

Quality Assurance for Higher Education in Lebanon
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Guide I: Introduction to Quality Management in Higher Education

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I. Understanding Quality

A. Definition

Whatever type of organization you work in – a university, a college, a hospital, a bank, local government, an airline, a factory – competition is rife: competition for students, for patients, for customers, for resources, for funds... Any organization basically competes on its reputation – for quality, reliability, price and delivery – and most people now recognize that quality is the most important of these competitive weapons. Moreover, this sort of attention to quality improves performance in reliability, delivery, and price.

For any higher education institution, there are several aspects of reputation which are important:

- It is built upon the competitive elements of quality, reliability, delivery, history and price, of which quality has become strategically the most important.
- Once a higher education institution acquires a poor reputation for quality, it takes a very long time to change it.
- Higher education reputations, good or bad, can quickly become national reputations.
- The management of the competitive weapons, such as quality, can be learned like any other skill, and used to turn round a poor reputation, in time.

Before anyone will buy the idea that quality is an important consideration, they would have to know what is meant by it.

Quality is often used to signify “excellence” of a product or service – people talk about “Harvard top quality”. In some manufacturing companies the word may be used to indicate that a piece of material or equipment conforms to certain physical dimensional characteristics often set down in the form of a particularly tight specification. If we are to define quality in a way that is useful in its *management*, then we must recognize the need to include in the assessment of quality the true requirements of the “customer” – the needs and expectations.

Quality is then simply *meeting the customer requirements*, and this has been expressed in many ways by several sources:

- “Fitness for purpose or use” – Juran, an early doyen of quality management.
- “The totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs” – BS 4778: 1987 (ISO 8402, 1986) *Quality Vocabulary: Part 1, International Terms*.
- “The totality of features and characteristics of a product or service that bears on its ability to satisfy given needs.” – The American National Standards Institute (ANSI) and the American Society for Quality (ASQ) quality terminology 1978.
- “Quality should be aimed at the needs of the consumer, present and future” – Deming, another early doyen of quality management.

- “The total composite product and service characteristics of marketing, engineering, manufacture and maintenance through which the product and service in use will meet the expectation by the customer” – Feigenbaum, the first man to write a book with “Total Quality’ in the title.
- “Conformance to requirements” – Crosby, an American consultant famous in the 1980s.
- “Degree to which a set of inherent characteristics fulfils requirements” – ISO (EN) 9000 : 2000 *Quality Management Systems – fundamentals and vocabulary*.

The usefulness of these definitions in higher education depends on the proper identification of who are the “clients” for higher education institutions. Unlike many manufacturers and other service industries, higher education institutions have more than one client. In fact, they have two primary clients – parents/guardians and students. They also have secondary clients – future employers of their current students (with employers, higher education institutions want to increase the possibility that they will employ their graduates).

In essence, students can be viewed as performing multiple roles. They are both the clients and the products of the higher education institution. This is a situation unique to higher education. This dual role does not make the application of quality impossible, it simply requires the acceptance that the dual role of students as clients and products does not prohibit the concept’s application.

B. The History of Quality

1. The Age of Craftsmanship: During the Middle Ages in Europe, the skilled craftsperson served both as manufacturer and inspector. “Manufacturers” who dealt directly with the customer took considerable pride in workmanship. Craft guilds, consisting of masters, journeymen, and apprentices, emerged to ensure that craftspeople were adequately trained. Quality assurance was informal; every effort was made to ensure that quality was built into the final product by the people who produced it. These themes, which were lost with the advent of the Industrial Revolution, are important foundations of modern quality assurance efforts.
2. The Early Twentieth Century: In the early 1900s the work of Frederick W. Taylor, often called the ‘father of scientific management” led to a new philosophy of production. Taylor’s philosophy was to separate the planning function from the execution function. By segmenting a job into specific work tasks and focusing on increasing efficiency, quality assurance fell into the hands of inspectors. Plants employed hundreds, even thousands, of inspectors. Inspection was thus the primary means of quality control during the first half of the twentieth century.
3. Post-World War II: During this time, two US consultants, Dr. Joseph Juran and Dr. W. Edwards Deming, introduced statistical quality control techniques to the Japanese to aid them in their rebuilding efforts. A significant part of their educational activity was focused on upper management, rather than quality specialists alone. With the support of top managers, the Japanese integrated quality throughout their organizations and developed a culture of continuous improvement (sometimes

referred to by the Japanese term *Kaizen*). Improvements in Japanese quality were slow and steady; some 20 years passed before the quality of Japanese products exceeded that of American and European manufacturers.

4. From the late 1980s and through the 1990s: Interest in quality grew at an unprecedented rate. It was a period of remarkable change and growing awareness of quality by consumers, industries, and governments worldwide. By 1990, quality drove nearly every organization's quest for success and quality practices expanded into the service sector especially the higher education institutions and health care providers worldwide. By the mid 1990s thousands of professional books had been written, and quality-related consulting and training had blossomed into an industry. New quality awards were established.
5. From Product Quality to Performance Excellence: Although quality initiatives focused initially on reducing defects and errors in products and services through the use of measurement, statistics, and other problem-solving tools, organizations began to recognize that lasting improvement could not be accomplished without significant attention to the quality of the management practices used on a daily basis. Managers began to realize that the approaches they use to listen to customers and develop long-term relationships, develop strategy, measure performance and analyze data, reward and train employees, design and deliver products and services, and act as leaders in their organizations are the true enablers of quality, customer satisfaction, and business results. Many began to use the term **Big Q** to contrast the difference between managing for quality in all organizational processes as opposed to focusing solely on manufacturing quality (**Little Q**). As organizations began to integrate quality principles into their management systems, the notion of **total quality management, or TQM**, became popular. Quality took on a new meaning of organization-wide performance excellence rather than a narrow engineering – or production-based technical discipline and permeated every aspect of running an organization.

The real challenge today is to ensure that managers do not lose sight of the basic principles on which quality management and performance excellence are based. The global marketplace and domestic and international competition have made organizations around the world realize that their survival depends on high quality. Tom Engibous, president and chief executive officer of Texas Instruments, commented on the present and future importance of quality in 1997: "Quality will have to be everywhere, integrated into all aspects of a winning organization".

It should be known that the quality process is challenging; true quality requires persistence, discipline, and steadfast leadership committed to excellence.

II. Quality philosophies and Frameworks

A. Introduction

The concept of “pride and joy” in work – and its impact on quality- is one of the foundations of the philosophy of W. Edwards Deming. Deming, along with Joseph M. Juran and Philip B. Crosby, are regarded as true ‘management gurus’ in the quality revolution. Their insights on measuring, managing, and improving quality have had profound impacts on entire institutions around the world. This section presents the quality management philosophies of these three gurus, their similarities and differences, and also examines their individual contributions to modern practice. In addition, it discusses the contributions of other key individuals who have helped to shape current thinking in quality management. These philosophies became the cornerstone for quality management practice and frameworks, such as the Deming Prize, the Malcolm Baldrige National Quality Award, the European Quality Award, the ISO 9000 standards which form the basis for much of the remainder of this guide.

B. The Deming Philosophy

No individual has had more influence on quality management than Dr. W. Edwards Deming (1900-1993). Deming received a Ph.D. in physics and was trained as a statistician, so much of his philosophy can be traced to these roots. Despite numerous efforts, his attempts to convey the message of quality to upper-level managers in the US were ignored. Shortly after World War II Deming was invited to Japan and began to teach Japanese managers statistical quality control. Deming’s influence on Japanese industry was so great that the Union of Japanese Scientists and Engineers established the Deming Application Prize in 1951 to recognize companies that show a high level of achievement in quality practices. Unlike other management gurus and consultants, Deming never defined or described quality precisely. In Deming’s view, variation is the chief culprit of poor quality. He claimed that higher quality leads to higher productivity, which in turn leads to long-term competitive strength. Deming stresses that top management must assume the overriding responsibility for quality improvement. Although Deming’s philosophy underwent many changes as he himself continued to learn, it was based on his “14 Points”:

1. **Constancy of purpose:** An organization must define its values, mission, and vision of the future to provide long-term direction for its management and employees. Deming believed that institutions must take a long-term view, invest in innovation, training, and research, and take responsibility for providing jobs and improving a firm’s competitive position. This responsibility lies with top management, who must show commitment.
2. **Adopt a new philosophy:** Deming sought to change the prevailing attitudes that ignored the importance of quality improvement. He believed that companies cannot survive if products of poor conformance quality or poor fitness for use leave their customers dissatisfied. Instead, companies must take a customer-driven approach based on mutual cooperation between labor and management and a never ending cycle of improvement. To effectively focus on the customers’ needs, everyone in the institution must learn the principles of quality and performance excellence.

3. Cease mass inspection: Deming encouraged workers to take responsibility for their work, rather than leave the problems for someone else down the production line. Simple statistical tools can be used to help control processes and eliminate mass inspection as the principal activity in quality control. Inspection should be used as an information-gathering tool for improvement, not as a means for assuring quality or blaming employees.
4. End Price tag business: Deming recognized that the direct costs associated with poor quality as well as the loss of customer goodwill can far exceed the cost savings perceived by purchasing. Deming also urged businesses to establish long-term relationships with fewer suppliers, leading to loyalty and opportunities for mutual improvement.
5. Improve constantly and forever: Improvements are necessary in both design and operations. When quality improves and costs decrease, as the Deming chain reaction suggests.
6. Institute training: Not only does training result in improvements in quality and productivity, but it adds to worker morale, and demonstrates to workers that the company is dedicated to helping them and investing in their future.
7. Institute leadership: Deming recognized that one of the biggest impediments to improvement was a lack of leadership. The job of management is leadership, not supervision. Supervision is simply overseeing and directing work; leadership means providing guidance to help employees do their jobs better with less effort.
8. Drive out fear: Driving out fear underlies many of Deming's 14 points. Fear is manifested in many ways : fear of reprisal, fear of failure, fear of the unknown, fear of relinquishing control, and fear of change. No system can work without the mutual respect of managers and workers. Workers are often afraid to report quality problems because they might not meet their quotas, their incentive pay might be reduced, or they might be blamed for problems in the system. Creating a culture without fear will definitely add value to organizations.
9. Break down departmental barriers: Teamwork helps to break down barriers between departments and individuals. The lack of cooperation leads to poor quality because other departments cannot understand what their internal customers want and do not get what they need from their internal suppliers.
10. Eliminate slogans, targets, and exhortations: Statistical thinking and training, not slogans, are the best routes to improving quality. Motivation can be better achieved from trust and leadership than from slogans.
11. Eliminate numerical quotas and management by objective (MBO): Deming believed that standards and quotas are born of short-term perspectives and create fear. They do not encourage improvement, particularly if rewards or performance appraisals are tied to meeting quotas. Workers may short-cut quality to reach the goal. Deming acknowledged that goals are useful, but numerical goals set for others without incorporating a method to reach the goal generate frustration and resentment.
12. Remove barriers to worker pride: Deming believed that one of the biggest barriers to pride in workmanship is performance appraisal. Performance appraisal destroys teamwork by promoting competition for limited resources, fosters mediocrity because objectives typically are driven by numbers and what the boss wants rather than by quality.

13. Institute education and self-improvement: The difference between this point and point 6 is subtle. Point 6 refers to training in specific job skills; point 13 refers to continuing, broad education for self-development. Organizations must invest in their people at all levels to ensure success in the long term.
14. Putting everyone to work, to realize the transformation: Any cultural change begins with top management and includes everyone. Changing an organizational culture generally meets with skepticism and resistance that many firms find difficult to deal with, particularly when many of the traditional management practices Deming felt must be eliminated are deeply ingrained in the organization's culture.

As we noted earlier, Deming did not propose specific methods for implementation because he wanted people to study his ideas and derive their own approaches. As he often stated, "There is no instant pudding".

C. The Deming Philosophy Applied to Higher Education

In the discussion that follows, we will examine how each of the above 14 points applies to higher education:

1. Constancy of purpose: The difficulties that higher education institutions would have in implementing constancy of purpose as defined by Deming are twofold. First, there are difficulties in defining and sticking to a purpose, and secondly, there are difficulties in maintaining the institutional stability necessary to achieve constancy of purpose. However, both of these obstacles can be overcome. At first glance, it would appear that the higher education institution's purpose is clear-educate students. Certainly that is clear, as a generalization. But in the complex modern world, that definition is too simplistic to be of value. For a higher education institution to know that it is producing the right product and services, it must answer the question "what is an educated graduate for the present and the future? Will the emphasis be on academic skills or social skills? Standards or work? So the first part of constancy of purpose for higher education institutions will be to determine their purpose. To answer this, higher education institutions will have to spend time on the future. This means long-range thinking and planning. It means working with visioning and mission development. It means having faith in the future to the point of daring to project into the future and making commitments to that projection. Higher education institutions have experience with all of those concepts. The problem is that they have not been accompanied by long-term commitment. This is evidenced by the constant vulnerability of higher education institutions to educational trends and fads, which come and go and leave little evidence of their existence behind them. This is because innovation, which should be a complimentary word or description, has come to mean change for the sake of change. If we consider innovation using Deming's definition, innovation would be thought of as a constant commitment to the quality of the products and services that make up the purpose of the higher education institution. Deming's emphasis on research could easily be used as well in higher education institutions. The institutional structure would need to reflect the importance of this function. Basically, to achieve constancy of purpose, higher education institutions will only need to spend more time thinking about the future. The obstacles to this are the tendencies of higher education institutions presidents to change jobs every three to

five years. Couple this with the fact that board members constantly turn over, and the problem becomes evident. Here is what must happen to overcome this problem. First ethically, higher education institutions presidents and board members must be willing to think beyond their tenures. There should be other safeguards beyond ethics to insure the continuity necessary for constancy of purpose. First, policy developments should include the planning and decision making that have occurred relative to constancy of purpose. Second, boards and presidents, the least stable elements of the higher education community, should involve the most stable members in the development and implementation of long-term planning. These stable members are employers, business and community leaders and faculty. By doing this, a higher education institution could have the stability necessary to maintain a constancy of purpose.

2. Adopt a new philosophy: We are in a new higher education age. Higher education institutions administration must awaken to the challenge, learn their responsibilities, and take on leadership for change. Quality must become the new religion in higher education. We can no longer afford poor workmanship in students, using bad learning materials, fearful and uninformed faculty, poor faculty training, and administrative job hopping. If we are rid the higher education institutions of these practices, it will require a transformation of management philosophy. It is hard to change after a lifelong career of doing things the same way. But in this new era of higher education competitiveness, higher education institutions must to change to stay in existence. Higher education institutions must also begin to work toward long-term improvement. They must begin listening more to constituents who, in the end, will determine the meaning of quality for their institutions. Higher education institutions will need to strive for the one thing that will, over the long run, please their constituents, and therefore make them more competitive-that is, a quality focus based on monitoring, controlling, and improvement.
3. Cease mass inspection: Cease dependence on supervision to achieve quality education. The aim of finding the bad faculty members and administrators and throwing them out is too late, too ineffective, and too costly to students and the institution through remediation efforts required to undo the damage. Quality comes not from supervision but from the improvement of the process. The old way of supervising bad quality out must be replaced by the new way of building good quality in.
4. End price tag business: End the practice of awarding business on the basis of price tag alone. Instead, minimize total cost. Induce publishers and other vendors to be actively involved with the institution through long-term commitments. In fact, price has no meaning without a measure of the quality being purchased.
5. Improve constantly: Improvement is not a one-time effort. Everyone and every department must subscribe to the ethic of constant improvement, and management must lead the way. Putting out fires is not improvement of quality. The pursuit of continuous improvement mandates that innovation become a stable part of the system, and more importantly, that innovation become a part of strategic planning. Higher education institutions must continually innovate so that the best educational processes will be discovered.

6. Institute training: Higher education refers to this process as professional development. Good training programs will concentrate on raising knowledge about real problems, followed by immediate application. The higher education institution must know which faculty/staff are competent in both knowledge and skill application, and utilize these competent faculty/staff as mentors for new faculty/staff.
7. Institute leadership: The aim of leadership should be to help faculty and students to do a better job. Quality leadership will be required to implement continuous improvement in the educational program. New relationships between administrators and faculty and faculty and students must be created and maintained. Administrator roles will be to help faculty and students do the best job possible, foreseeing and eliminating barriers that prevent faculty and students from doing quality work.
8. Drive out fear: fear and anxiety are present at all levels of most higher education institutions. These feelings result from management's efforts to spur better performance from faculty and staff with the use of numerical goals, ranking, incentives, and slogans intended to stimulate the competitive spirit. The response to this fear and anxiety is defensiveness. By ridding higher education institutions of these old-style management techniques, the fear will be greatly reduced.
9. Break down departmental barriers: For higher education institutions, this point should include elimination of the barriers between buildings as well as departments. The educational infrastructure in most higher education institutions includes multiple buildings. Therefore, the existence of barriers between and among buildings is an acute problem. The departmental barriers are most prevalent in higher education institutions. Faculty in various departments tend to think within the confines of their own disciplines.
10. Eliminate slogans, targets, and exhortations: Eliminate slogans calling for pride or new levels of faculty/staff effort. Such exhortations only create adversary relationships, as most of the causes of low quality and low productivity belong to the system and thus lie beyond the power of faculty and the other workforce personnel. Slogans only generate frustration and resentment. They are based on the supposition that employees could, if they tried do better. Faculty/Staff perceive slogans and exhortations as signals that management not only does not understand their problems, but it does not care enough to find out about them. It is totally impossible for anyone or any group to perform outside a stable system, either above or below it. Total Quality Management will create a stable system, and eliminate the need for slogans and other exhortations that fall on deaf ears.
11. Eliminate numerical quotas: The setting of goals and evaluating both goals and people by quantifiable output are contradictory to the total quality management concepts of identifying stable systems and then working with continuous improvement. For example, faculty members may focus on getting as many as possible to achieve the quota. They will tend to disregard, or give less emphasis to, the students who are either already above the quota or have little chance of achieving the quota. This practice means that the average students will receive the most resources, time, and energy, while the extremes away from the average are left to swim or sink on their own. What is lost in this process is the pursuit of quality and the intrinsic desire to continuously improve.

12. Remove barriers to worker pride: Remove barriers that rob faculty/staff of their right to pride of workmanship. This means abolishment of the annual or merit rating scheme and the management by objective. Listen to the faculty/staff, and have clear expectations over time. Give them ongoing feedback on work, institute and maintain training/retraining, and do not evaluate critically without suggestions. Make effectiveness, not efficiency, the goal of administration.
13. Institute education/self-improvement: It is not enough to have good people in your institution. Faculty/staff must be continually acquiring new knowledge and skills. This program of education must fit people into ever-changing jobs and responsibilities. How will higher education institution employees believe that their institution is constantly improving unless they can see that they themselves are constantly improving? Higher education is a service industry, operated not by machines but by people. No improvement in technology or infrastructure is more important than improvement in the people who make up the institution.
14. Putting everyone to work, to realize the transformation: Put everybody in the higher education institution system to work to accomplish the transformation to total quality. The transformation is everybody's job. The transformation process will take team management and initiative from top management. However, every employee will be involved in quality. The most frequent cause of failure in any quality improvement effort is the lack of involvement or a sense of indifference on the part of top and middle management. Therefore, the active leadership and participation of administrators, beginning at the top, is essential.

With an eye to the long term, and with commitment to the management philosophy on the part of everyone involved, total quality management can be implemented in higher education institutions, providing the same successes for higher education that it provided for industry.

D. The Juran Philosophy

Joseph Juran was born in Romania in 1904 and came to the United States in 1912. He spent much of his time as a corporate industrial engineer, and in 1951, did most of the writing, editing, and publishing of the *Quality Control Handbook*. This book, one of the most comprehensive manuals ever written, has been revised several times and continues to be a popular reference. Juran's definition of quality suggests that it should be viewed from both external and internal perspectives; that is quality is related to 1. Product performance that results in customer satisfaction and 2. Freedom from product deficiencies, which avoids customer dissatisfaction. Juran's prescriptions focus on three major quality processes, called the **Quality Trilogy**:

1. Quality planning – the process of preparing to meet quality goals;
2. Quality control – the process of meeting quality goals during operations;
3. Quality improvement – the process of breaking through the unprecedented levels of performance.

As a parallel to Deming's emphasis on identifying and reducing sources of variation, Juran stated that quality control involves determining what to control, establishing units of measurement to evaluate data objectively, establishing standards of performance, measuring actual performance, interpreting the difference between actual performance

and the standard, and taking action on the difference. Unlike Deming, however, Juran specified a detailed program for quality improvement. Such a program involves proving the need for improvement, identifying specific projects for improvement, organizing support for the projects, diagnosing the causes, providing remedies for the causes, proving that the remedies are effective under operating conditions, and providing control to maintain improvements. Many aspects of the Juran and Deming philosophies are similar. The focus on top management commitment, the need for improvement, the use of quality control techniques, and the importance of training are fundamental to both philosophies. However, they did not agree on all points. For instance, Juran believed that Deming was wrong to tell management to drive out fear. According to Juran, “fear can bring out the best in people”.

E. The Crosby Philosophy

Philip B. Crosby (1926-2001) was corporate vice president for quality at International Telephone and Telegraph (ITT). After leaving ITT, he established Philip Crosby Associates in 1979 to develop and offer training programs. He also authored several popular books. His first book, *Quality Is Free*, sold about 1 million copies. The essence of Crosby’s quality philosophy is embodied in what he calls the “Absolutes of Quality Management” and the ‘Basic Elements of improvement’. Crosby’s Absolutes of Quality Management include the following points:

- Quality means conformance to requirements: Requirements must be clearly stated so that they cannot be misunderstood. Crosby maintained that once the requirements are specified, quality is judged solely on whether they have been maintained.
- There is no such thing as a quality problem: Problems must be identified by those individuals or departments that cause them. In other words, quality originates in functional departments, not in the quality department, and therefore the burden of responsibility for such problems falls on these functional departments. The quality department should measure conformance, report results, and lead the drive to develop a positive attitude toward quality improvement.
- There is no such thing as the economics of quality; doing the job right the first time is always cheaper: Crosby supports the premise that “economics of quality” has no meaning. Quality is free. What costs money are all actions that involve not doing jobs right the first time.
- The only performance measurement is the cost of quality, which is the expense of nonconformance: Quality cost data are useful to call problems to management’s attention, to select opportunities for corrective action, and to track quality improvement over time. Such data provide visible proof of improvement and recognition of achievement.
- The only performance standard is ‘Zero Defects (ZD)’: Crosby felt that the zero defects concept is widely misunderstood and resisted. It is described as follows: “The theme of ZD is to do it right the first time. That means concentrating on preventing defects rather than just finding and fixing them...Most human error is caused by lack of attention rather than lack of knowledge. Lack of attention is created when we assume that error is inevitable...”

Crosby’s basic elements of improvement were determination, education, and implementation. Determination means that top management must take quality improvement seriously. Everyone should understand the absolutes, which can be

accomplished only through education. Finally, every member of the management team must understand the implementation process. Unlike Juran and Deming, Crosby's approach was primarily behavioral. He emphasized using management and organizational processes rather than statistical techniques to change corporate culture and attitudes.

F. Similarities among Deming, Juran, and Crosby

Despite their significant differences, the philosophies of Deming, Juran, and Crosby are more alike than different. Each views quality as imperative in the future competitiveness in global markets; makes top management commitment an absolute necessity; demonstrates that quality management practices will save, not cost money; stresses the need for continuous, never-ending improvement; acknowledges the importance of the customer and strong management/worker partnerships; and recognizes the need for and difficulties associated with changing the organizational culture. These similarities among the three philosophies constitute the main principles to what is today known as **Total Quality Management (TQM)**.

G. Other Quality Philosophers

1. **A.V. Feigenbaum:** Feigenbaum is best known for coining the phrase **total quality control**, which he defined as "... an effective system for integrating the quality development, quality maintenance, and quality improvement efforts of the various groups in an organization so as to enable production and service at the most economical levels which allow full customer satisfaction." His book *Total Quality Control* was first published in 1951 under the title *Quality Control: Principles, Practices, and Administration*. He viewed quality as a strategic business tool that requires involvement from everyone in the organization, and promoted the use of quality costs as a measurement and evaluation tool. Feigenbaum's philosophy is summarized in his three steps to quality: a-**Quality Leadership:** A continuous management emphasis is grounded on sound planning rather than reaction to failures. Management must maintain a constant focus and lead the quality effort. b- **Modern Quality Technology:** Resolving quality problems requires the integration of office staff as well as engineers and shop-floor workers in the process who continually evaluate and implement new techniques to satisfy customers in the future. c- **Organizational Commitment:** Continuous training and motivation of the entire workforce as well as an integration of quality in business planning indicate the importance of quality and provide the means for including it in all aspects of the firm's activities.
2. **Kaoru Ishikawa:** An early pioneer in the quality revolution in Japan, Ishikawa was the foremost figure in Japanese quality until his death in 1989. Ishikawa built on Feigenbaum's concept of total quality and promoted greater involvement by all employees. Some key elements of his philosophy include: a- quality begins with education and ends with education b- the first step in quality is to know the requirements of customers c-the ideal state of quality control occurs when inspection is no longer necessary d- remove the root cause, not the symptoms e-quality control is the responsibility of all workers and all divisions f-marketing is the entrance and exit of quality...

3. **Genichi Taguchi:** A Japanese engineer whose philosophy was strongly advocated by Deming – explained the economic value of reducing variation. Taguchi maintained that the manufacturing based definition of quality as conformance to specification limits is inherently flawed. Taguchi measured quality as the variation from the target value of a design specification, and then translated that variation into an economic loss function that expresses the cost of variation in monetary terms. Taguchi advocated as well certain techniques of experimental design to identify the most important design variables in order to minimize the effects of uncontrollable factors on product variation.

The philosophies of Deming, Juran, Crosby, and others provide much guidance and wisdom in the form of ‘best practices’ to managers around the world, leading to the development of numerous awards and certifications (including Deming Prize, Malcolm Baldrige, ISO 9000, European Quality Award...) for recognizing effective application of TQM principles. These award and frameworks will be discussed later in this guide within the context of the higher education industry.

III. Quality Management in Higher Education

A. Introduction

While quality and excellence have always been a keen concern for educators in higher education, the debate on how to manage or improve quality has intensified in more recent years.

Terminology can confuse the issue, with the terms quality management, quality assurance, quality improvement, quality control and quality assessment being some of the key terms used to describe all or part of the institutional process of focusing on quality issues. Internationally, different countries have tended to adopt one or more terms more than the others for describing their particular processes.

However, despite the variations of terminology and approaches, international trends in quality improvement and management have tended to converge rather than diverge, particularly when it comes to the principles of what an institution should be like that is effectively engaged in improvement of quality. Even where specific approaches to development of improved quality exist, interchange of best practices continues to help government quality agencies and councils refine their processes and expectations.

In practice quality improvement in a higher education institution is concerned with an ongoing cycle of agreeing on a set of standards and/or goals, gathering relevant information, evaluating feedback and ensuring the implementation of change. A higher education institution involved in a strong and effective quality improvement process will be characterized by the following:

15. An institutional culture that is open to constructive evaluation and to change.
16. A high level of satisfaction from students, employees and external customers.
17. Institution-wide embracing of the concept of quality improvement, including a commitment to participate in institutional improvement and growth.
18. Evidence of ongoing measurable improvement in institutional performance in agreed areas of need.
19. Open communication within and between different areas of operation.
20. Self-confidence of the institution in its ability to manage its own future, and evidence of its success in doing so, particularly in relation to any external accreditation bodies.

B. Quality Management Issues in Higher Education

The following principles provide a framework for development of all quality improvement processes:

- Internal quality management complements external accreditation expectations: External accreditation agencies have traditionally evaluated an institution in relation to a set of standards. However, much more importance is now attached to an institution's ability to manage effectively its own quality. This means that external accreditation bodies want to find mature institutions that can successfully identify their own strengths and areas for needed improvement, and then develop a strategy to bring necessary changes that are evidenced by outcomes. This focus on institutional quality management changes the way that higher education institutions should see external accreditation. It is still an important process, but it is one that helps guide the

internal processes, providing assistance in developing guidelines of accepted standards and monitoring the institution's effectiveness in responding to these.

- Quality management decisions, especially the identification of quality objectives should be linked to the institutional strategic plan: Strategic planning and quality management look at different aspects of the present and future of a higher education institution. However, there are clear areas of overlap and effective coordination between the two will strengthen the higher education institution and avoid unnecessary duplication of effort.
- Quality improvement will be most successful if the higher education institution culture is open to change and improvement: In fact, this is not the automatic culture in a higher education institution, where traditions can be strong and departments can operate with a high degree of independence. Transparency, openness, responsiveness and creativity should form the bases of the ideal culture for quality improvement in higher education institutions.
- A quality management plan of a higher education institution should be comprehensive: An institution-wide quality improvement plan moves beyond the area of academic quality. Its concern is equally with the physical campus, the quality of student life, the attitudes of faculty and staff, the satisfaction levels of faculty and staff, the interaction and the service to external constituencies.
- A quality management plan needs to be supported by accurate factual information: The higher education institution should have a regular process in place to gather factual and quantifiable data about institutional quality. The individuals leading on quality management need to inform the necessary individuals or groups of what information they need on a regular basis, and need to take advice back on what may or may not be possible or objective.
- Quality management procedures should be concerned with both formative and summative evaluation and finding the correct balance of these for institutional quality improvement: Whenever evaluation is involved, there is always a level of summative evaluation involved. This gives a final judgment on a situation. A quality management process that does not draw some end conclusions will be a weak one. A summative conclusion that identifies areas of concern should result in major recommendations for change and improvement. A formative evaluation, on the other hand, is feedback that leads to re-evaluation and change in a situation where immediate changes are possible and may correct identified issues of concern.
- Senior Administration responsibility: Ensuring that a strong quality management plan is both in place and operating effectively is the responsibility of senior administration. Managing the process of quality improvement is the responsibility of all faculty and staff. However, developing structures to ensure quality management happens in an effective and cost-effective way is more complex. The actual structure adopted by an institution will vary, dependent on other institutional structures
- The quality improvement cycle is a continuous process: The quality improvement cycle starts with evaluation of the present, and then sets goals for the future. Plans are implemented and then after a reasonable period of time, the effectiveness of the implementation is evaluated, and appropriate conclusions are drawn and appropriate actions taken. At that point the cycle starts again.

- Avoid excessive formalization in the implementation of the quality improvement process: A strong quality improvement process is vital to an institution, but it can become so formalized and bureaucratic in its implementation that it becomes time-consuming and has very little practical value. However, if the process is effectively coordinated and if the ideals are fully integrated into institutional culture, quality improvement will enhance the institutional experience for all concerned members and parties.

IV. TQM in Higher Education

A. Definition

Simply stated, Total Quality Management (TQM) is an organizational philosophy and a management approach which involves all employees and is aimed at continuously improving the organization's effectiveness in achieving customer satisfaction. The concepts and application of TQM originate from Japan. Since the early 80s, the value of TQM has increasingly been recognized in the US and subsequently in Europe.

While originally limited to the private sector, and more particularly manufacturing enterprises, the early successes of TQM contributed to the spreading of its principles and methods across other sectors, including higher education institutions, public services, and non-profit organizations.

Although some official definitions of TQM exist, it must be recognized that the scope of TQM is not very well defined. Aspects which were central to TQM some decades ago in Japan may have lost their prominent place today. Thus, TQM is more a catalyst for existing trends and tendencies, than a standard or a precise catalogue of methods and prescriptions.

Over the past years some generic models for TQM have been developed. In the USA, the first models were based upon the ideas of some quality gurus like Deming, Juran and Crosby. The more elaborated system which has been developed out of this is the set of criteria for the Malcolm Baldrige Award (discussed later in this guide). This has become the standard reference model for TQM in the United States, with adaptation for specific sectors including higher education.

In Europe, the most important model is that developed for the European Quality Award (discussed later in this guide), promoted by the industry-led European Foundation for Quality Management (EFQM). The EQA model has also been at the basis of the criteria of national quality prizes in many European countries. Adaptations of the EQA model have been made for the education sector including higher education.

B. TQM characteristics

One may identify a TQM organization through four different series of characteristics:

- Underlying concepts.
- Operational principles.
- Implementation characteristics.
- Typical results.

The five underlying concepts of TQM are the following:

1. A clear customer focus: The first priority must be to understand and to satisfy the needs and expectations of the customers and the chosen target group. The customer orientation also embraces the concept of internal customer within an organization.

2. Continuous improvement: An institution-wide attitude should prevail whereby the search for improvement always continues, by everyone in the organization.
3. Quality assurance of internal processes; this implies that standards are set, procedures to achieve them are defined, and adherence to these is guaranteed; problems occurring are remedied in a systematic way.
4. Process orientation: This principle points to the need for process thinking, for an integrated approach to the whole development and delivery chain, and for an optimization of the internal/external interfaces.
5. Prevention instead of inspection to achieve quality: Through adequate preventive measures, fewer quality errors will occur, customers will be more satisfied, and less inspection and control will be needed.

The operational principles are the following:

1. Top management commitment: The driving force behind any TQM approach must be the commitment, vision and exemplary leadership of the senior management.
2. Teamwork: The benefits of TQM reside to a large extent in effective teamwork, particularly when involving people from different departments. Effective, cross-functional teamwork needs to be a key operational characteristic of any TQM effort.
3. Quality is everyone's job: This goal requires the involvement of all employees at all levels and in all departments. It must be supported through human resource strategies that recognize and reward quality efforts.
4. Focus on facts and systematic problem-solving: Discussions and decisions on activities and resource allocations should be based on reliable and relevant information. TQM calls for the use of appropriate tools and methods (discussed later in this guide) for identifying weaknesses and areas for improvement, analyzing them, tracing the sources of problems, seeking improvements and finally, implementing them.

While there are many ways to implement all these principles, research shows that most TQM organizations display the following implementation characteristics:

1. The formulation of a clear vision and mission statements: These are communicated and accepted throughout the institution, and serve as an anchor for the quality policy and strategy.
2. The establishment of a quality manual: which describes the institution, its policies, its key processes and the responsibility and authority of staff. In general, such an overall quality manual is complemented by procedural manuals at department level, describing the critical processes in details. Access to up to date information in quality and procedural manuals is a necessity for quality assurance.
3. Training: Training needs are analyzed and remedied where necessary, in order to ensure that all employees are qualified for the activities they perform. Training should be complemented by human resource policies that reward improvement, professional development and quality achievements.
4. Empowerment: Empowerment of employees increases commitment and motivation and encourages mutual trust and support throughout the organization.

5. Feedback: Customers are asked for feedback all the time, often through regular customer surveys aimed at understanding needs and expectations, checking satisfaction with the quality provided, and detecting new trends. Such surveys are systematically analyzed in order to implement changes where necessary.

Finally, the institution is likely to show the following typical results:

1. Better and more consistent quality of product/service provided.
2. Considerable reduction in problems, complaints, delays...
3. Regular innovations in products/services.
4. Cost effective and efficient processes throughout the institution.
5. A highly motivated, qualified and self-confident workforce.

C. The Rationale behind TQM in Higher Education

One might imagine that the primary reason to embrace TQM concepts by higher education institutions would have been to improve the quality of their education provision. The reality is more complex, however. Based on reported experience and documented case studies, the main rationale behind the TQM approach appears to have been:

- An improved external quality perception and image, thanks to clearer internal policy choices, better customer orientation and more effective internal/external marketing.
- A more efficient internal organization, with more effective management, better motivated staff, and more successful internal communication.
- Achievement of professionalism in non-educational services such as the services and activities provided by the institution in addition to the delivery of courses (registration, administration...)
- Raising the quality of the education through the relevance of the courses, the quality of instruction, the effectiveness of the needs analysis.

D. Challenges/Problems Associated with the Application of TQM in Higher Education

- Higher education is a sector in which individual autonomy and academic freedom are highly valued; therefore, top-down management initiatives may be viewed with deep concern.
- Another problem associated with the implementation of total quality management in higher education is the commercial undertone of the language which is utilized.
- Right first time is detrimental to creativity, experimentation and research which are central to a higher education context.
- In total quality management, the processes are supposed to be customer-driven. In higher education, the critical problem is the identification of the customers to drive towards.
- The main tenet of effective communication required within a university for total quality management implementation is rarely reached.

V. ISO 9000 in Higher Education

A. What is ISO?

The International Organization for Standardization (ISO) is a non-governmental organization established in 1947. The mission of ISO is to promote the development of standardization and related activities in the world with a view to facilitating the international exchange of goods and services, and to developing cooperation in the spheres of intellectual, scientific, technological and economic activity.

ISO's work results in international agreements which are published as International Standards.

B. ISO's name

Many people have noticed a seeming lack of correspondence between the official title when used in full, International Organization for Standardization, and the short form, ISO. Shouldn't the acronym be "IOS"? Yes, if it were an acronym – which it is not.

In fact, ISO is a word, derived from the Greek isos, meaning equal. Whatever the country, the short form of the organization's name is always ISO.

C. ISO 9000

ISO 9000 is a family of standards for quality management systems. ISO 9000 is maintained by ISO. An institution that has been independently audited and certified to be in conformance with ISO 9001 may publicly state that it is "ISO 9001 certified". Certification to ISO 9001 does not guarantee the compliance of end products and services; rather, it certifies that consistent business processes are being applied.

Although the standards originated in manufacturing, they are now employed across a wide range of other types of organizations. A product, in ISO vocabulary, can mean a physical object, or services, or software. In fact, according to ISO in 2004, "service sectors account by far for the highest number of ISO 9001: 2000 certificates – about 31% of the total.

D. History of ISO 9000

- **Pre ISO 9000:** During World War II, there were quality problems in many British high-tech industries such as munitions, where bombs were exploding in factories during assembly. The adopted solution was to require factories to document their manufacturing procedures and to prove by record keeping that the procedures were being followed. In 1979, the authorities in the United Kingdom published a generic standard. The name of the standard was BS 5750, and it was known as a management standard because it did not specify what to manufacture, but how to manage the manufacturing process. The success of this standard was rapidly observed outside the United Kingdom. In 1987, therefore, ISO issued a family of standards, ISO 9000, which were almost a direct copy of the British standard.
- **1987 version:** The 1987 version had the same structure as the UK standard BS 5750 with three models for quality management systems, the selection of which was based on the scope of activities of the organization:

1. ISO 9001:1987 *Model for quality assurance in design, development, production, installation, and servicing* was for companies and organizations whose activities included the creation of new products.
 2. ISO 9002:1987 *Model for quality assurance in production, installation, and servicing* had basically the same coverage as ISO 9001 but without covering the creation of new products.
 3. ISO 9003:1987 *Model for quality assurance in final inspection and test* covered only the final inspection of finished product, with no concern for how the product was produced.
- 1994 version: This version emphasized quality assurance via preventive actions, instead of just checking the final product, and continued to require evidence of compliance with documented procedures. As with the first version, the downside was that companies tended to implement its requirements by creating shelf-loads of procedure manuals, and becoming burdened with an ISO bureaucracy.
 - 2000 version: This version combines ISO 9001, 9002, and 9003 into one, now called 9001. Design and development procedures are required only if a company does in fact engage in the creation of new products. The 2000 version sought to make a radical change in thinking by actually placing the concept of process management front and center. The 2000 version also demands involvement by upper executives, in order to integrate quality into the business system and avoid delegation of quality functions to junior administrators. Another goal is to improve the effectiveness via process performance metrics – numerical measurement of the effectiveness of tasks and activities. Expectations of continual process improvement and tracking customer satisfaction were made explicit. The requirements of this version are organized into four major sections: Management Responsibility; Resource Management; Product Realization; and Measurement, Analysis, and Improvement. ISO 9000:2000 is a response to the widespread dissatisfaction that resulted from the old standards. The 2000 version had a completely new structure, based on the following eight principles - that reflect the basic principles of total quality philosophies discussed above- :
 1. Customer Focus: Organizations depend on their customers and therefore should understand current and future customer needs, should meet customer requirements, and strive to exceed customer expectations.
 2. Leadership: Leaders establish unity of purpose and direction for the organization. They should create and maintain the internal environment in which people can become fully involved in achieving the organization's objectives.
 3. Involvement of people: People at all levels are the essence of an organization and their full involvement enables their abilities to be used for the organization's benefit.
 4. Process approach: A desired result is achieved more efficiently when activities and related resources are managed as a process.
 5. System approach to management: Identifying, understanding, and managing interrelated processes as a system contributes to the organization's effectiveness and efficiency in achieving its objectives.

6. Continual improvement: continual improvement of the organization's overall performance should be a permanent objective of the organization.
 7. Factual approach to decision making: Effective decisions are based on the analysis of data and information.
 8. Mutually beneficial supplier relationships: An organization and its suppliers are interdependent and a mutually beneficial relationship enhances the ability of both to create value.
- 2008 Future version: TC 176, the ISO 9001 technical committee, has started its review on the next version of ISO 9001, which will in all likelihood be termed the ISO 9001:2008, assuming its planned release date of 2008 is met. Early reports are that the standard will not be substantially changed from its 2000 version.

E. Certification

ISO does not itself certify organizations. Many countries have formed accreditation bodies to authorize certification bodies, which audit organizations applying for ISO 9001 compliance certification. Both the accreditation bodies and the certification bodies charge fees for their services. The various accreditation bodies have mutual agreements with each other to ensure that certificates issued by one of the accredited certification bodies are accepted worldwide.

The applying organization is assessed based on an extensive sample of its sites, functions, products, services, and processes; a list of problems (action requests or non-compliances) is made known to the management. If there are no major problems on this list, the certification body will issue an ISO 9001 certificate for each geographical site it has visited, once it receives a satisfactory improvement plan from the management showing how any problems will be resolved.

An ISO certificate is not a once and for all award, but must be renewed at regular intervals recommended by the certification body, usually around three years.

F. Auditing

Two types of auditing are required to become registered to the standard: auditing by an external certification body (external audit) and audits by internal staff trained for this process (internal audits). The aim is a continual process of review and assessment, to verify that the system is working as it is supposed to, find out where it can improve and to correct or prevent problems identified. It is considered healthier for internal auditors to audit outside their usual management line, so as to bring a degree of independence to their judgments.

G. The Relation between Quality assurance, ISO 9000 and TQM

The term quality assurance is defined in ISO 8402 – a standard containing official definition of key quality terms – as follows: “All the planned and systematic activities implemented within the quality system, and demonstrated as needed, to provide adequate confidence that an entity will fulfill requirements for quality.”

In practical terms, quality assurance requires an organization to ensure that:

- Quality standards are defined for all activities to which quality assurance applies.
- Suitable procedures are available for ensuring that quality standards are met.

- Procedures are systematically monitored for conformance, using statistical methods where appropriate.
- Causes of the non-conformances identified are analyzed.
- Causes of problems are eliminated through appropriate corrective action, in order to avoid – or at least minimize – the probability of those problems reoccurring.

When all this is undertaken – in whatever way – for a set of activities, processes, or outputs, it can safely be stated that quality assurance is taking place.

Although quality assurance is only one of the underlying concepts of a TQM approach, it should be recognized that it is closely linked to the other components of TQM. For instance:

- The customer orientation should be reflected in the definition of standards.
- Continuing improvement is only possible when the current system is well known and under control.
- The effective application of quality assurance requires a process orientation.

Thus, effective quality assurance is an important milestone towards a TQM based organization; similarly, implementing TQM without adequate attention to quality assurance concepts will eventually fail.

At first sight, it would appear that the ISO 9000 standards are concerned with quality assurance alone. However, a closer look shows that the standards cover more than quality assurance alone, and pay attention to other aspects of TQM especially in the year 2000 version.

H. Main Reasons for Seeking Certification by Higher Education Institutions

Improving or maintaining the quality of education is not the only reason why higher education institutions seek to be ISO 9001 certified. Overall, four types of arguments are put forward:

1. Promotion of a high quality image, high visibility and credibility: Image is important for all types of higher education institutions, because it influences the numbers of students –and hence in the long term the survival of the organization. The image perceived by the outside world depends on the quality of services delivered, as well as on how effective that quality performance is communicated. Being certified under ISO 9001 is an easily communicated signal to the outside world that the institution is committed to quality and that it has been subject to independent external scrutiny.
2. A response to external factors: The concern for quality and performance is growing in society, with all institutions being expected to become more accountable to all stakeholders. In addition, customers, in higher education increasingly desire proof of the quality promised. Certification is a way of responding to such demands.
3. Develop a full quality assurance system: If a higher education institution is looking for a comprehensive quality assurance approach, then the principles of ISO 9001 are to be considered seriously. The benefits listed for ISO 9001 by certified higher education institutions include: The provision of a visible, understandable and verifiable focus for the internal quality improvement efforts of an organization; the perspective of a certificate is important for the motivation of staff, it considers higher

education activities not as isolated processes, but in the context of the organization's quality objectives.

4. Improvement of specific activities of the organization: Some higher education institutions have sought to introduce ISO 9000 to improve specific functions or activities. This may be related to a general concern of ensuring high customer satisfaction, or the willingness to attain specific quality levels. Some examples include the improvement of the logistical and support processes, quality assurance of the examination and evaluation of students.

I. Challenges/Problems Associated with the Application of ISO 9000 in Higher Education:

- Interpretation problems: The application of ISO 9000 is not straightforward. The requirements and even the underlying concepts have to be translated or interpreted into a language that a higher education institution can understand. Even specialists who have published interpretations or guidelines on ISO 9000 in higher education – do not agree entirely on all interpretation issues.
- Insufficient relevance: Many higher education experts criticize ISO 9000 at its core, as being of insufficient relevance for higher education institutions. They argue that many critical aspects of higher education are not explicitly listed in the standard and may hence not be covered. They also believe that the complexity and multiplicity of objectives and purposes of higher education do not fit very well with the standardization resulting from ISO 9000.
- Time consumption and cost: The cost and time consumption nature of ISO 9000 requirements are probably the most serious obstacle to the generalized use of the standards in higher education institutions.
- Skepticism: ISO 9000 is met with much skepticism in higher education circles, and the standards also face competition with existing or new quality assurance, audit or accreditation arrangements.

J. Critical Success Factors (CSF) for ISO 9000 in Higher Education:

ISO 9000 is not an appropriate goal for any institution in any circumstance. Neither can anyone engage in the certification process with a reasonable chance of success. Below are ten CSF for successful implementation of ISO 9000 by higher education institutions. Most of these are necessary conditions for successful certification:

1. The higher education institution (HEI) should know very well why it wants to be certified.
2. The HEI has fully committed senior staff who are prepared to implement a quality system.
3. The HEI is convinced of the relevance of the standard not only the certificate.
4. The HEI takes all requirements of ISO 9000 seriously.
5. The HEI has a long term vision on quality issues.
6. The HEI has already high quality standards for its key services.
7. The HEI is well organized.
8. The HEI is not in the middle of another major change process such as restructuring.

9. The HEI is capable of committing sufficient staff time.
10. The HEI starts from a sound financial situation.

If a higher education institution fails to meet more than half of these conditions, it is unlikely to benefit quickly from its ISO 9000 journey.

VI. Quality Awards

A. The Deming Prize

The Deming Prize was instituted in 1951 by the Union of Japanese Scientists and Engineers (JUSE) in recognition and appreciation of W. Edwards Deming's achievements in statistical quality control and his friendship with the Japanese people.

The Deming Prize is awarded to all companies that meet a prescribed standard. However, the small number of awards given each year is an indication of the difficulty of achieving the standard. The emphasis of the Deming Prize now is on finding out how effectively the applicant is achieving distinctive performance improvements through the application of companywide quality control (CWQC). As defined by JUSE, CWQC is a system of activities to assure that quality products and services required by customers are economically designed, produced, and supplied while respecting the principle of customer orientation and the overall public well-being.

The Deming Prize "examination viewpoints" now include

1. Top management leadership and organizational vision and strategies.
2. TQM frameworks: Organizational structure and its operations, daily management, relationship to ISO 9000 and ISO 14000, TQM promotion and operation...
3. Quality assurance system: QA system, process control, test, quality evaluation and quality audits...
4. Management systems for business elements: cross-functional management and its operations, quantity/delivery management, environmental management, safety, hygiene and work environment management...
5. Human resources development: positioning of people in management, education and training, respect for people's dignity...
6. Effective utilization of information: positioning of information in management, information systems, support for analysis and decision making...
7. TQM concepts and values: quality, maintenance and improvement, respect for humanity...
8. Scientific methods: understanding and utilization of methods, understanding and utilization of problem-solving methods...
9. Organizational powers: core technology, speed, vitality...
10. Contribution to realization of corporate objectives: customer relations, employee relations, social relations, supplier relations, shareholder relations, realization of corporate mission, continuously securing profits...

B. The Malcolm Baldrige National Quality Award (MBNQA)

Recognizing that US productivity was declining, the Malcolm Baldrige National Quality Improvement Act was signed into law on August 20, 1987 in the USA. The focus of the program was defined as follows :

- Helping to stimulate American companies to improve quality and productivity.
- Recognizing the achievements of those companies that improve the quality of their goods and services.

- Establishing guidelines and criteria that can be used by business, industrial, governmental, and other enterprises in evaluating their own quality improvement efforts.

The award is named after President's Reagan's Secretary of Commerce, who was killed in an accident lately after the Senate acted on the legislation. Up to three companies can now receive an award in each of the original categories of manufacturing, small business, and service (prior to 1999, only two). Congress approved award categories in nonprofit education and health care in 1999.

B.1 MBNQA criteria for performance excellence

The award examination is based upon a rigorous set of criteria, called the criteria for performance excellence that consist of a hierarchical set of categories, items and areas to address. The seven categories are as follows:

1. Leadership: this category examines how an organization's senior leaders address values, directions, and performance expectations, as well as a focus on customers and other stakeholders, empowerment, innovation, and learning. Also examined are an organization's governance and how the organization addresses its public responsibilities.
2. Strategic Planning: This category examines how an organization develops strategic objectives and action plans. Also examined is how the chosen objectives and plans are deployed and how progress is measured.
3. Customer and market focus: This category examines how an organization determines requirements, expectations, and preferences of customers and markets.
4. Measurement, analysis, and knowledge management: This category examines how an organization selects, gathers, analyzes, manages, and improves its data, information and knowledge assets.
5. Human resource focus: This category examines how an organization's work systems and employee learning and motivation enable employees to develop and utilize their full potential in alignment with the organization's overall objectives and action plans.
6. Process Management: This category examines the key aspects of an organization's process management, including key product, service, and business processes for creating customer and organizational value, and key support processes involving all work units.
7. Business results: This category examines an organization's performance and improvement in key business areas – customer satisfaction, product and service performance, financial and marketplace performance, human resource results, operational performance, and governance and social responsibility. Also examined are performance levels relative to competitors.

B.2 Criteria Evolution

Over the years, the criteria have been streamlined and simplified to make them more relevant and useful to organizations of all types and sizes. For example, the initial set of criteria in 1988 had 62 items with 278 areas to address. By 1991, the criteria had only 32 items and 99 areas to address. The 1995 criteria were reduced to 24 items and 54 areas to

address. In 1997 further refinements to develop the shortest list of key requirements necessary to compete in today's marketplace, improve the linkage between process and results, and make the criteria more generic and user-friendly resulted in 20 items and 30 areas to address. In 1999, the criteria were reworded in a question format that managers can easily understand. Since 2003, the criteria strengthened its emphasis on organizational governance and ethics. In 2007, new education criteria were released and will be discussed in details below.

B.3 MBNQA education criteria for performance excellence goals

- Delivery of ever-improving value to students and stakeholders, contributing to education quality and organizational stability.
- Improvement of overall organizational effectiveness and capabilities.
- Organizational and personal learning.

B.4 MBNQA education criteria core values and concepts

The criteria are built on the following set of interrelated core values and concepts:

1. Visionary leadership: Your institution's senior leaders should set directions and create a student-focused, learning-oriented climate; clear and visible values; and high expectations.
2. Learning-centered education: In order to develop the fullest potential of all students, institutions need to afford them opportunities to pursue a variety of avenues to success. Learning-centered education supports this goal by placing the focus of education on learning and the real needs of students.
3. Organizational and personal learning: Achieving the highest levels of organizational performance requires a well-executed approach to organizational and personal learning.
4. Valuing faculty, staff, and partners: valuing the people in your workforce means committing to their satisfaction, development, and well-being.
5. Agility: Success in today's ever-changing, globally competitive environment demands agility – a capacity for faster and more flexible responses to the needs of your students and stakeholders.
6. Focus on the future: Pursuit of educational excellence requires a strong future orientation and a willingness to make long-term commitments to students and key stakeholders.
7. Managing for innovation: Innovation means making meaningful change to improve an institution's programs, services, processes, and operations and to create new value for the organization's stakeholders.
8. Management by fact: Institutions depend on the measurement and analysis of performance. Such measurements should derive from the institution's needs and strategy, and they should provide critical data and information about key processes and results.
9. Social responsibility: An institution's leaders should stress responsibilities to the public, ethical behavior, and the need to practice good citizenship.
10. Focus on results and creating value: An institution's performance measurements need to focus on key results. Results should be used to create and balance value for your students and for your stakeholders.

11. Systems perspective: A systems perspective includes your senior leaders' focus on strategic directions and on your students and stakeholders. It means that your senior leaders monitor, respond to, and manage performance based on results. A systems perspective also includes using your measures, indicators, and organizational knowledge to build your key processes and aligning your resources to improve overall performance and satisfy students and stakeholders. Thus, a systems perspective means managing your whole institution, as well as its components, to achieve success.

The core values and concepts are embodied in seven categories as follows: leadership; strategic planning; student, stakeholder, and market focus; measurement, analysis, and knowledge management; workforce focus; process management; results. The criteria focus on the key areas of organizational performance given below:

1. Student learning outcomes.
2. Student and stakeholder-focused outcomes.
3. Budgetary, financial, and market outcomes.
4. Workforce-focused outcomes.
5. Process effectiveness outcomes, including key operational performance results.
6. leadership outcomes, including governance and social responsibility results.

B.5 ISO 9000 and Baldrige

Although both frameworks are process-focused, data-based, and management-led, each offers a different emphasis in helping organizations improve performance and increase customer satisfaction. For example, Baldrige focuses on performance excellence for the entire organization in an overall management framework, while ISO focuses on product and service conformity for guaranteeing equity in the marketplace and concentrates on fixing quality system problems and product and service nonconformities.

Although the 2000 revision of ISO 9000 incorporated many of the Baldrige criteria's original principles, it still is not a comprehensive business performance framework. Nevertheless, it is an excellent way to begin a quality journey. Thus, for companies in the early stages of developing a quality program, the standards enforce the discipline of control that is necessary before they can seriously pursue continuous improvement. The requirements of periodic audits reinforce the stated quality system until it becomes ingrained in the institution.

B.6 Deming and Baldrige

It is no secret that Deming was not an advocate of the Baldrige Award. Joseph Juran, however, was highly influential in its development. The competitive nature of the award is fundamentally at odds with Deming's teachings. However, many of Deming's principles are reflected directly or in spirit within the criteria.

C. European Quality Award

In October 1991, the European Foundation for Quality Management (EFQM) in partnership with the European Commission and the European Organization for Quality

announced the creation of the European Quality Award. The award was created to increase awareness throughout the European community, of the growing importance of quality in the increasingly global market. The European Quality Award consists of two parts: the European Quality Prize, given to companies that demonstrate excellence in quality management practice by meeting the award criteria, and the European Quality Award, awarded to the most successful applicant. In 1992, four prizes and one award were granted for the first time.

Applicants must demonstrate that their TQ approach has contributed significantly to satisfying the expectations of customers, employees and other constituencies. The award process is similar to the Deming Prize and Baldrige Award. The fundamental concepts are:

- Results orientation: excellence is achieving results that delight all the organization's stakeholders.
- Customer focus: Excellence is creating sustainable customer value.
- Leadership and constancy of purpose: excellence is visionary and inspirational leadership, coupled with constancy of purpose.
- Management by process and facts: excellence is managing the organization through a set of interdependent and interrelated systems, processes and facts.
- People development and involvement: excellence is maximizing the contribution of employees through their development and involvement.
- Continuous learning, innovation and improvement: excellence is challenging the status quo and effecting change by utilizing learning to create innovation and improvement opportunities.
- Partnership development: excellence is developing and maintaining value-adding partnerships.
- Corporate social responsibility: Excellence is exceeding the minimum regulatory framework in which the organization operates and to strive to understand and respond to the expectations of their stakeholders in society.

The EFQM publication for the new millennium of the so-called "Excellence Model" provides a framework which organizations can use to follow then new steps:

1. Set direction through leadership.
2. Establish the results you want to achieve.
3. Establish and drive policy and strategy.
4. Set up and manage appropriately your approach to processes, people, partnerships and resources.
5. Deploy the approaches to ensure achievement of the policies, strategies, and thereby the results.
6. Assess the business performance, in terms of customers, your own people, and society results.
7. Assess the achievements of key performance results.
8. Review performance for strengths and areas for improvement.
9. Innovate to deliver performance improvements.
10. Learn more about the effects of the enablers on the results.

D. Canadian Awards for Business Excellence

Canada's National Quality Institute (NQI) recognizes Canada's achievers of excellence through the prestigious Canada Awards for Excellence. NQI is a nonprofit organization designed to stimulate and support quality driven innovation within all Canadian enterprises and institutions, including business, government, higher education, and health care. The major criteria used for these awards include:

1. Leadership: strategic direction, leadership involvement, and outcomes.
2. Customer focus: voice of the customer, management of customer relationships...
3. Planning for improvement: development and content of improvement plan, assessment, outcomes...
4. People focus: human resource planning, participatory environment, continuous learning environment...
5. Process optimization: process definition, process control, process improvement, and outcomes...

E. Australian Business Excellence Award

Four levels of awards are given:

1. The Business Improvement Level: encouragement recognition for "Progress toward Business Excellence" or "Foundation in Business Excellence".
2. The Award Level: representing Australian best practices, recognition as a winner or finalist.
3. The Award Gold Level: open only to former Award winners; represents a revalidation and ongoing improvement.
4. The Australian Business Excellence Prize: open only to former Award winners; represents international best practices evident throughout the organization.

The assessment criteria address leadership, strategy and planning, information and analysis, people, customer focus, processes, products and services, and organizational performance in which customer focus should be the driver of the management system.

VII. Quality Tools Applicable to Higher Education

A. Brainstorming

- Definition: the open, uninhibited generation of ideas by a group.
- Utility: the purpose of brainstorming is to generate a wide variety of ideas, to ensure that everyone on the team becomes involved, to assure that nothing is overlooked, and to provide an atmosphere in which creativity can flourish, and we can break out of conventional thought. Any time group input is required. Problem selection, identifying cause and effect, group consensus efforts, and many others are good examples of the use of brainstorming.
- Construction:
 - a. Facilitator announces and records the question or topic to brainstorm.
 - b. Facilitator provides rules if none have been determined previously (Rules- No criticism (verbal or nonverbal); take turns-each person should have equal, ample opportunity to express ideas; quantity is important-the more the better...)
 - c. Members of the group take turns generating ideas. The facilitator makes sure this happens. Members have the right to pass at any point if they have no ideas. Each person may give one idea per person per turn.
 - d. Facilitator records the ideas as closely as possible to what was said and verifies the idea with contributor.

B. Affinity Diagram

- Definition: A tool to generate, organize, and consolidate information gathered through brainstorming.
- Utility: Affinity diagrams help to give a sense of the ideas that a group has concerning a given issue, provides an anonymous, nonjudgmental format for gathering group input. They give the group a sense of how serious a concern is because of the number of thoughts written on the issue. They also focus on how the group is similar in thought.
- Construction:
 - a. The leader states the problem or issue to be addressed.
 - b. Brainstorm and record all ideas, one per slip of paper, silently.
 - c. Post the ideas on a board or arrange on a table.
 - d. Have the entire group move the cards into piles by like ideas or common themes.
 - e. Name each group with a header that summarizes the content.
 - f. List all ideas under the categories or tape up ideas under headers to create the diagram.
 - g. Discuss the piles. Look at frequency of recurring themes, ask questions as needed and address next steps.

C. Cause-and-Effect Diagram

- Definition: Also known as the Fishbone or Ishikawa Diagram, a Cause-and Effect diagram is a picture of many system elements (causes) that may contribute to a

- problem (effect). It is organized output from a brainstorming session concerning “what causes.....?”
- Utility: A Cause-and-Effect diagram is useful whenever root causes of a problem need to be identified to find effective solutions. It allows a group to organize many ideas around a central theme of effect. Cause-and-Effect diagrams help teams locate both special and common causes of variation.
 - Construction:
 - a. Name the problem or effect the team will be analyzing.
 - b. Record the statement for all to see.
 - c. Draw and label the main bones by category. Typical categories may be people, methodology, curriculum, materials, assessment, and others.
 - d. Ask the team to brainstorm likely causes.
 - e. Record all ideas on the chart under the logical category or categories, if a cause fits under more than one category.
 - f. Ask the team, through consensus, to identify the most likely causes.

D. Check sheet/Matrix

- Definition: A tool to collect and organize data in a way that makes both collection and interpretation clear and understandable.
- Utility: Check sheets and matrices are useful when specifics in the data collection need to be reported. The block format makes the collection easier, and the clear categories make understanding and interpretation more clear.
- Construction:
 - a. Determine the data to be collected and reported.
 - b. Identify categories within the measurement that are of interest to you (types of errors, types of assignments, students...).
 - c. Construct the Check sheet/Matrix in a format that is useful to you.
 - d. Test the Check sheet/Matrix.
 - e. Collect the data.

E. Flowchart

- Definition: A drawing of any process, using standard symbols, that includes tasks, decisions, paperwork, and others in a sequence in which they occur.
- Utility: A flowchart provides a common understanding of the process as it currently operates or as it is projected to operate. It defines the system the team will study. The flowchart can be studied to look for ways to streamline, simplify, error-proof, and redesign the system. It also can be useful in system design to show how a system will work.
- Construction:
 - a. Define the boundaries to the process (Where does it start? Where does it stop?)
 - b. Observe the process in operation; ask people how work is done or should be done, and note the order in which steps occur.
 - c. List the major steps in the process (tasks and decisions)
 - d. Using the symbols, draw the flowchart.
 - e. study your flowchart.

F. Force-Field Analysis

- **Definition:** A tool to assess the likelihood of accomplishing a change. The tool defines driving forces, or any resources, attitudes, experience, and so on, that will support the change, and restraining forces as any resources, attitudes, or experiences that will cause the change to be stopped or delayed. Set-up in a two-column format (driving and restraining), with the desired change listed across the top of the page, the tool relies heavily on group input through some form of brainstorming.
- **Utility:** Force-Field analysis should be used whenever a change needs to be initiated as part of process improvement. It is useful that it not only provides a complete picture of what will be working for you and what will be working against you, but also because the group can move closer to consensus on the change by discussing the challenges and barriers in an open constructive format. Instead of negative conversation going underground, it is now legitimate to talk about it in the meeting.
- **Construction:**
 - a. Define the desired change and list at the top of the page.
 - b. Brainstorm the driving forces (resources, attitudes, experiences that will support the change). List on the left-hand column.
 - c. Brainstorm the restraining forces (resources, attitudes, experiences that will resist the change). List on the right-hand column.
 - d. Prioritize forces on both sides to determine what are the strongest drivers and restrainers.
 - e. Match and use drivers wherever possible to reduce and eliminate restrainers. Allow for conversation about how to approach the change.
 - f. Write an action plan at the bottom of the diagram.

G. Lotus Diagram

- **Definition:** A tool to expand thinking around a single topic. The expansion may include types, categories, details, or questions around a theme. It is a simple, effective way to organize the output around brainstorming.
- **Utility:** The Lotus is a good choice to organize the output of brainstorming around any central theme.
- **Construction:**
 - a. Identify the central topic or theme the group is to deal with.
 - b. Ask for the type of expansion you would like the group to make.
 - c. Record or ask the group to record the responses in the blocks around the lotus. You may use a lotus form, or simply fold a piece of paper into thirds both length-wise and width-wise.
 - d. Discuss the lotus and use it for its intended purpose.

H. Nominal Group Technique (NGT)/Light Voting

- **Definition:** A structured group process used to help teams make decisions without falling into voting or other decision-making modes that can divide the team.
- **Utility:** It gives everyone on the team an equal voice in the decision and reduces the pressure of traditional decision-making model to conform. It is used anytime the team needs to generate and choose a course of action for improvement (may be used several times during the course of the improvement process).
- **Construction:**
 - a. Leader writes the defined area of opportunity or problem to be addressed.
 - b. The group silently generates action items.
 - c. Ideas are stated and recorded.
 - d. Each item on the list is discussed to clarify understanding, not to promote or sell ideas.
 - e. Leader will establish criteria for the voting.
 - f. Leader conducts the vote
 - g. Results are discussed.

I. Pareto Diagram

- **Definition:** ranks data in categories from largest to smallest in terms of frequency of occurrence, cost, or time. Evaluates related measures of a problem or categories.
- **Utility:** A Pareto diagram is useful because it graphically represents the categories and their value, and helps an improvement team separate the ‘significant few’ categories from the “trivial many” in order to focus their efforts on an area that will yield the most significant results. Any time data can be stratified (separated by type or category), a Pareto is useful. This includes project selection, cause analysis, and location identification.
- **Construction:**
 - a. Choose logical categories to stratify your data.
 - b. Specify the time period you will collect data.
 - c. Collect the data on to a frequency table.
 - d. Draw and scale the horizontal and vertical axes.
 - e. Draw and label the bars for each category.
 - f. Review the chart, using these data to focus the team’s efforts.

J. Radar Chart

- **Definition:** A graph with multiple scales to report self-assessed knowledge or competence, often several points in time.
- **Utility:** A Radar chart is used to identify current level of self-assessed knowledge or competence, and then monitor change or growth across several factors.
- **Construction:**
 - a. Determine the critical factors, competencies, skills, or bits of knowledge you need to assess.
 - b. Draw the radar and identify the various spikes by characteristic you are assessing.

- c. Determine the scale (numbers often from 0 to 5) and definitions of what each number means, and mark both on the chart.
- d. Duplicate the chart, one per person.
- e. Ask the group to self-report and mark on the radar chart with a date or symbol indicating first measurement.
- f. Determine the next measurement point and repeat (e).
- g. Analyze data and compare results, if appropriate. You can choose to do a cumulative average of the group by adding and averaging the entire group's scores.

K. Relations Diagram

- Definition: A picture of the cause-and effect relationships between elements of a problem.
- Utility: A Relations diagram helps teams distinguish between causes and effects and get to root cause(s) and effect(s) of a problem when the group cannot reach consensus on its own. It is particularly useful when the group or team is struggling to get to root cause of a problem because of either the problem's complexity or the symptoms being more visible than the causes.
- Construction:
 - a. The leader clearly defines the issue or problem.
 - b. Construct the diagram layout with the effect in the center of the diagram and all suspected causes, one per block, around the center.
 - c. Analyze as a team the relationship between each two factors. Draw arrows from those that influence to those that feel the effect.
 - d. Count and list the arrows in and the arrows out for each cause category.
 - e. Identify the root causes (many arrows out, few arrows in) and the root effects (many arrows in, few arrows out).
 - f. As a team, study the final diagram to determine root cause and next action steps.

L. Run/Control Charts

- Definition: A graphic representation of system performance over time. A control chart helps us to determine if a system is stable and predictable over time and gives a team baseline data against which to mark future changes. Both variable and attribute data can be placed on control charts.
- Utility: A Run/Control Chart can tell what kind of variation is at work on your system, and give an assessment of your systems performance over time. It can help avoid undercontrolling or overcontrolling your system by understanding what is normal, predictable variation and what is not. At the beginning of every improvement project, a team should evaluate the system performance to help gather baseline of results data against which all changes can be evaluated.
- Construction:
 - a. Begin by planning how and where you will get your data.
 - b. Complete the chart identifier information and record the data on the sheet.
 - c. Calculate the process average.
 - d. Calculate the upper and lower control limits.

- e. Determine the scaling for the chart on the paper form, draw the center and control lines, and plot the points.
- f. Interpret the chart.

M. How These Tools Can Help

Using these quality tools as part of the continuing improvement process will help faculty and students to gain and sustain results.

You can use these tools as part of a “plan-do-study-act” process (PDSA), first created by W. Edwards Deming, one of the leaders of the quality movement.

- **Plan:** Assess where you are and where you want to be, identify strengths and barriers to improvement, and decide what you need to change.
- **Do:** Implement changes on a small scale or trial basis.
- **Study:** Using data, identify if your changes made a difference.
- **Act:** Set the process in motion and continuously assess results.

VIII. Success Stories at the university level

A. Introduction

Many international colleges and universities have made substantial commitments to quality efforts –sometimes through partnerships with business/industry. In fact, business plays an important role in fostering quality improvement efforts in higher education by transferring knowledge and expertise on quality processes and implementation practices.

B. Purdue University

In 1989 Xerox Corporation hosted its first Quality Forum, a gathering of academic and business leaders. Business leaders urged academia to teach quality principles and to use them in managing their organizations. Many companies established partnerships with colleges and universities. For example, Motorola's partnership with Purdue University led to the formation of the university's continuous quality improvement approach called Excellence 21, which is a systemwide effort by the university to explore the principles of continuous improvement and TQM. Projects were developed in the areas of:

- Faculty and staff development and worklife enrichment.
- Assessment of student learning outcomes.
- Student services
- Quality of undergraduate/graduate education.
- Administrative processes.
- Technology

C. Penn State University

Another example is Penn State University which is a mega university that serves more than 81000 students each year on 24 campuses. Since the early 1990s the university has shown a consistent commitment to continuous quality improvement (CQI) efforts. Each year, Penn state hosts a quality expo to “share, learn, and celebrate” quality improvements and quality champions”. One example of a noteworthy project is the following:

By eliminating several steps in the processing of new faculty appointments, a CQI team in the dean's office of the College of Health and Human Development saved 500 to 750 hours per year.

D. Binus University

BINUS, an Indonesian university, felt that the application of quality management principles in the university is urgent. The university quality management system, started by BINUS University in 1996, has been acknowledged internationally in 1997. BINUS achieved ISO 9001 certificate on November 17, 1997 because of its application of the quality management system in the scope of curriculum design and lecture materials, teaching and research...According to BINUS, obtaining the certification was not an easy matter. BINUS underwent six stages processes: preparation; document compilation; implementation and auditing; improvement and prevention; and finally the certification itself. BINUS believes that ISO 9001 is the ultimate recognition of global quality. The achievement has made BINUS aware that quality is the most important thing-its application, maintenance, and continuous improvement. To show continued interest, the certification has been renewed on February 10, 2005.

E. University of Wisconsin - Stout

On March 7, 2002, US President Bush and Commerce Secretary Don Evans presented five organizations with Malcolm Baldrige National Quality Awards in recognition of their performance excellence and quality achievements. Among the winners was the University of Wisconsin-Stout (UWS), which won in the education category. Previously, there had been no winners in the education category.

The 110-year old university employs about 1200 people, serving nearly 8000 students. Its annual operating budget is US\$95 million, with which UWS offers 27 undergraduate and 16 graduate degrees through three colleges.

Nearly half of UWS programs are unique within the university and several are not offered anywhere else in the US. This distinctive array of degree offerings stems from UWS's "mission driven-market smart" focus aimed at developing students for careers in industry and education. The university began conducting student satisfaction surveys in the mid 1970s. The results of these and other analyses are helping UWS to sharpen its "Mission-driven-market smart" focus to the benefit of students and employees alike. Since 1996, the job placement rate for graduates has been at or above 98%. Alumni earn salaries that exceed the national average from other institutions. Moreover, 99% of employers surveyed rate UWS graduates as well prepared. Such results also lead to satisfaction. For example, 90% of graduate program alumni and almost 90% of undergraduate alumni say that, if they could do it over again, they would choose to attend UWS.

In an interview with Charles Sorensen, the university's chancellor for the past 14 years, he mentioned the most difficult part about getting to the Baldrige level was "reinventing the campus, by seeing the campus not as a collection of isolated departments, but as a set of systems that all relate to one another in some way. It sounds simple, but it wasn't." He added that the major quality improvements they've seen during the Baldrige journey are "we think differently at this campus today. We think in terms of improving everything on a continual basis. We don't look backward anymore. There's been constant improvement in every process we have. We think with more vision than we ever did before, always looking ahead five years at what we want to become and how we're going to get there."

IX. Managing the Change

A. Introduction

The principles of total quality-focus on the customer, involve everyone, and continuously improve- are simple to understand and represent common sense. Yet many institutions have experienced great difficulty in implementing total quality and even deciding whether to do it. This difficulty often results from some common mistakes, such as that TQ means doing lots of 'things' like collecting data, organizing teams, or that it only applies to large companies. A total quality strategy does, however, require significant changes in institutional design, processes, and culture. Such broad change has been a stumbling block for many companies, and researchers have noted that upwards of 70% of all change initiatives fail.

B. Change Management

Change makes people uncomfortable, thus, managing change is seldom pleasant. Change management usually requires a well-defined process, just like any other business process. Thinking of change management as a process helps to define the steps necessary to achieve the desired outcomes. It also forces the institution to think of its employees as customers who will be affected by the change. Most change processes include three basic stages. The first stage involves questioning the institution's current state and dislodging accepted patterns of behavior. The second stage is a state of flux, where new approaches are developed to replace suspended old activities. The final period consists of institutionalizing the new behaviors and attitudes. An accumulation of continuously improving process changes can also lead to a positive and sustainable culture change.

C. Implementation Barriers to creating a TQ culture

Numerous barriers exist to successfully transform institutions to a sustained culture of total quality. Understanding these barriers can help significantly in managing this change process.

One reason for TQ failure is a lack of what Deming called "constancy of purpose" in his original version of the 14 Points. The people who implement quality initiatives often have conflicting goals and priorities. Other institutions continually try to implement the latest fads, only to disband them after a short time in favor of something else. This inconsistency causes an incredible amount of cynicism on the part of the workforce. An institution must have a clear understanding of why it is embarking on a total quality effort and must stay focused for the long haul.

Another reason for failure is the lack of the holistic view of quality. Many approaches to "implementing quality" are one-dimensional and are consequently prone to failure.

Another danger lies in the lack of understanding cultural issues and the tendency to imitate others. Research has shown that imitation of TQ efforts made by one successful organization may not lead to good results in another.

Another barrier is ignoring "What's in it for me?" question which can destroy – and it has in numerous cases – any TQ effort. Aligning the institution is a challenging task that is accomplished through a sound strategy and effective deployment. The most damaging alignment problem to which many TQ failures have been attributed is the lack of alignment between expectations that arise from TQ change processes and reward systems.

Other problems include the organizational culture which remains one of "command and control" and is driven by fear or game-playing, budgets, schedules, or bureaucracy; and

the overemphasis on cross-functional teams which leads to neglect individual efforts for local improvements.

Although the above list is extensive, it is by no means exhaustive. It reflects the immaturity that many institutions exhibit when trying to implement TQ. TQ requires a new set of skills and learning, including interpersonal awareness and competence, team building, encouraging openness and trust, listening, giving and getting feedback, group participation, problem solving, clarifying goals, resolving conflicts, delegating and coaching, empowerment, and continuous improvement as a way of life.

D. Sustaining the quality institution

Getting started often seems easy by comparison with sustaining a quality focus. Sustaining total quality requires viewing quality efforts as a journey, not an end, as well as the ability to develop into a “learning organization”.

Successful TQ organizations realize that quality is a never-ending journey. Therefore, both the culture and the organizational structure should be designed to support the established direction in which the organization is moving, and modified whenever that direction changes significantly. Senior management, especially those who do not understand the nature of leadership, are often hesitant to make needed institutional changes as the institution grows, even when the need for change becomes obvious. This need to change is embodied in a concept called the “learning organization”. Peter Senge, an MIT professor, has become the major advocate of the learning organization movement. He defines the learning organization as “...an organization that is continually expanding its capacity to create its future. For such an organization, it is not enough merely to survive. Survival learning or what is often termed adaptive learning is important-indeed it is necessary. But for a learning organization, adaptive learning must be joined by generative learning, learning that enhances our capacity to create”.

Learning organizations are skilled in creating, acquiring, and transferring knowledge and in modifying the behavior of their employees and other contributors to their institutions. They are good at performing the following activities: systematic problem solving; experimentation with new approaches; learning from their own experiences and history; learning from the experiences and best practices of others, and transferring knowledge quickly and efficiently throughout the organization. These characteristics will definitely help the institution sustain a quality focus.

E. Self-Assessment Processes

One way for institutions to build and subsequently sustain a TQ institution is to conduct self-assessments –which will be the focus of guide II- of where it stands relative to best practices and key requirements. Self-assessment should identify both strengths and opportunities for improvement, creating a basis for evolving toward higher levels of performance. Thus, a major objective of most self-assessment projects is the improvement of institutional processes based on opportunities identified in the evaluation. Self-assessment is the holistic evaluation of processes and performance. The self part of the term means that it should be conducted internally which promotes greater involvement of the institution’s faculty, staff, and senior administrators, yielding a higher level of understanding and buy-in.

F. The importance of follow-up

The lack of follow-through might seem a bit surprising. Why would institutions take the time to conduct a self-assessment and then not follow up on the results?

Some senior administrators may not follow up because they truly do not sense problem- despite information suggesting otherwise. Often, however, they get the message but choose not to respond. They react negatively or by denial. Others may not know what to do with the information.

Senior administrators must take a positive approach to self-assessment findings, no matter how unpleasant they might appear. Action plans must be set to identify particular activities- that may include preparing for institutional accreditation which is the subject of guide III - necessary to address the improvement opportunities. Many senior administrators consider their job finished when action plans are set in motion. However, planned changes are rarely implemented as initially intended. Moreover, people responsible for implementing the plans may need to use encouragement or involvement in order to effectively execute their portions of the intended change. Change implementation demands a second component of effective follow up – tracking the progress of action plan execution – to provide feedback on whether the intervention is effective.

X. Glossary of Terms Related to Quality in Higher Education

Academic recognition: Academic recognition is a set of procedures and processes for the acknowledgement and acceptance (subject to conditions), between institutions and countries, of higher education qualifications.

Academic year: The academic year is:

1. the duration of a specific program of study (which may not last a complete 12 months and is divided into terms, semesters or quarters)
2. the start and finish dates of the annual cycle of an institution of higher education.

Access / Accessibility: Access is the process of enabling entry to higher education.

Access courses: Access courses are preparatory programs for students to gain entry to higher education.

Accountability: Accountability is the requirement, when undertaking an activity, to expressly address the concerns, requirements or perspectives of others.

Accreditation: Accreditation is the establishment or of the status, legitimacy or appropriateness of an institution or program of study.

Accreditation body: An accreditation body is an organization delegated to make decisions, on behalf of the higher education sector, about the status, legitimacy or appropriateness of an institution, or program.

Accreditation of Prior Experiential Learning (APEL): APEL is the formal acknowledgement (based on professional assessment) of learning acquired from previous experience, usually from experience unrelated to an academic context.

Accreditation of Prior Learning (APL): Formal acknowledgement (based on professional assessment), by way of granting credit, of students' previous learning: credit is given towards a program of study or towards professional body accreditation.

Accreditation duration: Accreditation decisions are usually limited to a fixed and stated period of time, after which the institution or program is required to engage with a more or less rigorous re-accreditation process.

Accreditation status: Accreditation status is the embodiment of the decision made by the accreditation body.

Accreditation survey: Accreditation survey is a term mainly applicable in the US context and refers to a process of checking compliance.

Accreditors: Accreditors are agencies that provide recognition to institutions as part of an accreditation process

Action: Action is a term used in the United States to imply a judgment or decision following an accreditation.

Additional learning opportunities: Additional learning opportunities are elements of the program of study that augment the usual classroom teaching of the syllabus content.

Adverse action: Adverse action is a term used in the US to refer to failure to achieve/retain accreditation.

Agency: Agency is, in the context of quality in higher education, shorthand for any organization that undertakes any kind of monitoring, evaluation or review of the quality of higher education.

Aim: An aim is an overall specification of the intention or purpose of a program of study or institutional mission or policy.

Alumnus: An alumnus (plural alumni) is a graduate of an institution.

Appraisal of student learning: Appraisal of student learning is the process of providing formative and summative feedback to students on the development of their learning

Assessment: A general term that embraces all methods used to judge the performance of an individual, group or organization.

Assessment of student learning: Assessment of student learning is the process of evaluating the extent to which participants in education have developed their knowledge, understanding and abilities.

Assessment of teaching and learning: Assessment of teaching and learning is the process of evaluating the quality and appropriateness of the learning process, including teacher performance and pedagogic approach.

Assurance: Assurance of quality in higher education is a process of establishing stakeholder confidence that provision (input, process and outcomes) fulfils expectations or measures up to threshold minimum requirements.

Audit: Audit, in the context of quality in higher education, is a process for checking that procedures are in place to assure quality, integrity or standards of provision and outcomes.

Audit report: An audit report is a codification of the process, findings and outcomes of the audit process, usually prepared by the auditors and project team.

Autonomy: Autonomy is being able to undertake activities without seeking permission from a controlling body.

Bachelor-master's: Bachelor-master's is the shorthand for a two-cycle system of higher education that is being introduced across the European Higher Education Area as part of the Bologna process.

Bachelor degree: A bachelor degree is the first-level higher education award, usually requiring three or four years' study but more in some medical subjects.

Benchmarking: Benchmarking is a process that enables comparison of inputs, processes or outputs between institutions (or parts of institutions) or within a single institution over time.

Blended learning: Blended learning is a flexible approach that combines face-to-face teaching/learning with remote (usually internet-based) learning.

Bologna process: The Bologna Process is an ongoing process of integration and harmonization of higher education systems within Europe.

Certification: Certification is the process of formally acknowledging achievement or compliance: it can be used to signify the achievement of an individual, such as a student, or of an institution.

Classification: Classification is the process of identifying types of institution based on their core functions or economic status.

Comparability: Comparability is the formal acceptance between two or more parties that two or more qualifications are equivalent.

Competence: Competence is the acquisition of knowledge skills and abilities at a level of expertise sufficient to be able to perform in an appropriate work setting (within or outside academia).

Compliance: Compliance is undertaking activities or establishing practices or policies in accordance with the requirements or expectations of an external authority.

Continuing education: Continuing education is:

1. a generic term for any program of study (award-bearing or not) beyond compulsory education.
2. post-compulsory education of a short-term nature that does not lead directly to a major higher education qualification.

Continuing professional development (CPD): Continuing professional development (CPD) refers to study (that may accumulate to whole programs with awards) designed to upgrade knowledge and skills of practitioners in the professions.

Control: Control is the process of regulating or otherwise keeping a check on developments in higher education.

Co-operative education: Co-operative education includes work experience as part of the learning experience.

Corrective action: Corrective action is process of rectifying problems.

Correspondence course: A correspondence course is a study unit undertaken by the student remotely from campus via written communication with teachers.

Credit: Recognition of a unit of learning, usually measured in hours of study or achievement of threshold standard or both.

Credit accumulation: Credit accumulation is the process of collecting credit for learning towards a qualification.

Credit transfer: Credit transfer is the ability to transport credits (for learning) from one setting to another.

Criteria: Criteria are the specification of elements against which a judgment is made.

Criteria-referenced assessment: Criteria-referenced assessment is the process of evaluating against a set of pre-specified criteria.

Curriculum: Curriculum is the embodiment of a program of learning and includes philosophy, content, approach and assessment.

Degree: Degree is the core higher education award, which may be offered at various levels from foundation, through bachelors, masters to doctoral.

Diploma: Diploma is:

1. a generic term for a formal document (certificate) that acknowledges that a named individual has achieved a stated higher education award
2. an award for a specific level of qualification (diploma level) which in some countries is between a bachelor and a masters-level award
3. a term for any award beyond bachelors level up to but excluding doctoral level awards, including continuing education certification.

Diploma supplement: A diploma supplement is a detailed transcript of student attainment that is appended to the certificate of attainment of the qualification.

Dissertation: A dissertation is an extended (usually written) project involving research by the student, which contributes significantly towards a final assessment for a (higher) degree.

Distance education: Distance education is higher education undertaken by students in a setting remote from the physical campus of the higher education institution.

Distributed education: Distributed education occurs when the teacher and student are situated in separate locations and learning occurs through the use of technologies (such as video and internet), which may be part of a wholly distance education program or supplementary to traditional instruction.

Doctoral degree: The doctoral degree is the highest level of award in most higher education systems.

Effectiveness: Effectiveness is the extent to which an activity fulfils its intended purpose or function.

Efficiency: Efficiency is the extent to which an activity achieves its goal whilst minimizing resource usage.

Employability: Employability is the acquisition of attributes (knowledge, skills, and abilities) that make graduates more likely to be successful in their chosen occupations (whether paid employment or not).

European Credit Transfer System (ECTS): ECTS is a system for recognizing credit for learning and facilitating the movement of the recognized credits between institutions and across national borders.

Evaluation: Evaluation (of quality or standards) is the process of examining and passing a judgment on the appropriateness or level of quality or standards.

Ex-ante assessment: Ex-ante assessment involves undertaking an evaluation of the conditions for the launch of a program or institution.

Excellence: Excellence means exhibiting characteristics that are very good and, implicitly, not achievable by all.

Ex-post assessment: Ex-post assessment involves undertaking a review of an operational program or institution.

External evaluation: External evaluation is:

1. a generic term for most forms of quality review, enquiry or exploration.
2. a process that uses people external to the program or institution to evaluate quality or standards.

External evaluation team: External evaluation team is the group of people, including persons external to the program or institution being reviewed, who undertake the quality evaluation.

External examiner: An external examiner is a person from another institution or organization who monitors the assessment process of an institution for fairness and academic standards.

External expert: External expert is someone with appropriate knowledge who undertakes a quality or standards review (of any kind) as part of a team or alone and who is external to the program or institution being reviewed.

External institutional audit: An external institutional audit is a process by which an external person or team check that procedures are in place across an institution to assure quality, integrity or standards of provision and outcomes.

External quality monitoring (EQM): External quality monitoring (EQM) is an all-encompassing term that covers a variety of quality-related evaluations undertaken by bodies or individuals external to higher education institutions.

External review indicator: An external review indicator is a measurable characteristic pertinent to an external quality evaluation.

External sub-institutional audit: An external sub-institutional audit is a process by which an external person or team check that procedures are in place to assure quality, integrity or standards of provision and outcomes in part of an institution or relating to specific aspect of institutional provision or outcomes.

Faculty: Faculty is:

1. the organizational unit into which cognate disciplines are located in a higher education institution
2. a shorthand term for the academic (teaching and research) staff in a higher education institution.

Faculty review: Faculty review has two different meanings, the first based on faculty as a term for academic staff, the second based on faculty as an organizational unit:

1. Faculty review is a process of reviewing the inputs, process or outputs of a faculty as an organizational unit; its structure, mode of operation, mission, aims and objectives.
2. Faculty review, (meaning review of academic staff) evaluates the performance of researchers and teachers.

Fees: Fees are the financial contribution made by students to their higher education

Fitness of purpose: Fitness of purpose evaluates whether the quality-related intentions of an organization are adequate.

Follow up: Follow up is shorthand for procedures to ensure that outcomes of review processes have been, or are being, addressed.

Formal learning: Formal learning is planned learning that derives from activities within a structured learning setting.

Formative assessment: Formative assessment is evaluation of student learning that aids understanding and development of knowledge, skills and abilities without passing any final judgment (via recorded grade) on the level of learning.

Foundation program: A foundation program provides an introduction to degree-level study.

Franchise programs: Franchise programs are study units of one higher education institution adopted by and taught at another institution, although the students formally obtain their qualification from the originating institution.

Grading: Grading is the process of scoring or ranking student academic work as part of assessing student learning.

Graduate: A graduate is someone who has successfully completed a higher education program at least at bachelor degree level.

Higher degree: A higher degree is an award beyond the basic-level higher education qualification.

Higher education: Higher education is usually viewed as education leading to at least a bachelor's degree or equivalent.

Impact: Impact in the context of quality in higher education refers to the consequences that the establishment of quality processes (both internal and external) has on the culture, policy, organizational framework, documentation, infrastructure, learning and teaching practices, assessment/grading of students, learning outcomes, student experience, student support, resources, learning and research environment, research outcomes and community involvement of an institution or department.

Improvement: Improvement is the process of enhancing, upgrading or enriching the quality of provision or standard of outcomes.

Informal learning: Informal learning is:

1. learning that derives from activities external to a structured learning context.
2. Unstructured learning within a structured learning environment.

Inspection: Inspection is the direct, independent observation and evaluation of activities and resources by a trained professional.

Institution: Institution is shorthand for institution of higher education, which is an educational institution that has students graduating at bachelor degree level or above.

Internal evaluation: Internal evaluation is a process of quality review undertaken within an institution for its own ends.

Internal institutional audit: Internal institutional audit is a process that institutions undertake for themselves to check that they have procedures in place to assure quality, integrity or standards of provision and outcomes across the institution.

Internal sub-institutional audit: Internal sub-institutional audit is a process that an institution has for checking that procedures are in place to assure quality, integrity or standards of provision and outcomes within a department, faculty or other operational unit or that specific issues are being complied with across the institution.

Internal quality monitoring: Internal quality monitoring (IQM) is a generic term to refer to procedures within institutions to review, evaluate, assess, audit or otherwise check, examine or ensure the quality of the education provided and/or research undertaken.

Joint degree: A degree awarded by more than one higher education institution.

Learning outcome: A learning outcome is the specification of what a student should learn as the result of a period of specified and supported study.

League tables: League tables is a term used to refer to ranking of higher education institutions or programs of study.

Level:

1. Level refers to the complexity and depth of learning.
2. Level refers to the formally designated location of a part of a study program within the whole.

Licensing: Licensing is the formal granting of permission to (a) operate a new institution (b) a new program of study (c) practice a profession.

Lifelong learning: Lifelong learning is all learning activity undertaken throughout life, whether formal or informal.

Management audit: Management audit, in higher education, is a process for checking that management structures and abilities are appropriate for assuring quality, integrity or standards of provision and outcomes.

Master's degree: Master's degree is an award higher than a bachelor's degree.

Mobility: Mobility is shorthand for students and academics studying and working in other institutions, whether in the same country or abroad.

Mode: Mode of study refers to whether the program is taken on a part-time or full-time basis, or through some form of work-linked learning and may include whether taken on-campus or through distance education.

Module: A module is a formal learning experience encapsulated into a unit of study, usually linked to other modules to create a program of study.

Module specification: Module specification is statement of the aims, objectives/learning outcomes, content, learning and teaching processes, mode of assessment of students and learning resources applicable to a unit of study.

Monitoring: Monitoring has two meanings:

1. the specific process of keeping quality activities under review;
2. a generic term covering all forms of internal and external quality assurance and improvement processes including audit, assessment, accreditation and external examination.

Mutual recognition: Agreement between two organizations to recognize each other's processes or programs.

Norm-referenced assessment: Norm-referenced assessment is the process of evaluating (and grading) the learning of students by judging (and ranking) them against the performance of their peers.

Objective: An objective is:

- (a) a specific statement about what students are expected to learn or to be able to do as a result of studying a program: more specifically this is a learning objective;
- (b) a measurable operationalization of a policy, strategy or mission: this is an implementation objective.

Off-shore provision: Off-shore provision is the export of higher education programs from one country to another.

One-level degree structure: One-level degree structure is where a single program of study results in a final (masters-level) award.

Outcomes: Outcome is:

1. shorthand for the product or endeavors of a higher education institution (or sector), including student learning and skills development, research outputs and contributions to the wider society locally or internationally (institutional outcomes).
2. shorthand for learning outcome.

Outputs: Outputs refers to the products of higher education institutions: including, graduates, research outcomes, community/business activities and the social critical function of academia.

Oversight: Oversight, in the quality context, refers to the process of keeping a quality process or initiative under observation, such that a person or organization has a watching brief on developments.

Peer: Peer, in the context of quality in higher education, is a person who understands the context in which a quality review is being undertaken and is able to contribute to the process.

Peer Review: Peer review is the process of evaluating the provision, work process, or output of an individual or collective who operating in the same milieu as the reviewer(s).

Performance indicators: Performance indicators are data, usually quantitative in form, that provide a measure of some aspect of an individual's or organization's performance against which changes in performance or the performance of others can be compared.

Personal Development Planning (PDP): Personal development planning is a structured and supported process to assist students in arranging their own personal educational and career progression.

Postgraduate: A postgraduate is someone who is undertaking study at post-first degree level.

Preliminary study: Preliminary study is an initial exploration of issues related to a proposed quality review.

Prior learning: Prior learning is previous learning from informal and formal learning situations.

Process: Process, in the context of quality, is the set of activities, structures and guidelines that:

1. constitute the organization's or individual's procedures for ensuring their own quality /standards
2. constitute the mechanism for reviewing or monitoring the quality or standards of another entity.

Profession: A profession is a group of people in a learned occupation, the members of which agree to abide by specified rules of conduct when practicing the occupation.

Professional body: A professional body is a group of people in a learned occupation who are entrusted with maintaining control or oversight of the legitimate practice of the occupation.

Professional recognition: Professional recognition is the formal acknowledgement of an individual's professional status and right to practice the profession in accordance with professional standards and subject to professional or regulatory controls.

Program: is shorthand for a study curriculum undertaken by a student that has coordinated elements, which constitute a coherent named award.

Program accreditation: Programs accreditation establishes the academic standing of the program or the ability of the program to produce graduates with professional competence to practice.

Program evaluation: Program evaluation is a process of reviewing the quality or standards of a coherent set of study modules.

Program specification: A program specification documents the aims, objectives or learning outcomes, program content, learning and teaching methods, process and criteria for assessment, usually with indicative reading or other reference material as well as identifying the modules or subunits of the program, setting out core and optional elements, precursors and levels.

Progress file: A progress file is an explicit record of achievement, an aid to reflecting on the achievement and a mechanism to enable future planning.

Project team: The project team is the group of people, within a quality monitoring agency, who organize and arrange the external quality process.

Provision: Provision is an all-encompassing term that refers to the learning opportunities, research and community activity offered/undertaken by an institution of higher education.

Qualification: Qualification is the award to which a formal program of study contributes.

Quality: Quality is

1. (n) the embodiment of the essential nature of a person, collective, object, action, process or organization
2. (adj) means high grade or high status (as in a quality performance).
3. a shorthand, in higher education, for quality evaluation processes.

Quality control: Quality control is a mechanism for ensuring that an output (product or service) conforms to a predetermined specification.

Ranking: Ranking is a term used to refer to the rating and ordering of higher education institutions or programs of study based on various criteria.

Re-accreditation: Re-accreditation is the re-establishment or re-statement (usually on a fixed periodic cycle) of the status, legitimacy or appropriateness of an institution, program (i.e. composite of modules) or module of study or of the professional recognition of an individual.

Reciprocity: Reciprocity is the acceptance by one agency of the outcomes of a quality process conducted by another agency.

Recognition: Recognition is the formal acknowledgement of the status of an organization, institution or program.

Recognition of prior learning: Recognition of prior learning is formal acknowledgement of previous learning, from informal as well as formal learning situations.

Regional accreditation: Regional accreditation is recognition of an institution within a regional context: it is much the same as national accreditation but is not restricted to national boundaries.

Regulatory body: A regulatory body, in the context of higher education, is an external organization that has been empowered by legislation to oversee and control the educational process.

Report: Report (n.) is the documented outcome or results of an evaluation process.

Research assessment exercise (RAE): The RAE is a process, in the UK, that assesses the quality of research to enable the higher education funding bodies to distribute public funds on the basis of research quality ratings.

Review:

1. Review is generic term for any process that explores the quality of higher education.
2. Review refers to explorations of quality that do not result in judgments or decisions.

Review team: The review team is the group of people undertaking a quality monitoring or evaluation process.

Self-assessment: Self-assessment is the process of critically reviewing the quality of one's own performance and provision.

Semester: A semester is a division of the academic year; usually two semesters in a year.

Seminar: A seminar is, ideally, a small-group teaching situation in which a subject is discussed, in depth, by the participants.

Site visit: A site visit is when an external evaluation team goes to an institution to evaluate verbal, written and visual evidence.

Specialized accreditation: Specialized accreditation refers to any accreditation process that relates to specific discipline areas.

Stakeholder: A stakeholder is a person (or group) that has an interest in the activities of an institution or organization.

Summative assessment: Summative assessment is the process of evaluating (and grading) the learning of students at a point in time.

Substantial equivalency: Substantial equivalency is a term used in the US to indicate that an overseas program is essentially the same as a US program of study.

Thesis: Thesis is:

1. shorthand for doctoral thesis, the outcome of a student research at doctoral level.
2. an argument proposing and developing a theory about a substantive or conceptual issue.
3. an intellectual proposition.

Total student experience: Total student experience refers to all aspects of the engagement of students with higher education.

Transcript: A transcript is a printed or electronic record of student achievement while in higher education.

Transnational education: Transnational education is higher education provision that is available in more than one country.

Tuning: Tuning, in the context of quality in higher education, refers to the process in Europe of adjusting degree provision so that there are points of similarity across the European Higher Education Area.

Undergraduate: Undergraduate is a student who is undertaking a first-level degree program of study, normally a bachelor's degree or equivalent.

Unit: Unit has two meanings in the context of quality in higher education, one as subject and one as object of quality review

1. unit is the generic name for a quality monitoring department internal to an institution.
2. unit is any element that is the subject of quality review: institution, subject area, faculty, department or program of study.

Validation: Validation is a process of confirming that an existing program of study or a newly designed one can continue or commence operation.

Value for money: Value for money is one definition of quality that judges the quality of provision, processes or outcomes against the monetary cost of making the provision, undertaking the process or achieving the outcomes.

Work-based learning: Work-based learning refers to any formal higher education learning that is based wholly or predominantly in a work setting.

Work-related learning: Work-related learning refers to any formal higher education learning that includes a period of learning that takes place in a work setting or involves activities linked to a work setting.

XI. Important Quality in Higher Education Links

- European Association for Quality Assurance in Higher Education www.enqa.eu
- European Consortium for Accreditation www.eacaconsortium.net
- European Foundation for Quality Management www.efqm.org
- European Organization for Quality www.eoq.org
- United Kingdom Business Improvement Network www.bin.co.uk
- International Network for Excellence in Management Development www.efmd.org
- International Society for Performance Improvement www.ispi.org
- Council for Higher Education Accreditation www.chea.org
- American Society for Quality www.asq.org
- Academic Quality Improvement Program www.aqip.org
- International Organization for Standardization www.iso.org
- North Central Association Commission on Institutions of Higher Education www.ncaciche.org
- National Quality Institute www.nqi.ca
- Deming Institute www.deming.org
- Quality Gurus www.qualitygurus.com
- American Quality Mall www.americanquality.com
- Association to Advance Collegiate Schools of Business www.aacsb.edu
- Association of Specialized and Programmatic Accreditors www.aspa-usa.org
- Middle States Association of Colleges and Schools Commission on Higher Education www.msache.org
- Accreditation Board for Engineering and Technology www.abet.org

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Guide II: Self Evaluation in Higher Education Institution

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I. Introduction

Self-evaluation - sometimes called self-study, self-assessment, departmental review (these terms will be used interchangeably in this guide) - is becoming a feature of academic life in higher education institutions in many countries. Self-evaluation provides systematic feedback to an institution on how it is doing. It is a process of diagnosis and reflection that leads to action. And the more the process is planned and internalized, the more likely that the institution will act on the results.

Planned, systematic self-evaluation is a self-strengthening process – it builds muscles for reflection and learning. And the more you reflect and learn and then act on your learning, the better you do it next time. Self-evaluation creates a habit for continuous improvement.

Self-evaluation is sometimes an external requirement of a national quality agency. Other times, it is an initiative taken within a higher education institution in order to support development and planning or to deal with perceived problems. Whatever the reasons for undertaking self-evaluation, it is a process which requires collective judgments about academic work. It also requires the collection of much information, analysis and debate.

Moreover, it is generally accepted that the self-evaluation phase plays a fundamental role in developing quality within a higher education context.

II. Purpose of Self-Assessment and its Link with Accreditation

The main purpose of the self-assessment process is to help higher education institutions ensure that they meet established standards of quality and that they continually evaluate the extent to which they meet educational quality goals.

From this self-assessment will come recommendations for improvements or enhancements to policies, processes, programs, services, facilities, and human resources.

Self-study is at the heart of the accreditation process. As mentioned before, effective self-assessment serves both internal and external purposes. It is concerned with quality assurance and encourages institutional improvement through rigorous self-analysis

Self-study is more than a document that addresses in depth the various Standards for Accreditation. It is an intensive endeavor involving individuals throughout the institution of higher education in a process of self-examination aimed at institutional improvement.

The self-assessment should not be viewed as an isolated phenomenon in which an institution periodically engages. Rather, if self-assessment is to be valuable, it should be an integral part of the institution's ongoing planning and evaluation efforts. Incorporating self-assessment into the planning process serves the institution in its continuing search for better ways of achieving its objectives. The self-assessment process necessitates thinking about the context in which the institution is operating and in what ways it is affected by its external environment. In addition, higher education institutions have to secure the following necessary conditions for self-evaluation to succeed:

- **Adequate Resources:** The institution must provide adequate resources including working time and space for those involved in the process, information, and the technology needed to support data gathering and report preparation.
- **A safe and non-judgmental environment:** Successful self-evaluation requires a safe climate characterized by respect and broad communication. The process requires a widely held understanding of institutional activities and priorities as well as a commitment to the attainment of measurable objectives.

The resulting report from a self-assessment process should present a clear, concise and accurate picture of the institution as a dynamic entity with a sense of its history, an understanding of its present, and a vision of its future. The self-study should demonstrate the institution's capacity for reflective self-examination as a means for improvement. Generally, the self-assessment process is seen as a necessary first step towards an accreditation journey.

III. Expectations for Self-Assessment

The self-assessment efforts exemplify the following general principles. In essence, self-assessment:

- Focuses on the institution as a whole. As mentioned before, self-assessment is generally seen as a necessary first step towards accreditation; and for accredited institutions, by addressing in this process, specific criteria for accreditation, the institution will gain reaffirmation of its accreditation. Because our emphasis in the QAHEL project is institutional not program-specific, the accreditation is for the entire institution rather than specific departments, programs, locations, or means of instruction. However, evaluating an institution in terms of accreditation standards requires that all of the institution's component parts be examined and that all locations and modes of offering its academic program be included. Ultimately, the information gathered through evaluation of each part must be used to formulate an evaluation of the institution as a whole.
- Appraises and assesses institutional effectiveness. While a self-assessment report provides a clear description of an institution's programs, resources, and operations, it also analyzes and determines how well the institution is functioning and the degree to which the institution is meeting its objectives, as well as setting forth the institution's commitments for improvement. By identifying its strengths and those areas in need of.
- Illustrates improvement along with plans for the future. The institution demonstrates the capacity to continue to meet its objectives. Institutional improvement should always be a goal of the process.
- Results in an unbiased and critical self-examination. The key objective of self-evaluation is to evaluate the higher education institution's effectiveness in achieving its mission and in striving towards continuous improvement in quality. The institution will need to:
 - a. Ask hard questions.
 - b. Identify key strengths and weaknesses.
 - c. Evaluate the adequacy of resources and identify key limitations.
 - d. Arrive at a clear understanding of the distance to be covered in order to achieve its strategic quality objectives.
- Contributes to a better understanding of the nature of quality in higher education. The self-evaluation process should result in detailed discussions within the institution about the nature of quality in a higher education context. This will support:
 - a. Continuous quality improvement within the institution.
 - b. Greater understanding of the issues surrounding quality in higher education.

Thus, through self-assessment, the institution demonstrates that it is using information gathered from its evaluative efforts to enhance its ability to meet its goals and fulfill its mission.

IV. Self-Evaluation Process

The self-evaluation process should be integrated into the overall concept of improving quality so as not to overburden the institution. A well-organized and efficient self evaluation should link ongoing processes in strategic management, quality management and teaching management to the process leading ultimately to accreditation.

A self-evaluation process must be prospective and well-structured if the institution is to gain the maximum benefit from the effort involved. Important stages in the self-evaluation process include:

- Selecting the type of self-evaluation model (described briefly in the next section) that will be most useful to the institution in supporting and promoting its particular goals and priorities.
- Establishing and organizing the required committees and campus-wide participation for effective involvement of the entire institutional community.
- Implementing the process.
- Writing a report summarizing the institution's conclusions and recommendations.
- Developing a strategic quality plan to sustain strengths, overcome problems/weaknesses, and address growth areas.
- Institutions interested in initial/continued accreditation: Hosting an evaluation team of peers who review the institution's self-study in the context of the institution's mission.
- Responding to the report of the evaluation team.
- Receiving the accreditation body's decision regarding initial or continued accreditation.

V. Overview of Self-Evaluation Models

There are three major models for self-evaluation. These are the comprehensive model (including a variation involving special emphases), the selected topics model, and the collaborative model. Within these broad models, there are many possible approaches to self-evaluation. This flexibility recognizes the differences in mission, purpose, internal conditions, needs, and external influences at each higher education institution.

A. The Basic Comprehensive Model

This model will be emphasized in this guide because it suits the current needs of the Lebanese higher education sector.

It is actually a comprehensive self-evaluation that enables an institution of higher education to appraise every aspect of its programs and services, governing and supporting structures, resources, and educational outcomes in relation to the institution's mission and goals.

B. The Comprehensive with Emphasis Model

A comprehensive with emphasis self-evaluation is a variant of the basic comprehensive model. It is particularly useful for an institution wishing to give special attention at the outset to selected issues that affect it. Institutions usually select from one to three areas of emphasis within a single self-evaluation in this model.

C. The Selected Topics Model

A selected topics model allows an already accredited institution to devote concentrated attention to selected issues, without having to provide comprehensive analysis of institutional programs and services and without having to address all accreditation standards within the self-evaluation report.

D The Collaborative Model

Almost all institutions of higher education are subject to review and oversight by multiple agencies or organizations. Some institutions find it helpful to coordinate one or more of these reviews with their self-evaluation in order to minimize duplication of effort and to maximize institutional benefit.

The collaborative review is a cooperative review process in which an accredited institution invites institutional, specialized, or professional accrediting agencies, government agencies, or other organizations to join in a review of the institution.

VI. Guidelines

The following recommendations are made with a view to making the self-evaluation run as smoothly as possible:

A. Self-Evaluation Group

Self-evaluation provides a special opportunity for each institution to reach out to all of its constituents. A broad cross-section of an institution's constituencies might include, for example, faculty, students, trustees, administrators, alumni, parents, employers, and legislative representatives.

Such participation is essential because each institution's decision making process can be enriched if it incorporates a wide range of diverse perspectives, ideas, and judgments. Moreover, the institution community will be more prepared to implement any resulting plans.

Accordingly, the institution should appoint a chairman (sometimes called project leader) and a self-evaluation committee (sometimes called steering committee) to manage the process and draft the report. The chair is usually appointed by the university higher council or the university President. It is obvious that the chair should be competent, well respected and committed, suitably qualified and resourced to carry out the work. In some circumstances, it is useful to appoint co-chairs to lead the self-evaluation effort. This arrangement may be particularly useful at large and complex universities or at multi-campus institutions.

Representation on the committee is also a key issue, and should include representatives from key stakeholders groups. It is essential that there be adequate faculty involvement in the self-evaluation process, and appointment of a faculty chair may encourage such participation. Involvement of key administrators is also important, and appointment of an administrator as a chair or co-chair may also be appropriate. The members of the steering committee may be appointed or elected, but they should as mentioned before represent the total institution community and should include adequate faculty representation.

The self-evaluation committee is responsible for providing leadership to the entire self-evaluation process. This includes determining the key issues for self-evaluation, recommending a self-evaluation model that would best reflect those issues, developing a self-evaluation design, establishing and charging subcommittees and coordinating their work on the various issues to be studied, ensuring that the timetable is implemented as planned, assuring communication within the institution about the self-evaluation process, and overseeing the completion of the final self-evaluation report and any other documents relevant to the self-evaluation process.

B. Communication

At an early stage, the self evaluation committee will need to provide a full explanation within the institution about the aims of the self-evaluation process. It must also make sure that its methodologies and its own role in the process are understood and accepted.

Administrators, academic staff and students must be informed about and benefit from a full opportunity to participate in the self-evaluation process. Effective communication with these parties must be maintained throughout the process.

The campus community should have opportunities at various points in the process to learn about and respond to self-evaluation issues and approaches and to review the self-evaluation in draft.

Many institutions effectively use electronic posting of documents and communication via e-mail to facilitate and enhance this process.

C. Methodology

Self-evaluation should take three to six months on average to complete. In view of this, it is advisable to draw up a detailed plan laying down key topics, assigning responsibilities and setting deadlines.

The fundamental stages of the self-evaluation process must be supported by systematic and organized collection of qualitative and quantitative data. This will allow the evaluation of compliance with the set standards. It is therefore strongly recommended that the first step be to define the main sources of information and appoint individuals to take charge of collecting and analyzing data. Various sources (audit reports, results of assessment, questionnaires, statistics etc.) can be used. Making use of available information can save a considerable amount of time. The following criteria should be applied to the self-evaluation methodology:

1. **Systematic:** The self-evaluation methodology should be well-planned, thorough, and comprehensive. The self-evaluation should be driven by a methodology seeking to answer key questions rather than simple application of a tick-box approach.
2. **Objectivity and balance:** The methodology used should result in a balanced statement of current strengths and weaknesses, opportunities and threats and a determination of the action needed to address these and maximize potential.
3. **Participation:** In collecting data and evaluating the results, the methodology should rely on a variety of groups to agree on key conclusions and recommendations. This is not a way of improving objectivity, but also a way of improving communication and commitment to the findings.

D. Timetable

The institution must set up a timetable laying down the various stages of self evaluation:

- Self-evaluation starts
- Set up the self evaluation group
- Give information on the details of the self-evaluation process
- Assign responsibility for collecting and analyzing data
- Data collection and analysis starts
- Basic data collection and analysis ends

- Draft report
- Complete and revise report

The Steering committee is responsible for establishing an overall timeline for completing the self-evaluation that includes dates for completing the tasks of each subcommittee and for supplying necessary documents and information to the self-evaluation committee. Each committee and work group creates a schedule for its own work that supports the overall self-evaluation effort. Progress reports and interactions among the various committees will aid in assuring adherence to the established schedules for completion.

VII. Areas Evaluated and Standards

The generic areas to be evaluated relate mainly to inputs and processes. They refer to the objectives of the institution or program, its strategy, infrastructure and organization, and processes and developments in teaching and research. Standards, discussed in details in the second part of this guide, are formulated for each area and complemented by corresponding points of reference (indicators). These later elements will help the institution or program collect the information needed to assess the standards.

The institution or program can also ask for specific areas or topics to be addressed with a view to developing quality.

VIII- Self-Evaluation Report

The final self-evaluation report should be a concise and readable, but substantial document to be used by its principal readers, the campus community. This audience may include, for example, faculty members, students, trustees, administrators, alumni, parents, employers, and legislative representatives. The design should anticipate that campus constituents will discuss the final draft of the self-evaluation report, that there will be a process to gain general acceptance of the document, and that the faculty, administration, governing board ultimately will take responsibility for the entire report.

The self-evaluation report is both a description and an analysis; it is therefore very important to indicate and separate these two aspects clearly. It must give a global and objective view of the institution, and its overall approach should be constructive.

A reliable, representative, coherent and clear self-evaluation report will make the external evaluation process much easier.

The report must include the following: members of self evaluation group, executive summary introduction, history, mission, vision, university values, priorities, facts and figures (students' distribution, students - faculty distribution, enrolment, full time faculty members, part time faculty members, and total faculty members), development of the strategy, and covered areas.

A. Length

No more than one hundred pages (main text) plus annexes.

B. Format

Usually, self assessment is conducted to obtain institutional or program accreditation. Accordingly, the format should follow the guidelines of the accrediting body.

C. Cover

The cover must show the title of the document (self-evaluation report), the name of the institution and the date of completion.

D. Executive Summary

The self-evaluation report should include an executive summary of no more than 5 pages that briefly describes the self-evaluation process and highlights the major findings and recommendations of the study.

E. List of Members of the Self Evaluation Group

The list must specify the responsibilities of each member.

F. Development of the Strategic Planning

Professional and regional accrediting association criteria place a growing emphasis on an integrated approach to assessment and planning. The Strategic Planning in Higher

Education (SPHE) provides a means to address key planning and change management issues and helps further a culture of continuous assessment and renewal throughout the institution mission and vision. SPHE emphasizes key strategies for effective leadership, communication, and assessment throughout the seven planning phases.

Mission, Vision, and Values – reviewing the organization’s guiding principles as a useful reference point for planning, especially when determining how to allocate resources and measure achievements.

Collaborators and Beneficiaries – identifying critical stakeholders, with particular attention to their expectations for the plan’s development and implementation.

Environmental Scan – examining cultural issues, resource concerns, and other factors that may impinge on the planning process.

Goals – identifying an organization’s aspirations in tangible, achievable, and measurable terms.

Strategies and Action Plans – translating goals into a series of concrete strategies and activities with appropriate timelines.

Plan Creation – describing goals and strategies in a manner that is comprehensive, yet easily understood.

Outcomes and Achievements – monitoring progress and, most importantly, evaluating outcomes.

Areas Evaluated and Standards - The self-evaluation report gives descriptive answers and an analysis based on points of reference (indicators) of each standard. The institution must also give its reasoned opinion on whether the standards have been met for each area. In exceptional cases it may not be possible for the institution to measure a standard; this must be highlighted and explained in the report. Sections covering individual areas must conclude with a summary of the institution’s strengths, weaknesses and prospects. The institution may already have made specific proposals for improvement in particular areas. (Refer to Appendix A for a list of the areas and their corresponding indicators.

Sample Questionnaires – Refer to Appendix B for a list of sample questionnaires to obtain feedback from stakeholders. These questionnaires are only suggestive and may be adapted to the institution’s needs. The data collected will form an important feedback for quality enhancement of the institution. The institution may devise its own feedback mechanisms to present the data to the peer team during the visit.

Pre-Accreditation Documents - The self evaluation report should include facts and figures about the institution, and generally other documents required for institutional accreditation as will be explained in Appendix C.

IX. Appendix A

Areas Evaluated: Standards and Indicators

Area 1: Management of the institution	
A. Leadership and Organization	
Standard	Indicators
Mission and vision statement, objectives	<ol style="list-style-type: none"> 1. The academic institution has a mission statement available to the public which states its educational and research objectives and which describes the position of the institution in its academic and social context. 2. The mission and vision statements should be approved by the board of trustees 2. Different faculties within the higher education institution should have their respective mission statements which are compatible with the institutional mission statement. 3. The mission statement should be periodically reviewed.
Strategic/department plans	<ol style="list-style-type: none"> 1. The institution has a strategic plan enabling it to implement its mission statement. 2. The institution regularly engages in reflection and planning that allow it to articulate priorities, align its purposes with its resources, and determine future directions 3. The institution monitors the effectiveness of the implementation of its plans and revise it as appropriate 4. The institution has planning bodies that meet regularly and have a clear charge and plan to assess the attainment of the institution's educational objectives. 5. Different faculties within the higher education institution should have their respective plans. 6. Evidence of planning activities should be demonstrated by the minutes of planning councils, board planning committees...
Preparing for the future	<p>The institution's allocation of resources and its processes for evaluation and planning demonstrate its capacity to fulfill its mission, improve the quality of its education, and respond to future challenges and opportunities.</p>
Internal evaluation	<ol style="list-style-type: none"> 1. The institution has implemented measures for monitoring and internal evaluation. 2. The institutional should provide : (factbook., program reviews of academic and non-academic units, student course and teaching evaluation forms and reports, students surveys, internal audit)

Area 1: Management of the institution	
A. Leadership and Organization	
Standard	Indicators
Governance and decision making	<ol style="list-style-type: none"> 1. There is a public chart of the institution governance system: (Board of Trustees, University council, Departmental council, Scientific Board or council) 2. The organization’s governance and administrative structures promote effective leadership and support collaborative processes that enable the institution to fulfill its mission. 3. Decision-making processes, competencies and responsibilities have been determined. The academic staff participates in decision-making processes affecting teaching and research. The students participate in decision-making processes affecting their education and are able to state their opinions. 4. The functions of the institution and its academic and administrative units are governed by the principles of participation and transparency. 5. The institutional should have manuals explaining governance policies and procedures (board memberships, minutes of meeting, policy on board evaluation of the president, job descriptions for principal administrators)
Quality assurance system	<ol style="list-style-type: none"> 1. The institution employs measures which help to ensure the systematic quality assurance of and improvements to its teaching and research activities. 2. The institution has quality assurance processes in place at each level of institutional functioning (including new curriculum and programs, program review, ongoing evaluation, and data collection). 3. The institution uses the results from quality assurance processes to revise and improve structures, processes, curricula, and pedagogy...

Area 1: Management of the institution	
B. Human Resources	
Standard	Indicators
The institution has a human resources policy	<ol style="list-style-type: none"> 1. There is a public organization chart that shows reporting relationships and the formal arrangement of work positions within the institution. 2. The institution has a policy for the forward planning of faculty positions. 3. The institution planning integrates objectives regarding external recruitment and internal promotion of faculty/staff. 4. The institution has a policy for the forward planning of technical and administrative positions. 5. The institution has regulations governing the employment of temporary staff.
Rights and Responsibilities	<ol style="list-style-type: none"> 1. All faculty/staff members receive a booklet explaining their rights and responsibilities. 2. All faculty/staff members receive a practical document on social services
The institution has a policy for managing human resources, career paths and conditions of service.	<ol style="list-style-type: none"> 1. The institution has a policy for the management of human resources. 2. The institution has set up a career development service for its human resources. 3. The institution has a policy for financial recognition of additional responsibility. 4. The institution has a policy for staff mobility.
Skills management policy	<ol style="list-style-type: none"> 1. The institution anticipates the development of occupations and skills. 2. The institution devotes part of the training effort to promoting its human resources. 3. The institution promotes the training of its teaching, technical and administrative staff and elected management staff.
Welfare Policy	<ol style="list-style-type: none"> 1. The institution has a policy on health and safety. 2. The institution has a structure for the management of welfare. 3. The institution offers health benefits to students. 4. The institution offers health benefits to faculty/staff members

Area 1: Management of the institution	
C. Financial Management	
Standard	Indicators
Finance organization	<ol style="list-style-type: none"> 1. The budgeting follows a defined procedure. 2. The budget takes into account the institution strategic plan. 3. The budgeting procedure is described in documents published by the institution.
Resource distribution	<ol style="list-style-type: none"> 1. The institution has the means to apply its financial policy. 2. The institution has clearly identified finance and accounting departments or at least one department with both functions responsibilities. 3. The institution has a transparent system for the internal distribution of resources.
Budget policy	<ol style="list-style-type: none"> 1. The institution has a policy of budgetary and financial care 2. The institution has a procedure for monitoring the budget. 3. The institution has set up financial auditing. <p>Financial management is regularly evaluated, and the results are used to improve the financial management system</p>
Financial Stability	<ol style="list-style-type: none"> 1. The institution ensures that future obligations are clearly identified and plans exist for payment. 2. The institution has policies for appropriate risk management. 3. The institution ensures that cash flow arrangements or reserves are sufficient to maintain stability. 4. The institution has a plan for responding to financial emergencies and unforeseen occurrences
Auxiliary activities and fund raising	<p>Auxiliary activities and fund raising efforts support the programs and services of the institution, are consistent with the mission and goals of the institution, and are conducted with integrity.</p>

Area 2: Partnerships and Cooperation	
Standard	Indicators
Environment	<ol style="list-style-type: none"> 1. The institution regularly scans its environment. 2. The institution has a process to inform itself about regional economical development. 3. The institution monitors the employability of graduates. 4. The Areas of synergy, the complement and the competition with the other higher education institutions in the region are followed up and analyzed on a regular basis.
Collaboration policy	<ol style="list-style-type: none"> 1. The institution has defined priorities in its collaboration policy. 2. The institution has many linkages with other organizations to promote: curriculum development, internship, job training, faculty exchange and development, research, consultancy, publication, students exchange and inter-institutional transfer of credits.
Cooperation with other institutions	<ol style="list-style-type: none"> 1. The institution has a strategy of cooperation with the other institutions in the same area. 2. The institution has set up and formalized relations with all other higher education institutions as well as relevant organizations.
International mobility	<ol style="list-style-type: none"> 1. The institution has a policy that encourages international mobility. 2. The institution monitors its involvement in international programs. 3. The institution has implemented measures to help with the mobility of students, doctoral students, teaching staff and other. 4. The institution has a policy for the integration of international students. 5. The institution has a policy for the integration of teaching and research staff coming from abroad.
Cooperation with stakeholders	<ol style="list-style-type: none"> 1. The local communities are invited to participate in the executive and advisory bodies of the institution and to define the educational pathways and research programs. 2. There are partnership and contractual agreements with local and regional communities and with companies. 3. The professional environment participates in the achievement of the mission statement of the institution.

Area 3: Research	
Standard	Indicators
Strengths and weaknesses in matters of research.	<ol style="list-style-type: none"> 1. The institution carries out its own evaluations on developing research teams. 2. The institution is aware of all the projects and work of its research teams. 3. The institution has consolidated information on all the financing of the research teams.
3Dynamism and creativity of research.	<ol style="list-style-type: none"> 1. The institution promotes the development of research teams and new projects, and ensures their support. 2. The institution ensures the implementation of collaborative research structures.
Position in the international research context.	<ol style="list-style-type: none"> 1. The institution has a policy of relevant partnerships with universities in other countries. 2. The institution monitors its research. 3. The research of the faculty members is published in international publications. 4. The faculty members are invited to international symposiums.
Definition and implementation of research priorities.	<ol style="list-style-type: none"> 1. The institution has a policy supporting innovation. 2. The research potential is set up in accordance with the priorities set by the institution. 3. The institution recruits faculty members according to the research strategies of the institution.
Communication and publishing of research production.	<ol style="list-style-type: none"> 1. The institution has a policy supporting the organization of seminars and symposiums backed by nationally recognized research organizations. 2. The institution has a publication policy. 3. The institution is involved locally, regionally and nationally in the dissemination of research culture. 4. The research done at the departments is published in well-recognized journals and conference proceedings.
Research culture among faculty and students.	<p>The process of promoting research culture among faculty and students is ensured by facilitating participation in research and related activities, providing resources and other facilities</p>

Area 3: Research	
Standard	Indicators
Research coordination	The institution has mechanisms for the governing and organizing research programs and logistics.
Research Strategy	The research conforms to the research plan devised by the department
Research Funding	The research projects are adequately funded by the university, industries, the government, international organizations....etc.
Research budget and Financial Support:	The institution has rules for the governing the coverage of travel and accommodation for attending conferences.
Research references	The institution provide up-dated, well-equipped libraries with IT infrastructure.
Sabbatical leave for faculty members.	The institution has rules for the governing of sabbatical leave for faculty members.
Work load for faculty members	The institution ensures that faculty members have enough time for research work.
Cooperation	The university has links with other national, regional and international research institutions.
Relevance	The research done is relevant to the economy, industries and the society.
Originality	The research contributes to the development of the field of specialization through investigating new areas or reevaluating the progress that has already been achieved.
Citation	The research done at the department is acknowledged at a national and international level by other academics.

Area 4: Graduate Programs	
Standard	Indicators
Variety and diversity:	The institution ensures that postgraduate program and research cover a wide range of topics in the field of specialization.
Disciplines	The institution encourages multidisciplinary and interdisciplinary graduate program studies
Quality of graduate students, qualifications at admissions	<p>1. The institution has policies that indicate the scope and nature of postgraduate education at the institution, and stipulate clear admission requirements and procedures. These admission requirements should be compatible with corresponding national (Lebanese Ministry) and international graduate studies standards.</p> <p>2. The institution has the required policies and criteria for the evaluation and approval of master's and doctoral proposals</p> <p>3. The institution ensures the students' commitment to postgraduate studies.</p>
Competence of graduates, reports of graduate students'	<p>1. The institution ensures that graduates are qualified for a competitive job market as well as pursuing further research.</p> <p>2. The institution applies clear criteria against which to evaluate, approve and monitor postgraduate research</p>
Student financial aid: scholarships, fellowship, and research support awards	<p>The institution has:</p> <ol style="list-style-type: none"> 1. Available and sufficient financial aid programs. 2. Policies and criteria governing access to and allocation of funding for postgraduate education and research; 3. Special funds to support postgraduate research
Supervision:	<p>The institution has:</p> <ol style="list-style-type: none"> 1. Policies and regulations that specify the role and responsibilities of supervisors of postgraduate research; 2. Policies and criteria for assessment of postgraduate education and research
Examination committee:	The institution provides rules for selecting and forming examination committees for MA and PhD theses (Supervisor, internal and external examiners)
Publication:	<ol style="list-style-type: none"> 1. PhD students are encouraged or supposed to publish part of their dissertations before their defense. 2. The institution has policies and regulations regarding postgraduate publications.

Area 4: Graduate Programs	
Standard	Standard
Faculty members	<p>The institution ensures that:</p> <ol style="list-style-type: none"> 1. Faculty responsible for/involved in the program are well qualified; i.e., have the appropriate academic and/or professional qualifications to support and develop the program according to ministry criteria. 2. Faculty members maintain and update the skills and knowledge appropriate to their discipline through involvement with academic, professional and/or scientific organizations. 3. Faculty members are nationally/internationally recognized for their scholarly and/or professional work. 4. Faculty are successful in obtaining research support
Thesis rules	The institution provides rules governing choice of MA or PhD topics, progress reports and thesis submission and examination.
Manuals	The institution provides a manual for graduate programs available for faculty members and students. This manual includes all regulations as well as programs and curricula
Theses and dissertations database	The institution keeps a database of completed and in progress of theses/dissertations
Program reviews of graduate programs.	The institution adopts regular review of the effectiveness of arrangements for the quality assurance, development and monitoring of the postgraduate programs.

Area 5: Programs and Curricula	
Standard	Indicators
Program outcomes	The institution exercises the responsibility to ensure that students have met its stated learning outcomes of programs at all degree levels
Educational objectives	<ol style="list-style-type: none"> 1. The institution has clearly stated goals and objectives that are communicated systematically to all its constituencies. 2. The programs of the institution are consistent with its goals and objectives. 3. Each degree is characterized by corresponding goals and objectives. 4. All individuals involved in teaching and the students must be aware of these goals and objectives. 5. The subjects taught reflect the goals and objectives of the program.
Ranges of programs	<ol style="list-style-type: none"> 1. The institution offers a range of programs leading to academic or professional degrees with stated goals and objectives. They integrate with the existing range of programs of higher education offered by the universities or complement them in a meaningful way. 2. The institution has a wide range of programs offerings that provide adequate academic flexibility
National and International recognition	<p>The Program are nationally recognized by all parties concerned (government, universities, businesses ...)</p> <p>The Programs are internationally recognized by relevant higher education institution and stakeholders</p>
Curriculum	<ol style="list-style-type: none"> 1. Curricula are consistent with the aims and objectives specified at the level of the faculty, the department and the program. 2. Curricula are designed to enable students to acquire subject-specific and transferable skills and to gain and deploy knowledge. 3. Curricula are flexible in terms of prerequisites, offered core and elective courses, concentration areas, and duration until graduation. 4. There is standardization in terms of number of credits per curricula, course, faculty and department. 5. The institution assesses the usefulness of its curricula to students who will live and work in a global, diverse, and technological world.

Area 5: Programs and Curricula	
Standard	Indicators
Curriculum	6. Curricula are compatible with those offered by other universities in Lebanon in terms of content and requirements (university, faculty, and department).
Design and delivery	Programs are designed and delivered to enhance the students' analytical and critical skills and to prepare them for the next stage in their lives, such as progression to employment or postgraduate study.
Program evaluation	<ol style="list-style-type: none"> 1. The programs offered are evaluated on a regular basis. 2. The students participate in the evaluation of the programs. 3. The professional sectors participate in the evaluations. 4. Results of exams and entrance exams are analyzed and distributed. 5. The first employment destination of graduates is the subject of ongoing follow-up.
Assessment process	<ol style="list-style-type: none"> 1. The institution has procedures to ensure equitable assessment of students. 2. Exam rules and conditions are decided by the institution council and are published and understood by all the staff and students. 3. The detailed regulations that govern all exams are clear and published. 4. Principles of confidentiality should be respected when giving students access to their results. 5. Use many assessment methods which most help students to learn; which are as reliable, valid, and fair as possible; and which are appropriate to course goals (Exams and quizzes, Assignments, Term projects, Team work, Presentation, Lab reports, Oral exam, Training).
Multi-disciplinary education	The institution encourage multi-disciplinary programs
Feedback from stakeholders	Feedback from academic peers, students, employers and other stakeholders are used in the initiation, review and redesign of curricula and programs.
Integrity in the award of academic credit	The institution should have a policy on evaluation of transfer credit, policy on student grading, graduation degree audit procedures, contractual relationships involving academic credit, policies and practices regarding academic integrity.

Area 6: Faculty and Staff	
Standard	Indicators
Recruiting procedures	<ol style="list-style-type: none"> 1. The institution must have a vision for its requirements of staff members and teaching assistants 2. The procedures for selecting, nominating and promoting academic staff are regulated and made public. For teaching staff, these procedures consider both teaching skills and scientific qualifications.
Teaching load	The institution ensures that the number of credits and number of weekly teaching hours is adequate
Qualifications	<ol style="list-style-type: none"> 1. The institution has sufficient faculty and staff who are qualified by appropriate education, training, and experience to support its programs and services, as required by ministry criteria 2. The institutional should have manuals explaining faculty policies and procedures (Faculty CVs by department (full-time – part-time, faculty employment contract, promotion and tenure criteria and process, procedures for appointing new faculty, list of faculty development funds and awards, list of teaching support workshops for part-time faculty)
Rank	<ol style="list-style-type: none"> 1. The institution ensures that faculty members are well distributed among different ranks (full professor, associate professor, assistant professor, lecturer, and teaching assistant) 2. The institution ensures that At least 50% of the faculty of each major should have a PhD degree in the field or the highest possible degree in that field.
Involvement in community and professional activities	<ol style="list-style-type: none"> 1. The institution encourages faculty to participate in professional academic programs. 2. The institution promotes faculty participation in consultancy work. 3. The institution is responsive to community needs and conducts relevant extension programs. 4. The institution has sustainable good practices in research, consultancy and extension to achieve academic excellence.
Continuous improvement	<ol style="list-style-type: none"> 1. The institution has policies and practices for gathering and analyzing information that leads to a culture of evidence and improvement. 2. The institution leadership is committed to improvement based on the results of evaluation and assessment

Area 6: Faculty and Staff	
Standard	Indicators
Continuous improvement	3. The institution faculty members take responsibility for evaluating the effectiveness of the teaching and learning process and use the results for improvement
Acquisition, discovery, and application of knowledge	The institution promotes a life of learning for its faculty, administration, staff, and students by fostering and supporting inquiry, creativity, practice, and social responsibility in ways consistent with its mission.
Mobility	The mobility of the teaching staff is facilitated.
Assessment	<p>1. The university evaluate teachers on teaching and research performance</p> <p>2. The institution introduced evaluation of the teachers by the students and the feedback is analyzed and implemented for the improvement of teaching and learning</p>
Facilities and benefits	The institution ensures the availability of well equipped offices, internet and library access, secretarial help, teaching and research assistance, end of service, Social and medical insurance).
Teaching methods	<p>1. The faculty members use innovative, flexible and creative teaching methods and techniques (lectures, case studies, group work and projects...)</p> <p>2. The institution ensures teaching and learning in electronic environment, internship and onsite training.</p>
IT competence	1. The faculty members have the ability to use IT for teaching and research.
Work load	<p>1. The faculty assignments and workloads are consistent with the institution's mission and purposes. They are equitably determined to allow faculty adequate time to provide effective instruction, advise and evaluate students, contribute to program and institutional assessment and improvement, continue professional growth, and participate in scholarship, research, creative activities and service compatible with the mission and purposes of the institution.</p> <p>2. The faculty workloads are reappraised periodically and adjusted as institutional conditions change.</p>
Faculty/student ratio	<p>1. The ratio of staff to students must be adequate</p> <p>2. The faculty members number should be proportional to the number of students: the ratio of students to teachers shouldn't exceed 20:1,</p>

Area 6: Faculty and Staff	
Standard	Indicators
Full-time/part-time faculty ratio	<ol style="list-style-type: none"> 1. The institution ensures balance between full-time faculty and part- time faculty 2. The number of full timers shouldn't be less than a student to full timer ratio of 30:1.

Area 7: Students and Student Infrastructure	
Standard	Indicators
Recruitment and admission standards	The conditions for admission to the institution and into the program have been made public.
Retention	1. The institution ensures that the majority of students persist in their studies from one year to the next. 2- The ratio of graduates to entry numbers is high
Extra curricular activities	The Students participate in academic and nonacademic associations.
Communications skills	The students have the ability to communicate effectively both orally to an audience and in writing
Research capabilities	The students are well prepared for a career in academic or industrial research and have the ability to think rigorously and to recognize and question assumptions
Student population	The institution has student statistics for all study programs which show the proportion of male and female students up to doctorate level.
Involvement in the community	The students are engaged in activities that relate to the profession and/or larger community. (Include internships, student organizations, community initiatives, student- projects, and other activities that indicate leadership and/or involvement.)
Financial aid	1. The institution ensures the availability, target groups and rules 2. The institution offers scholarships to students according to their financial conditions. 3. The institution awards teaching assistance to postgraduate students. 4. The institution awards honor scholarships for the top students.

Area 7: Students and Student Infrastructure	
Standard	Indicators
Counseling service and guidance	<ol style="list-style-type: none"> 1. The institution ensures that potential and current students have access to counseling services and guidance to the studies. 2. The institution implements measures which allow the students to assess their progression through the program.
Employability	<ol style="list-style-type: none"> 1. The institution encourages the employability. 2. The institution has a specialized careers service. 3. The academic, research and service departments are responsible for implementing this policy.
Ratio of staff to students	<ol style="list-style-type: none"> 1. The number of staff member is fairly proportional to the number of students 2. The ratio of staff to students must be adequate to ensure that the educational goals and objectives of the institution and of its organizational units can be achieved.
Mobility	The mobility of students is possible and is promoted by mutual recognition of credits between universities and between disciplines.
Integration of new students	<ol style="list-style-type: none"> 1. The institution has a policy for the integration of new students. 2. The institution organizes information sessions for secondary school students. 3. The institution organizes contacts between secondary school teachers and its own teaching staff. 4. The institution has a policy for the integration of international students who are enrolled individually. 5. The working hours of the various students' services are compatible with their needs and are clearly posted

Area 8: Services and Facilities	
Standard	Indicators
Laboratories	<ol style="list-style-type: none"> 1. The university/institute should provide the necessary labs for each major and identify its capacity in proportion to the number of students who will require the use of the labs. 2. The laboratories are well equipped with the required and up to date instruments. 3. The laboratory sessions are supervised by qualified instructors. 4. The university provides adequate spaces for laboratories. 5. The staff member responsible for the practical work is available for students' enquiries.
Libraries	<p>The institution ensures that:</p> <ol style="list-style-type: none"> 1. The references for literature review required for postgraduate students are available in the library. 2. New editions of reference books and periodicals are present in the library and requests for new books are easily approved. 3. The personnel in the library is helpful and qualified 4. The access for students is easy and the opening hours for library are adequate. 5. Internet services and an electronic library are offered in the library for staff members and students. 6. The books and periodicals present in the library are well documented and an easy electronic search is available. 7. The printing facilities for students and staff members are offered in the library. 8. The books lending policy for students and staff members is adequate.
Class room environment	<ol style="list-style-type: none"> 1. The institution ensures that lecture rooms are well equipped with the necessary tools for teaching (projectors, video equipments, TV and others) 2. The institution ensures that the lecture rooms are comfortable for students and the number of students per class is adequate

Area 8: Services and Facilities	
Standard	Indicators
IT infrastructure	<p>The institution ensures that:</p> <ol style="list-style-type: none"> 1. Teaching materials (Offered courses, schedule, syllabus, exams and lecture notes) are available online for students. 2. Software packages related to different fields are offered by the university. 3. Adequate number of computer laboratories is available for students. 4. Wide bandwidth internet services are available for staff and students. 5. Online connection between staff members and students. 6. Sufficient number of printers for staff members and internal printing facilities for students. 7. Lectures may be given in form of electronic presentations.
Public disclosure	<p>The institution should have an editorial policy for publications, websites, e-information, reviews of website information..</p>
Campus	<p>The institution ensures that:</p> <ol style="list-style-type: none"> 1. The physical environment of the campus is characterized by its hygiene and tidiness. 2. The access to parking for staff members and students is easy 3. The architectural institution campus allows easy communications between the different faculties. 4. Healthy food services for staff members and students are offered 5. Enough number of conference rooms is available 6. The courts for sport activities and the green area surrounding the institution are abundant. 7. Accommodation for students are offered 8. First aid services are available on campus in case of accidents and emergencies. 9. Other services include bookshop, ATM machines and post office are present.

Area 8: Services and Facilities	
Standard	Standard
Career development center	<ol style="list-style-type: none"> 1. The institution has a Career Development Center that helps in placing graduate students. 2. The institution has links with employers that aid in the process of providing job opportunities
Employment career and alumni	<ol style="list-style-type: none"> 1. The institution alumni has connections with graduate students to attain their feedback and to assist other graduates. 2. The institution organizes a job fair day to introduce senior students to prospective employers.
Maintenance and optimal use of infrastructure	<ol style="list-style-type: none"> 1. The institution allocates budget for the maintenance of its infrastructure (land, furniture, equipments, computers and transport) 2. The maintenance budget is optimally allocated and utilized 3. The institution has staff appointed for maintenance and repair

X. Appendix B

Sample Questionnaires

Annual faculty member activities report

A. General Information:

- a) Name
- b) Address (Residential) Ph. No.
- c) Designation
- d) Department
- e) Area of Specialization
- f) Date of Appointment
 - (i) in the institution
 - (ii) in the present post

B. Teaching

Credit Hours	No. of Students	Courses		Semester
		Course	UG/PG*	
				Fall
				Spring
				Summer

* UG: Under Graduate, PG: Post Graduate

- b) Regularity and Punctuality
- c) Details of course teaching plan, synopses of lecturers, and reading lists supplied to students

- d) Details of participation in the following:
- (i) University Education
 - (ii) Internal Evaluation
 - (iii) Paper Setting
 - (iv) Assessment of Home assignments
 - (v) Conduct of Examinations
 - (vi) Evaluation of Dissertation etc.

C. Details of Innovations / Contribution in Teaching, during the year :

- a) Design of curriculum
- b) Teaching methods
- c) Laboratory experiments
- d) Evaluation methods
- e) Preparation of resource material including books, reading materials, laboratory manuals etc.
- f) Remedial Teaching / Student Counseling (academic)
- g) Any other

D. Research Activities

- a) Published Research Papers

- b) Research Papers Accepted for Publication

- c) Research Papers Accepted for Presentation in Conferences

- d) Current Research and Projects

- e) Conferences, Workshops

Conferences, Workshops	Organizing institution & Place	Date & Duration	Papers & activities

f) Scientific and Technical Consultations

g) Examiner for M.Sc Thesis and Ph.D Dissertation and books

h) Field and Scientific Trips

i) Meeting and Scientific and General Lectures

j) Published Books

E. Committees

a) Department Committees

b) Faculty Committees

c) Institution/ University Committees

d) Committees outside the Institution/ University

Signature of the Teacher)

Students Accommodation Evaluation Form

Using the scale below, please evaluate to the best of your ability the following aspects

Strongly Agree (A = 5); Agree (B = 4); Neutral (C= 3); Disagree (D = 2);

Strongly Disagree (E = 1)

Put a circle wherever appropriate

1.	Cleanliness is being observed	5	4	3	2	1
2.	Water and electricity supplies are maintained	5	4	3	2	1
3.	Physical facilities available to the residents in the given circumstances are adequate	5	4	3	2	1
4.	Discipline is strictly maintained.	5	4	3	2	1
5.	Equality and impartiality is observed.	5	4	3	2	1
6.	Administration is always willing to solve the genuine problems of the residents	5	4	3	2	1
7.	Quality of food supplied is up to the mark	5	4	3	2	1
8.	Mess expenses are according to the quality and quantity of the food supplied	5	4	3	2	1
9.	Overall I am happy with my stay	5	4	3	2	1

Faculty Evaluation Form

Student Feedback on Teachers (Separate for each Teacher)

Department:Course Title:

Course Code: Instructor:

Class:Section: Academic Year.....

Using the scale below, please evaluate to the best of your ability the following aspects

Strongly Agree (A = 5); Agree (B = 4); Neutral (C= 3); Disagree (D = 2);

Strongly Disagree (E = 1)

Put a circle wherever appropriate

1.	Regular and punctual.	5	4	3	2	1
2.	Maintains class discipline.	5	4	3	2	1
3.	Well prepared for his class.	5	4	3	2	1
4.	Presents material in clear and interesting way.	5	4	3	2	1
5.	Explains material with slow and regular steps.	5	4	3	2	1
6.	Encourages student's participation and welcomes questions.	5	4	3	2	1
7.	Behaves decently with students.	5	4	3	2	1
8.	Arouses interest by introducing new ideas and discoveries.	5	4	3	2	1
9.	Willing to give individual assistance outside the class	5	4	3	2	1
10.	Course coverage is consistent with course outline.	5	4	3	2	1
11.	Fair in marking.	5	4	3	2	1
2.	Has good communication Skills (in terms of articulation and comprehensibility)	5	4	3	2	1
3.	Has the ability to integrate course material with environment/other issues, to provide a broader perspective	5	4	3	2	1
4.	Overall rating is excellent	5	4	3	2	1

Course Evaluation Form

Student Feedback on Courses (Separate for each Course)

Department: Course Title:
 Course Code: Instructor:
 Class:Section: Semester.....
 Academic Year.....

Using the scale below, please evaluate to the best of your ability the following aspects

Strongly Agree (A = 5); Agree (B = 4); Neutral (C= 3); Disagree (D = 2);

Strongly Disagree (E = 1)

Put a circle wherever appropriate

1.	Recommended text is appropriate	5	4	3	2	1
2.	Course contents are useful in general	5	4	3	2	1
4.	Workload of the course is reasonable	5	4	3	2	1
5.	Referred material is available	5	4	3	2	1
6.	Required equipments are available	5	4	3	2	1
7.	Difficulty level of the course is reasonable	5	4	3	2	1
8.	Learning value (in terms of knowledge, concepts, manual skills, analytical abilities and broadening perspectives) are acquired	5	4	3	2	1
9.	Overall rating is excellent	5	4	3	2	1

Students Exit Survey

The survey seeks exit students' input on the quality of education they received in their program of study.

The purpose of this survey is to assess the quality of the academic programs. We seek your help in completing this survey.

A: Strongly agree = 5 B: Agree = 4 C: Neutral = 3 D: Disagree = 2 E: Strongly disagree = 1

Put a circle wherever appropriate

1.	The work in the program is too heavy and induces a lot of pressure	5	4	3	2	1
2.	The program is effective in enhancing team-working abilities	5	4	3	2	1
3.	The program administration is effective in supporting learning	5	4	3	2	1
4.	The program is effective in developing analytic and problem solving skills	5	4	3	2	1
5.	The program is effective in developing independent thinking	5	4	3	2	1
6.	The program is effective in developing written communication skills	5	4	3	2	1
7.	The program is effective in developing planning abilities	5	4	3	2	1
8.	The theoretical content of the program is adequate for pursuing the advanced courses in the program	5	4	3	2	1
9.	Students have the opportunity to develop self-confidence and to work independently or in groups.	5	4	3	2	1
10.	Students are well prepared for a career in academic or industrial research.	5	4	3	2	1
11.	Students have developed the academic, personal and professional skills that equip them for employment in a wide range of professions.	5	4	3	2	1
12.	The internship experience is effective in enhancing					
	Ability to work in teams	5	4	3	2	1
	Appreciation of ethical values	5	4	3	2	1
	Professional development	5	4	3	2	1
	Time management skills	5	4	3	2	1
	The link between theory and practice	5	4	3	2	1

10. What are the best aspects of your program?

11. What aspects of your program could be improved?

Faculty Satisfaction Survey

The purpose of this survey is to assess faculty members, satisfaction level and the effectiveness of programs in place to help them progress and excel in their respective fields. Indicate how satisfied are you with each of the following:

A: Strongly agree = 5 B: Agree = 4 C: Neutral = 3 D: Disagree = 2 E: Strongly disagree = 1

Put a circle wherever appropriate

1.	Your mix of research, teaching and community service	5	4	3	2	1
2.	The intellectual stimulation of your work	5	4	3	2	1
3.	Type of teaching/research you currently do	5	4	3	2	1
4.	Your interaction with students	5	4	3	2	1
5.	Cooperation you receive from colleagues	5	4	3	2	1
6.	The mentoring available to you	5	4	3	2	1
7.	Administrative support from the department	5	4	3	2	1
8.	Providing clarity about the faculty promotion process	5	4	3	2	1
9.	Your prospects for advancement and progress through ranks	5	4	3	2	1
10.	Salary and compensation package	5	4	3	2	1
11.	Job security and stability at the department	5	4	3	2	1
12.	Amount of time you have for yourself and family	5	4	3	2	1
13.	The overall climate at the department	5	4	3	2	1

15. Suggest programs/factors that could improve your motivation and job satisfaction?

Information about faculty member:

1. Academic rank:

A: Professor B: Associate Professor C: Assistant Professor

D: Lecturer E: Instructor

2. Years of service (in years)

A: 1-Under 5 B: 5- Under 10 C: 10- Under 15

D: 15-Under 20 E: 20 and above

Employer Survey

The purpose of this survey is to obtain employers' input on the quality of education the institution is providing and to assess the quality of the academic program. The survey is with regard to the institution graduates employed at your organization. We seek your help in completing this survey.

A: Strongly agree = 5 B: Agree = 4 C: Neutral = 3 D: Disagree = 2 E: Strongly disagree = 1

Put a circle wherever appropriate

I. Knowledge					
Math, Science and Theoretical skills	5	4	3	2	1
Problem formulation and solving skills	5	4	3	2	1
Collecting and analyzing appropriate data	5	4	3	2	1
Ability to link theory to Practice	5	4	3	2	1
Ability to design a system component or process	5	4	3	2	1
Computer knowledge	5	4	3	2	1
II. Communication Skills					
Oral communication	5	4	3	2	1
Report writing	5	4	3	2	1
Presentation skills	5	4	3	2	1
III. Interpersonal Skills					
Ability to work in teams	5	4	3	2	1
Leadership	5	4	3	2	1
Independent thinking	5	4	3	2	1
Motivation	5	4	3	2	1
Reliability	5	4	3	2	1
Appreciation of ethical values	5	4	3	2	1
IV. Work Skills					
Time management skills	5	4	3	2	1
Judgment	5	4	3	2	1
Discipline	5	4	3	2	1

V. General Comments

Please make any additional comments or suggestions, which you think would help strengthen our programs for the preparation of better graduates.

VI. Information about organization

- Organization Name -----
- Type of Business -----
- Number of graduates (specify the program) in your organization:

Alumni Survey

The purpose of this survey is to obtain alumni input on the quality of education they received and the level of preparation they had at the institution. The purpose of this survey is to assess the quality of the academic program. We seek your help in completing this survey.

A: Strongly agree = 5 B: Agree = 4 C: Neutral = 3 D: Disagree = 2 E: Strongly disagree = 1

Put a circle wherever appropriate

I. Knowledge					
Math, Science and Theoretical skills	5	4	3	2	1
Problem formulation and solving skills	5	4	3	2	1
Collecting and analyzing appropriate data	5	4	3	2	1
Ability to link theory to Practice	5	4	3	2	1
Ability to design a system component or process	5	4	3	2	1
Computer knowledge	5	4	3	2	1
II. Communication Skills					
Oral communication	5	4	3	2	1
Report writing	5	4	3	2	1
Presentation skills	5	4	3	2	1
III. Interpersonal Skills					
Ability to work in teams	5	4	3	2	1
Leadership	5	4	3	2	1
Independent thinking	5	4	3	2	1
Motivation	5	4	3	2	1
Reliability	5	4	3	2	1
Appreciation of ethical values	5	4	3	2	1
IV. Work Skills					
Time management skills	5	4	3	2	1
Judgment	5	4	3	2	1
Discipline	5	4	3	2	1

V. General Comments

Please make any additional comments or suggestions, which you think would help strengthen our programs. (New courses that you would recommend and courses that you did not gain much from)

VI. Alumni Information

- Name (optional) -----
- Name of organization -----
- Job title -----
- Year of graduation -----

XI. Appendix C

Pre-Accreditation Documents

Pre-Accreditation Documents

NAME AND ADDRESS OF TEACHING ESTABLISHMENT:

Head of Institution:

Telephone Number:

Fax Number:

E-mail:

Website:

PREMISES AND RESOURCES

- 1- All premises in which the Institution operates, indicating whether they are owned by the Institutions or leased (give the period of the lease):
- 2- Classrooms (numbers and capacity):
- 3- Specialist areas (laboratories, IT suites etc – brief **description** of each equipment):
- 4- Study areas (library, self-access IT, private study rooms etc):
- 5- Academic Equipment (over head projectors, data projectors, video/audio equipment etc)
- 6- Student social areas (common rooms, cafeterias etc):

REQUIRED DOCUMENTATION

1. Documents authenticating the legal status of the institution, including list of Directors/Partners/legal owners
2. Copies of the last three years' audited annual Accounts (if the college has not yet operated for three years, please supply all the available annual accounts)
3. Lease agreement, if premises are leasehold
5. Policy on refunds of student fees
6. Two copies of current prospectus, course brochures, and other marketing materials
7. Two copies of Staff & Student Handbooks or other guidance information
8. Sample staff contract
9. Full CVs for Head of Establishment and Academic Head (if different)
10. Staff list (see Appendix) and CVs of Senior Staff
11. Diagram of management structure
12. Descriptions and relevant data of courses (see Appendix B)

Documents which should be available for Scrutiny during the inspection:

1. Staff files including evidence of qualifications
2. Class registers and evidence that attendance is adequately monitored
3. Student files recording progress
4. Student feedback documents
5. Samples of marked student work
6. In the case of degree programs, agreements with awarding bodies
7. Data from examination results over the last two years
8. Summaries of results/grades awarded for previous three years for each academic program (or less if the course has not been available for that time)
9. Samples and summaries of any student feedback questionnaires
10. Minutes of relevant committee of board meetings
11. Copies of external examiners' reports for the previous two years
12. Copies of annual reports to the awarding bodies for the previous two years
13. Copies of any academic reviews carried out by or on behalf of the awarding body
14. Copies of any policies developed by the institution as a means of quality management

ACADEMIC PROGRAMS

List all current programs offered within the institution (including those with no students enrolled):

Course/award title	Awarding Body	Level(s)	Year first taught	Student Numbers

APPENDIX : ACADEMIC STAFF FOR EACH FACULTY

Name	Qualifications Dates of obtained degrees	specialization	Post Held Full time/part-time	Date Appointed	Academic rank	Subjects Taught

APPENDIX : ACADEMIC STAFF (B)

Number of full-time and part-time members of the teaching staff .			
	Female	Male	Total
Full-time teachers			
Number of teachers with Ph.D degree as the highest qualification			
Number of teachers with MS degree. as the highest qualification			
Part-time teachers			
Number of teachers with Ph.D degree as the highest qualification			
Number of teachers with MS degree. as the highest qualification			

XII. Appendix D

Glossary

GLOSSARY

Accreditation: Accreditation is the establishment or of the status, legitimacy or appropriateness of an institution, program (i.e. composite of modules) or module of study

Accreditation body: An independent body that develops educational standards, criteria and procedures and conducts expert visits and peer reviews to assess whether or not those criteria are met.

Accreditation of programs: The process by which a qualification, a course or a program comes to be accepted by an external body as of a satisfactory quality and standard. Accreditation involves a periodic audit against published standards of the education provided by a particular course or program. It is essentially a peer review process, undertaken by appropriately qualified and independent panels.

Accreditation of institutions: Accreditation is a formal, published statement regarding the quality of an educational institution, based on external assessment.

Accreditation process: An evaluation or quality assurance procedure, assessing whether a study program or an institution meets or exceeds the academic or professional standards required by the accrediting body.

Admission to higher education institutions and programs: The process which allows qualified applicants entry to pursue higher education studies at a given institution on a given program.

Assessment: It is an evaluation process that may apply to programs, institutions or students.

- With regards to students, it is the total range of written, oral and practical tests, as well as projects and portfolios, used to decide on their progress in the Course Unit or Module. These measures may be mainly used by the students to assess their own progress (formative assessment) or by the University to judge whether the course unit or module has been completed satisfactorily against the learning outcomes of the unit or module (summative assessment).
- With regards to institutions and programs, it is the process of systematic gathering, quantifying and using information to judge the effectiveness and adequacy of a higher education institution or a program. It implies evaluation of core activities. It is a necessary basis for a formal accreditation decision.

Assessment criteria: Description of what the learner is expected to do, in order to demonstrate that a learning outcome has been achieved and to what extent. The criteria are usually related to the cycle and/or level descriptors for the module being studied in the discipline concerned.

Academic year: The academic year is:

- The duration of a specific program of study (which may not last a complete 12 months and is divided into terms, semesters or quarters).
- The start and finish dates of the annual cycle of a university or national higher education system.

Accountability: Accountability is the requirement, when undertaking an activity, to expressly address the concerns, requirements or perspectives of others.

Accreditation duration: Accreditation decisions are usually limited to a fixed and stated period of time, after which the institution or program is required to engage with a more or less rigorous re-accreditation process.

Agency: Agency is, in the context of quality in higher education, shorthand for any organization that undertakes any kind of monitoring, evaluation or review of the quality of higher education.

Aim: An aim is an overall specification of the intention or purpose of a program of study or institutional mission or policy.

Alumnus: An alumnus (plural alumni) is a graduate of an institution.

Assurance: Assurance of quality in higher education is a process of establishing stakeholder confidence that provision (input, process and outcomes) fulfils expectations or measures up to threshold minimum requirements.

Audit: Audit, in the context of quality in higher education, is a process for checking that procedures are in place to assure quality, integrity or standards of provision and outcomes.

Autonomy: Autonomy is being able to undertake activities without seeking permission from a controlling body.

Academic calendar: The schedule of the institution for the academic year giving details of all academic and administrative events.

Assessors: Trained specialists who are peer team members.

Benchmarking: Benchmarking is a process that enables comparison of inputs, processes or outputs between institutions (or parts of institutions) or within a single institution over time.

Best practice: Is a comprehensive, integrated and co-operative approach for the continuous improvement of area/s of performance in an organization: the winning strategies, approaches and processes that produce superior performance leading to a sustainable and successful end result. Benefits often include the assurance of quality results and consistency where the practice is followed

Competence: Proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and/or personal development. In the European Qualifications Framework for lifelong learning, competence is described in terms of responsibility and autonomy.

Course: It may refer to a complete study program or to a single component (such as Unit or Module) of a study program.

Creativity: The ability to produce new ideas, connections and solutions.

Curriculum: Comprehensive description of a study program. It includes learning objectives or intended outcomes, contents, assessments procedures.

Certification: Certification is the process of formally acknowledging achievement or compliance: it can be used to signify the achievement of an individual, such as a student, or of an institution.

Classification: Classification is the process of identifying types of institution based on their core functions or economic status.

Continuing Education: Any form of education, vocational or general, following the initial education. It may include, for example, education for full-time mature students, liberal adult education, part-time degrees and diplomas, post-experience professional education and training courses, staff development, open-access courses and regional development through open and distance learning.

Curriculum design & development: Process of designing and developing appropriate curriculum through a need assessment process and consultation with expert groups based on the feedback from the stakeholders resulting in the development of relevant programs to meet the professional and personnel needs of the students.

Citation index: Citation index of a research paper expresses the number of times it is referred to by other researchers in referred journals and is a measure of validity of its contents.

Collaboration for research and extension: Formal agreement/ understanding between any two or more institutions for training, student/faculty exchange or extension support.

Counseling: Exhorting, assisting and mentoring students individually or collectively for academic, career, personal and financial decision-making.

Criteria: Pre-determined standards of functioning of an institution of higher education that form the basis of assessment and accreditation.

Diploma: A qualification from an educational institution, at a particular level. It may refer to any qualification or award, but in some countries it characterizes specific awards or titles.

Discipline: A particular area of study, especially a subject of study in a college or university

Doctor: Usually, the holder of a title awarded after successful completion of a Doctorate Program or the delivery and defense of a doctorate thesis. It is sometimes characterized as Ph.D. (Doctor of Philosophy). When used without extension, the title usually refers to a Doctor of Medicine.

Doctorate: A study program towards high level qualification recognized as qualifying someone for research and/or academic work. It will include a substantial amount of original work which is presented in a thesis. In the European Higher Education System it is identified with the third cycle study.

Degree: Degree is the core higher education award, which may be offered at various levels from foundation, through bachelors, masters to doctoral.

Doctoral degree: The doctoral degree is the highest level of award in most higher education systems.

Education: The act, process or art of imparting knowledge, understanding, skills and attitudes normally given by formal education providers like schools, colleges, universities, or other educational institutes. Education may be general or related to specific disciplines (e.g. Engineering education).

Higher Education: All types of study programs at the post-secondary level which are recognized by the competent authorities as belonging to its higher education system.

Higher Education Institution: An establishment providing higher education.

Employability: It is a set of achievements – skills, understandings and personal attributes – that make graduates more likely to gain employment and be successful in the chosen occupations, which benefits themselves, the workforce, the community and the economy.

Equivalence: The recognition by an organization/competent authority that course units, modules, study programs or degrees awarded by different institutions of higher education are equivalent. When an exact matching cannot be found, equivalence is often qualified as substantial equivalence.

Extra-curricular activity: An activity undertaken outside the formal curriculum of a study program. It may be awarded credits.

Effectiveness: Effectiveness is the extent to which an activity fulfils its intended purpose or function.

Efficiency: Efficiency is the extent to which an activity achieves its goal whilst minimizing resource usage.

Enhancement: Enhancement is a process of augmentation or improvement.

Evaluation: Evaluation (of quality or standards) is the process of examining and passing a judgment on the appropriateness or level of quality or standards.

Excellence: Excellence means exhibiting characteristics that are very good and, implicitly, not achievable by all.

External evaluation: External evaluation is:

- A generic term for most forms of quality review, enquiry or exploration.
- A process that uses people external to the program or institution to evaluate quality or standards.

External evaluation team: External evaluation team is the group of people, including persons external to the program or institution being reviewed, who undertake the quality evaluation.

External examiner: An external examiner is a person from another institution or organization who monitors the assessment process of an institution for fairness and academic standards.

External expert: External expert is someone with appropriate knowledge who undertakes a quality or standards review (of any kind) as part of a team or alone and who is external to the program or institution being reviewed.

External institutional audit: An external institutional audit is a process by which an external person or team check that procedures are in place across an institution to assure quality, integrity or standards of provision and outcomes.

Evaluation process and Reforms : Assessment of learning, teaching and evaluation process and reforms to increase the efficiency and effectiveness of the system

Field of study: The main subject area of a study program (e.g. Engineering).

Faculty: Faculty is:

- The organizational unit into which cognate disciplines are located in a higher education institution
- A shorthand term for the academic (teaching and research) staff in a higher education institution.

Fees: Fees are the financial contribution made by students to their higher education

Feed back on curriculum & curriculum revision: Response from student's academic peers and employers for review and design of curriculum programs.

Financial management & resource mobilization: Budgeting and optimum utilization of financial resources including planning and implementing strategies for augmenting resources.

Format for self-study: Structured framework to enable an institution to collect, compile and present quantitative and qualitative information.

Flexibility: Enables student's greater horizontal mobility with a large number of program options in diverse disciplines.

Grant: Grant has different accepted meanings.

- It can be a sum of money awarded by funding bodies to undertake a project or research.
- Alternatively, it can be awarded to students (e.g. as part of widening participation strategies) to facilitate their progression to or in higher education (sometimes also referred to as a bursary or scholarship).

Grading: Grading is the process of scoring or ranking student academic work as part of assessing student learning.

Graduate: A graduate is someone who has successfully completed a higher education program at least at bachelor degree level.

Human resource Management: The process of assessing the man power requirements, recruiting, monitoring the growth and appraising them periodically and plan the staff development programs for the professional development and provide the necessary incentives and feedback.

Institution: Institution is shorthand for institution of higher education, which is an educational institution that has students graduating at bachelor degree level or above.

Institutional accreditation: Institutional accreditation provides a license for a university or college to operate.

Internal evaluation: Internal evaluation is a process of quality review undertaken within an institution for its own ends (with or without the involvement of external peers).

Internal institutional audit: Internal institutional audit is a process that institutions undertake for themselves to check that they have procedures in place to assure quality, integrity or standards of provision and outcomes across the institution.

Internal sub-institutional audit: Internal sub-institutional audit is a process that an institution has for checking that procedures are in place to assure quality, integrity or

standards of provision and outcomes within a department, faculty or other operational unit or that specific issues are being complied with across the institution.

ICT: The term refers to computer and allied gadgetry that have a bearing on the efficiency of services both academic and administrative, which an institution provides.

Internal quality assurance system: Self regulated responsibilities of the higher education institutions aimed at continuous improvement of quality for achieving academic excellence and administrative reforms.

Innovation: Meaningful change to improve an organization's program, services and processes to create a new value for the organization's stakeholders.

Infrastructure: Physical facilities like building, play fields, hostels etc. which help run an institutional program.

Laboratory: In educational context, practical experimental class where the students are active and supervised by a staff member and/or assistants.

Learning: The process whereby individuals acquire knowledge, skills and attitudes through experience, reflection, study education and/or instruction.

e-Learning: Any structured learning activity using information and communication technologies.

Learning Objectives: The specific knowledge, skills and/or competences which a teaching/learning process aims to achieve.

Learning Outcomes: Statements of what a learner knows, understands and is able to do on completion of a learning process. They usually are defined in terms of knowledge, skills and/or competences. For assessment purposes they may be specified by learning outcomes indicators.

Lecture:

- It is a set piece period of learning delivered by a lecturer to an entire class of students in which s/he imparts essential background and theory (basic concepts or facts) or examples. Typical length of a lecture is two contact hours.
- A talk someone gives in order to teach people about a particular subject, usually at university or college.

Library as a learning resource: The library holdings in terms of titles of books, journals and other learning materials and technology aided learning mechanism, which enable the students to acquire information, knowledge and skills required for their study.

Leadership: Term used for setting direction and create a student-focused, learning oriented climate, clear and visible values and high expectation by ensuring the creation of strategies, system and methods for achieving excellence, stimulating innovation and building knowledge and capabilities.

Master's degree: Master's degree is an award higher than a bachelor's degree.

Mission: A brief statement clearly identifying the educational institution's duty and its role in the development of the surrounding society and the nation, all in light of its strategic goals.

Mobility: Mobility is shorthand for students and academics studying and working in other institutions, whether in the same country or abroad.

Module specification: Module specification is statement of the aims, objectives/learning outcomes, content, learning and teaching processes, mode of assessment of students and learning resources applicable to a unit of study.

Maintenance of infrastructure: The effective mechanism for maintenance of optimal use of infrastructure

Objective: An objective is:

- A specific statement about what students are expected to learn or to be able to do as a result of studying a program: more specifically this is a learning objective
- A measurable operationalization of a policy, strategy or mission: this is an implementation objective.

Outcomes: Outcome is:

- Shorthand for the product or endeavors of a higher education institution (or sector), including student learning and skills development, research outputs and contributions to the wider society locally or internationally (institutional outcomes).
- Shorthand for learning outcome (discussed elsewhere).

Organizational structure: The structure and functions of an institution to co-ordinate academic and administrative planning.

Optimum utilization of infrastructure: The infrastructure facilities are made available to the student for their maximum utilization. E.g. Extended hours for computer center and library, sharing of facilities for interdisciplinary and multidisciplinary programs.

Peer: A person who is of equal standing with another in a group. Increasingly used for "evaluator" or "assessor" in a Quality Assurance and/or accreditation process, to underline that it is a "peer process".

Peer Review:

- External review and evaluation of the quality and effectiveness of an Institution, academic programs, staffing and structure, carried out by a team of external evaluator ("peers") who are specialists in the fields reviewed and knowledgeable about higher education in general. Reviews may be based on self-evaluation and on site visits and referred to standards set by the accredited organizations or quality standards set more broadly.
- The process by which students assess and evaluate the contributions made by their peers to a specified piece of learning, e.g. project. This would normally contribute to the marks for the module/course unity.

Prerequisites: Any prior conditions or specific courses that must be fulfilled before access to another program or part of a program.

Study Program: A course of study recognized by the competent authority, and the completion of which provides the student with a higher education qualification. It has a set of learning outcomes and is composed of compulsory and optional course units/modules which lead to the achievement of a pre-determined set of learning outcomes.

Performance indicators: Performance indicators are data, usually quantitative in form, that provide a measure of some aspect of an individual's or organization's performance against which changes in performance or the performance of others can be compared.

Performance audit: Performance audit is a check on the competence of someone to undertake a task.

Postgraduate: A postgraduate is someone who is undertaking study at post-first degree level.

Process: Process, in the context of quality, is the set of activities, structures and guidelines that:

- Constitute the organization's or individual's procedures for ensuring their own quality or standards.
- Constitute the mechanism for reviewing or monitoring the quality or standards of another entity.

Program evaluation: Program evaluation is a process of reviewing the quality or standards of a coherent set of study modules.

Progress file: A progress file is an explicit record of achievement, an aid to reflecting on the achievement and a mechanism to enable future planning.

Promotion of research and research support system: The process of promoting research culture among faculty and students by facilitating faculty and student participation in research budget allocation, research fellowship and other faculties.

Physical facilities: Infrastructure facilities of the institution to run the educational programs efficiently and the growth of the infrastructure to keep pace with the academic growth of the institution.

Perspective plan and strategic development: Designing and implementing a time-bound strategic perspective vision document for institutional development with prioritized activities and appropriate financial allocations.

Quality in higher education: The extent to which a course unit, the teaching and learning activities and the provider's facilities help students achieve appropriate learning goals of a study program.

Quality Assessment (QA): Process usually carried out by an external body. It assesses the performance of a higher education unit against written objectives that might be determined solely by the higher education unit or by agreement between it and the Assessing Authority.

Quality Assurance: The structure and/or the processes by which an institution maintains the quality of its provision by planned and systematic actions. It is an umbrella term for several instruments which are concerned with the monitoring and development of quality. These instruments include evaluation, accreditation,

benchmarking and quality management tools. National quality assurance systems should include:

- A definition of the responsibilities of the bodies and institutions involved;
- Evaluation of programs or institutions including internal assessment, external review, participation of students and the publication of results;
- A system of accreditation, certification or comparable procedures;
- International participation, cooperation and networking.

Quality Audit: A process carried out periodically by a higher education institution or by external reviewers/bodies to evaluate the institutional quality assurance system and processes in order to determine whether both quality system activities and the results of such activities comply with quality system procedures, that these procedures are implemented effectively, and that these procedures are suitable to achieve quality system objectives.

Quality Control: Internal measurement of quality of an institution or a program referring to a set of operational activities and techniques.

Quality culture: A set of shared, accepted and integrated patterns of quality to be found in the management and all other levels of an institution.

Recognition: The provision by which a body or institution (the recognizer) considers another body or institution (the recognized) appropriate or competent for a certain purpose.

Recruitment: The process by which an academic institution identifies potential students and assesses them for admission to a particular program.

Scholarship: Financial support provided to a high-achieving student to cover, in total or in part, fees and/or living expenses. It may come from national governments, charitable foundations or private sectors.

Re-accreditation: Re-accreditation is the re-establishment or re-statement (usually on a fixed periodic cycle) of the status, legitimacy or appropriateness of an institution, program (i.e. composite of modules) or module of study or of the professional recognition of an individual.

Report: The annual report of the faculty prepared on the basis of reports of its educational program

Research and publication output : Quality research outcome beneficial for the discipline, society and industry and dissemination of knowledge including theoretical and practical findings of research through publication in reputed refereed journals nationally and internationally.

Research: Systematic intellectual investigations aimed at discovering, interpreting and revising human knowledge.

Research grant: Grant generated/ received from different agencies by the institution for conducting research projects.

Syllabus: List of topics (content) of a Course Unit. In the USA it is also used for the content of a Study Program.

Self-assessment: Self-assessment is the process of critically reviewing the quality of one's own performance and provision.

Semester: A semester is a division of the academic year; usually two semesters in a year.

Seminar: A seminar is, ideally, a small-group teaching situation in which a subject is discussed, in depth, by the participants.

Site visit: A site visit is when an external evaluation team goes to an institution to evaluate verbal, written and visual evidence.

Stakeholder relationship: Affiliation and interaction with groups or individuals (students, alumni, employers...) who have an interest in the actions of the institutions and the ability to influence its actions, decisions, policies, practices or goals of the organization

Strategy development and deployment: Formulation of objectives, directives and guidelines with specific plans for institutional development and their appropriate implementation.

Strategic objectives: A collection of institution-specific objectives that are derived from its mission. They are written in a general manner concentrating on the knowledge and skills that the institution intends to develop in its students.

Student progression: Vertical movement of students from one level of education to the next higher level successfully or towards gainful employment.

Student support: Facilitating mechanism for access to information fee structure and refund policies and also guidance and placement cell with student welfare measures to give necessary learning support to the students.

Student activities: The participation of the students in the activities, which are instrumental in developing various skills to foster holistic personality development.

Social responsibility: Focuses on responsibilities to the public in terms of protection of public health, safety and the environment, the public ethical behavior and the need to practice good citizenship.

Training: Systematic instruction and programs of activities and learning for the purpose of acquiring skills for particular jobs..

Thesis: Thesis is:

- Short hand for doctoral thesis, the outcome of a student research at doctoral level.
- An argument proposing and developing a theory about a substantive or conceptual issue.
- An intellectual proposition.

Teaching-learning process: Learner-centered education through appropriate methodologies to facilitate effective teaching and learning.

Teacher quality: A composite term to indicate the quality of teachers in terms of qualification of the faculty, the adequacy meant for recruitment procedures, professional development, recognition and teachers characteristics.

University: An autonomous higher education institution which offers education at degree level. Courses may be taken at bachelor, master or doctorate level

Undergraduate: Undergraduate is a student who is undertaking a first-level degree program of study, normally a bachelor's degree or equivalent.

Unit of assessment and accreditation: A University/ Autonomous College/ Affiliated College/ Constituent College/ A Department of a University constitutes the unit of assessment and accreditation

Vision: is a clearly articulated statement of what the higher education institution wants to become in the future. A vision is based on a set of reasonable assumptions that will impact the future of the higher education institution.

A vision is consistent with the higher education institution's values and purposes and takes into account the long-term interests of its members. A vision provides guidance for key strategic plans the higher education institution should pursue in preparing for its future.

Workload: A quantitative measure of the learning activities that may feasibly be required for the achievement of the learning outcomes (e.g. lectures, seminars, practical work, private study, information retrieval, research, examinations)

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Guide III: Quality Audits and Accreditation

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Part One

Quality Audits

I. Introduction

This guide elaborates on quality audit as concerned with a higher education institution's processes for quality assurance and quality enhancement.

The major output of the guide is to understand how an institution knows that the standards and objectives it has set for itself are being met. More specifically, on what evidence is the assessment on the quality of its work based, and are the procedures in place to ensure that the significant processes are followed up and continuously improved. Quality audits are used to measure the effectiveness of the internal quality procedures in place at higher education institutions; the assumption used by auditors is always: the "innocent until proven guilty" model.

II. Definition

Audit, in the context of quality in higher education, is a process for checking that procedures are in place to assure quality, integrity or standards of provision and outcomes.

An external audit is a process by which an external person or team checks that procedures are in place to assure quality, integrity or standards of provision and outcomes in part of an institution or relating to specific aspect of institutional provision or outcomes.

The elements being checked may be an academic area, administrative area, resource (such as library or computing facility) or an aspect that cuts across institutions, such as compliance with disability legislation or health and safety. This is similar to thematic evaluation. Subject assessment, programme accreditation, is also similar to external sub-institutional audits but unlike audits include evaluative judgement. Note that audits can be undertaken internally.

The UNESCO definition of audit is directed at programme level and is about checking that aims and objectives are met: Audit is the process of reviewing an institution or a programme that is primarily focused on the accountability of the latter, evaluating/determining if the stated aims and objectives (in terms of curriculum, staff, infrastructure, etc.) are met.

The **CHEA (Council for Higher Education Accreditation)** definition of audit concentrates on the institutional audit. According to CHEA audit is a process of review of an institution or program to determine if its curriculum, staff, and infrastructure meet its stated aims and objectives. An audit focuses on accountability of institutions and programs.. The term "audit" is sometimes referred to as "institutional review".)

In summary, Higher education institutional audit is a process that concentrates on the quality of institutions/programs and the standards of awards at the point of delivery of the education services and supporting functions. Audit pays attention to the institution's responsibility to protect and respect its own name and what is made using that name. It aims at promoting public confidence that the quality of standards of awards is being protected, reviewed, and changed to the better of the institution and its stakeholders.

III The Audit Cycle and Transitional Arrangements

The **UK (United Kingdom)** is taken as worldwide reference for assigning audit cycle frames. Institutional audits in UK take place every six years. This would represent the norm to introducing institutional audits progressively from (date) onwards.

Depending on the number of institutions willing to participate in an external audit and after making sure that Higher Education Institutions have previously undertaken their own internal quality audits, which will be the focus of the external quality audit, visits would start as presented later on in this guide. It is advised, for the matter of strengthening the process of ensuring quality, to have an Academic Development Resources Center established in one or more of the leading universities to undertake quality care and support quality audits.

It is assumed that, throughout the cycle, institutions will continue to meet the expectations set out by the Higher Education Audit and Accreditation Body (Body hereafter) to be established as prerequisite to the audit process.

As a matter of check up, and after regularly starting the process of external audit, it is a high necessity to perform intermediate visits to the involved institutions to review their systems and to discuss the institutions' intentions in respect of managing quality and standards until the date of the planned audit, as it is a standard procedure adopted by most developed countries. This procedure would apply to for pre-accreditation and accreditation. A team of experts would assess the programs using a peer group of specialists and the facilities put in place to offer quality education as per the stated criteria.

A continuous check up will be undertaken to see whether the expectations are met. This puts the audit team in a better position to plan and act timely and proactively for pre-accreditation, accreditation and renewal requests.

IV. The Audit Operational Principles and Service Standards

The approach to institutional audits should refer to the practices and process standards developed elsewhere. The principles mostly applied concentrate on the following factors:

Comprehensiveness - taking into account the needs of all stakeholder groups and facilitating their participation in aspects of the audit work.

Openness - transparency in the work and methods applied, to build trust and confidence among stakeholders, and to provide information about the work to the wider public.

Liability - demonstrating that the team is using its resources to good effect and with honesty; conducting its work with integrity and neutrality; and ensuring that stakeholders are able to depend on the information provided.

Appropriateness - the need for regular, systematic and timely action in all reporting processes to support the decision-making of the audit process.

Comparability - using experience drawn from previous experiences and other organizations as a means with which to inform future work.

Significance - ensuring that the information provided by the team is useful to, and understood by, all stakeholders.

Trustworthiness - The team should be committed to the regular monitoring and evaluation of its policies, procedures and processes, to ensure their ongoing credibility and to continuously improve its performance in response to the results.

Responsiveness - In respect of institutional audit, the regular monitoring commitment includes providing the opportunity for participants in the process, including students, to provide structured feedback on their experiences.

V. Aims and Objectives of Institutional Audit

A. Aims

The aims of the institutional audit is a public interest concern that tackles and inspects how higher education is provided including awards and qualifications to insure that both quality of education and academic standards are being respected, and how institutions are exercising their legal power to award degrees the proper manner.

When the problem appears to represent a serious weakness in applying a predefined quality standard either in the programs or the standards of awards, audit offers the basis for ensuring the right reaction to improve such quality. Audit is an accountability measure when relying on public funds to run effectively the institutional functions.

B. Audit Outcomes

The audit process targets the following sensitive areas:

- The assessment of the internal quality assurance design and practices, which include the detection of review processes, at the institution, of the quality of the programs and the standards of its awards and how initiated recommendations are implemented either partially or comprehensively. This assessment is a key indicator to the soundness and reputation of the institution as an academic programs provider that respects international standards of higher education.
- The transparency of the institution while publishing its information to the public. This includes the accuracy, completeness and reliability of information to make such descriptions useful to the students or other interested stakeholders.
- The creations of a mechanism that ensures rapid action to statuses where institutional or program practices prove to be weak or seriously deficient, in order to maintain a specific quality and performance measure.
- The transparency and accountability of the use of public and grantors funds received by institutions.

VI. The Institutional Audit Process in Summary

A. Overview

The range of work in institutional audit focuses on:

- a. Assigning external reference points or benchmarks.
- b. Evaluating the outcome of internal quality assurance reviews.

- c. Assessing the available information about the institution to the public especially what relates to the quality of the programs and the standards of awards.
- d. Evaluating how information are managed and used to enhance the system of education, its quality and standards.
- e. Evaluating student statuses including the quality of their research and the degree of programs knowledge.
- f. Assessing the quality of instructors, their recruitment criteria, promotion requirements and the competitiveness of reward measures.

B. Information

The audit team should have access to all possible information about the institution, including:

- A general paper prepared by the institution outlining its approach to managing the security of the academic standards of its awards and the quality of its educational provision, and offering a view of the effectiveness of that approach. An index to the paper should list reference to existing documents cited by the institution to illustrate its approach and provide evidence to support its view of the effectiveness of that approach.
- Any key documents (such as a Strategic Plan, Quality Manual or equivalent) that the institution wishes to submit with its general paper as background or reference material.
- Reports that can be accessed directly by the team about the institution or its provision, including professional, legal and regulatory bodies, within at least five years preceding the audit.
- The information placed by the institution on its website, and the additional information held by the institution that relates to quality measures.
- The information that the students of the institution would also wish to provide in a paper in a written submission prepared by representatives of the student body. (Guide II of this series gives detailed background on the required documents for accreditation.)

VII. Student Contribution

Students are invited to submit a brief written presentation to the audit team. It should be clear that the students are welcomed and encouraged so as to offer the opportunity to express their views to the audit team in a written form.

Some fundamental questions are useful to students to get closer views in a way that is particularly useful for the audit team:

- What is the exact information that the institution has published?
- Are students aware of what is expected of them?
- What is the experience that students have learned and how?

- Are there any students who have a voice within the institution, and how effective it is?

Although the written presentation of the students is voluntary, the audit team encourages each group of students to submit its informative document. In some cases, the prospect of a relatively small number, but representative of students, can be derived from interviews, answers to basic questions.

VIII. How the Process Works

A. Preparation

The audit process will begin with a preliminary meeting between the institution and the coordinator to discuss the structure and content of the audit as a whole. This will be arranged about six months before the audit visit. The purpose of this meeting will be to clarify the scope of the exercise; to discuss the interactions between the institution, the audit body and the audit team including the relative responsibilities of all the participants; to ensure that the institution's briefing paper will be well matched to the process of audit; to emphasize that documentary evidence should be based primarily on existing material used in internal quality management, not on material prepared specially for the audit; to discuss any matters relating to the audit process; and to consider the basis for choosing audit trails. The audit body will offer advice and guidance on the process as it can, at the request of the institution. The preliminary meeting will also provide an opportunity for a separate discussion with student representatives about the written submission that it is hoped they will wish to prepare on behalf of the student body. The purpose of this meeting will be to clarify the scope and purpose of such a paper; to explore any topics, beyond the standard template for the paper, that the student representatives consider appropriate; to note any views of the student representatives that might bear upon the team's choice of audit trails; and to discuss any matters relating to the quality set or published material in general. Institutions will be invited to nominate a contact at a senior level that is able to liaise on a regular basis with the audit body, normally through the coordinator of the audit team.

Institutions and student representatives will be requested to submit their briefing papers no later than five weeks before the briefing visit. On receipt, the body will distribute the documents to the audit team.

B. Documentation and Analysis

The institution is required to submit its initial documentation for the audit no later than four months before the audit visit. The initial documentation comprises the institutional self evaluation document and other documents that the institution wishes to provide for the audit team in advance of the briefing visit. If representatives of students within the institution wish to make a separate written submission to the team, that submission should also be sent to the body at this stage.

On receipt, the documentation submitted by the institution and its students is distributed by the body to the audit team. The team also receives an analysis of relevant data produced by the Information Unit at the body in liaison with the

coordinator. The analysis uses the institution's submission to augment the digest provided for the coordinator in advance of the preliminary meeting. On the basis of this information, the team is asked to consult and to select, from the provisional selection made by the coordinator, the discipline areas that it intends to pursue during the audit. At this stage, the team also considers possible areas for thematic enquiry (discussed later in this guide).

On the basis of the audit team's decisions, and not less than 14 weeks before the audit visit, the [Auditing Agency](#) confirms the membership of the audit team and provides the institution with a confirmed list of discipline audit trails.

C. Audit Trails

An audit trail is an error detection technique that follows a discipline from input to output. Disciplinary trails are essential to offer a recent illustration of institutional processes for assuring the quality of programs and the standards of awards. It detects the lack of clarity in the institutional self evaluation report about particular aspects of the quality assurance arrangements, which might be better illustrated for the team through examination of a particular discipline. It also helps following any indication in other documentation, in the period preceding the audit, of a possible or identified weakness. Finally it enables the audit team to sample an appropriate range of the institution's provision.

The number of discipline audit trails for each audit is determined by the team on the basis of the size and breadth of an institution's provision. As a general guide, the sampling trails are expected to represent some [10 per cent \(in terms of the number of enrolled students\)](#) of the institution's higher education programs that may cover a program, a cluster of related program, a field of study, a department, or another unit of review. Normally around [25 per cent \(2 days\)](#) of auditor time during the visit is allocated to the trails.

The trails comprise of some essential elements as follows:

- A recent internal review report (or similar) covering the area of the discipline audit trail.
- A provision of a limited amount of documentation or illustrative materials that may be drawn from the unpublished information.
- An examination of the accuracy, completeness and reliability of the information that the institution provides to potential students, employers and other stakeholders about the quality of its programs and the standards of its awards.
- An examination of the quality of teaching and learning and the standards achieved by students, and draws upon the primary evidence provided by a sample of students' work.

Each audit trail results in a conclusion by the audit team about the extent to which the institution's quality assurance arrangements are operating in practice, at discipline level, in a way that ensures acceptable quality and standards.

D. The Briefing Visit

An audit team's visit to an institution will take place in two parts. The first part is the briefing visit, which is an opportunity for the audit team to gain a sound understanding of the institution and its approach to the strategic management of academic standards and quality of provision prior to the audit visit. During the briefing visit the audit team will explore and gain further clarification of matters outlined in the briefing papers submitted by the institution and by the students, and will consider some of the evidence offered by documents cited as references in the institution's briefing paper. The briefing visit will also offer the institution and student representatives an opportunity to bring the team up to date on developments and changes since the briefing papers were submitted, and to raise with the audit team, among other matters, what they consider would be particularly worthy of exploration by the team during the audit visit.

This briefing visit will be held typically five weeks before the audit visit. The audit team will be on site for three days in all, of which two days will involve meetings between the team and key representatives of the institution and its students. From these meetings and from its study of the documents made available to it by the institution, the team will consider its detailed lines of enquiry for the audit visit, and will propose a program for that visit. The final choice of audit trails will be made by the audit team using the briefing visit, following discussion with institutional representatives.

The documentation available to the team during the briefing visit will normally be limited to the illustrative material identified by the institution in the index to its briefing paper; institutions may choose whether to make these documents available to the team electronically or in hard copy or in a mixture of formats, whichever is most convenient for the institution. Auditors may also indicate what additional illustrative documentation they would like to be available at the start of the audit visit, or sometimes, in the case of particular key documents, before the audit visit. Any request for additional documentation will be limited to no more than what is needed to inform the specific enquiries that the team will be undertaking.

E- Summary Timeline

To give auditors a sense of the process, the summary timeline for a typical audit of a medium-to-large institution is set out below. The time required for several of these stages will be less for audits of smaller institutions.

Audit stage	Time period
Auditee submits Performance Portfolio or self study report (SSR)	
Audit panel reads Portfolio or SSR	2-3 weeks
Portfolio Meeting or SSR	1 week
Panel's questions, requests and visit proposals sent to and considered by auditee	2 weeks

Final planning for main Audit Visit	2 weeks
Main Audit Visit	1 week
Report is drafted by the auditing agency staff member with several iterations sent to panel members for input	8 weeks
Definitive draft sent to auditee	1 week
Auditee considers draft report	2–3 weeks
Auditee sends comments on draft to the auditing agency	1 week
Report is revised	2 weeks
Report is sent to the auditing agency Board for approval	1 week
Board considers and approves report	1–2 weeks
Report is sent to auditee	1 week
Embargo period prior to publication	2 weeks
Report is made public	

F. The Audit Visit

The audit visit provides an opportunity to the team to follow up, with a greater depth, on the issue in the lines that were found in the briefing visit including the study on the establishment and related documentation about the quality management and standards for certain categories of staff and students.

What characterizes the audit visit is the exploration on the selection of audit trails. An examination of the visit is also an opportunity for the institution that reflects the discussions of the briefing for the visiting team clarification or other documentary evidence that can help the team to understand its approach to quality management and standards.

The audit team is to ensure that its program of audit includes meetings with the students, so they get first-hand information about the experience that students as learners are gaining in line with the system of quality assurance and improvement. It tries to meet with student representatives in the implementation of the statutory audit visit to discuss with them, in connection with the views expressed in a written submission, the information received during the visit's meeting. The examination goes, in general, to extend over **one week, including up to four days** are dedicated to the meetings between the audit team and the staff and students of the institution.

The last day of the audit visit is oriented to consider its tentative conclusions about the decisions and agreements:

- The level of confidence/trust, it believes that, in establishing safety standards of academic higher education awards in the institution's name and the preservation of quality education that covers its awards.
- Comments that it wishes the institution to approach to improve the quality of educational provision, on the arrangements for the maintenance of academic standards and improving the quality of research in post-graduate programs, on the accuracy and completeness of information that the institution has published about the quality of their educational provision and standards rewards.
- Characteristics of good practice that it wants to point out as positive contribution to the development of the approach to the management of academic standards and quality of provision.
- Recommendations concerning further improvement of the institution, arranged by categories and terms of the importance and / or urgency.

The audit team should prepare its preliminary results at its closed meeting at the end of the visit, but it will continue to refine knowledge about some aspects of the audit through internal communication in the coming days, to get another opportunity to access all the information available and gathered. Therefore, it would be premature for the team to report to the institution on the results of the review, while on site. Instead, it would be very valuable to address the institution in writing, [within two weeks](#) after the end of the visit, in which the main findings and recommendations that are most probable to be included in the draft report.

This letter is seen as a polite step towards the institutions, for a feedback on the outcome of the visit before completion of the audit report that will only be used as basic information;

G. Thematic Inquiries

Thematic enquiries, are seen as aspects related to the establishment of procedures for quality assurance that work within and across the institution as a whole. Such inquiries are needed only if an audit team considers that one aspect of an institution's quality management and standards is particularly interesting, or requires control of several disciplines. The confirmation of the subject of investigation takes place in the briefing visit and the institution is notified for any further similar inquiries in all segments to take place as an integral part of the program for the audit visit.

Evidence regarding the thematic inquiries can be done through the audit trails by subject and through the audit team discussions with the staff and students at the institutional level. If, during a thematic study, the audit team identifies questions on a level of discipline where further expertise is necessary, it may rely on the views of expert advisers from outside the team.

H. Use of Benchmarks

The audit teams will focus on the academic infrastructure as the source for external benchmarks when considering an institution's approach to security management of academic standards and the quality of their awards. Teams should prove that the institutions have carefully examined the purpose and intent of the elements of the academic infrastructure, have their impact on the practices and institutions, or to take the necessary measures to better reflect the institutional practice of managing the institution's infrastructure. The audit team, in practice, will use the academic infrastructure as the prime reference point or benchmark.

The teams are invited to comment on the way the institutions are looking to the development of the situation within the framework of academic standards, to see how the institutions are checking the alignment between the academic standards of their awards.

The audit team is concerned, in the nature and manner in which all the materials benchmark statements were taken into account when defining and monitoring programs and awards. They remain that the reports of the academia, as a viable frame of reference to a certain extent, as a general rule, should represent the basis for awarding degrees. They should pay special attention to multi or interdisciplinary contexts in which the simple or general application may be inappropriate. They do, however, while taking a point of reference, students and other interested parties expect to be taken into account when programs are designed and verified. Final program specifications are considered as the publicly available information on the goals, learning outcomes and the expected performance of students, the audit teams wishing to explore their usefulness for students and staff, and the accuracy of the information that they contain. Notably teams interested to see how to take advantage of the program specifications and other benchmarks in the academic infrastructure, in order to clearly define the expectations of teaching, learning and assessment of the commitment between the institution and its students. It is expected that sampling trails should open doors for the team to compare the actual performance of the institution and the used benchmark or reference point, and the way in which program specifications are explained and transmitted to students.

I. Judgment

Judgments on the institution performance would concentrate on the confidence that can reasonably be placed in the soundness of the institution's present and likely future management of the academic standards of its awards and of the quality of the learning opportunities available to students.

I.1 Judgment Output

Confidence: a judgment of confidence indicates that, in the view of the team, the institution is managing effectively and consistently. The team expresses its confidence where an audit team finds that an institution is managing the security of academic standards soundly and effectively, and where the prospects for the future continuation of this appear good. Similarly, where an audit team finds that an institution is managing the quality of the student learning opportunities soundly and effectively, and where the prospects for this future continuation appear good, it would also be expected to express its confidence.

Limited confidence: A judgment of limited confidence indicates that there is evidence that the institution's capacity to manage soundly and effectively the academic standards of its awards and/or the quality of its educational provision is currently limited or is likely to become limited in the future. Where an audit team has substantial doubts about the current management of security of academic standards and/or of the quality of provision, and/or about the future management of either of these, it will make a judgment of limited confidence and will indicate clearly the areas of concern that have given rise to such limitation of confidence.

It should be emphasized that a judgment of limited confidence is not a judgment of failure, rather it indicates an outcome that is positive but that improvements need to be made.

No confidence: A judgment of no confidence indicates that there is substantial evidence of serious and fundamental weaknesses in the institution's capacity to secure the academic standards of its awards and/or to maintain an appropriate quality of educational provision. Where the audit team has serious concerns about the current management of the security of academic standards and/or of the quality of provision, and/or about the future management of either of these, it will make a judgment of no confidence and will indicate clearly the significant areas of concern that have given rise to this judgment.

I.2 Recommendations

Recommendations of the team are responsible for the continued treatment by the institution, and to determine, referring to a good practice, that the audit team has added a very positive contribution to the development up with the approach of the safe management of academic standards and quality of the provisions in the context of this institution.

The recommendations shall be classified by importance:

Essential: main recommendations focus on the important things that the audit team, are under notice of quality and/or standards in danger, and the urgent need for corrective action.

Recommended: recommended recommendations relate to matters that the audit team believes have the potential to improve the quality and/or standards in danger and demanded the adoption of corrective or preventive measures.

Desirable: desirable recommendations relate to matters that the audit team believes have the potential for improving the quality of learning and/or to safeguard the standards of academic distinctions.

J. The Audit Reports

1- General Parameters

Following the Audit Visit, the auditing agency produces a public written report on the audit. The report outlines the panel's findings, which it has reached through its interpretation of the specific evidence it has gathered. Reports note both commendable practices and areas for improvement. Reports do not comment on individual people (positively or negatively) or appeal to irrelevant standards. Reports attempt to address all relevant areas, but without excessive detail or presuming to be exhaustive.

Audit reports do not contain statements that cannot be validated. Hence, if the panel has formed the view that comment on a particular matter needs to be made, it has firm evidence on which to base its comment.

The audit report is a public document and belongs to the auditing agency, not to the audit panel or its members. The panel acts on behalf of the auditing agency.

2- Audit Report Content and Writing Process

2.1 Content and Format

Audit reports contain a summary of findings and more detailed comments in the body of the report. They all include commendations, affirmation and recommendations. Major elements of the auditee's Performance Portfolio or self-study report (SSR) are likely to be reflected in the audit report structure. Within each area discussed, the report considers: the issues investigated; the auditee's objectives for this area; relevant evidence; the investigations conducted; and the panel's analysis and conclusions.

2.2 Commendations, Affirmations and Recommendations

The panel's investigations are as attentive to identifying commendable practices as they are to areas for improvement. Reports typically include both highlighted 'commendations' as well as other favorable comments throughout the text.

'Recommendations' in audit reports relate to areas the audit panel believes require improvement. The recommendation will alert the auditee to an area for attention, rather than instructing it to take a particular action or series of actions. However, some suggestions of possible approaches may be offered by the panel. A subset of recommendations is 'affirmations'. These relate to areas the panel believes require improvement which have already been identified by the auditee, in its Performance Portfolio or SSR, as needing attention. Affirmations are validated by the panel in the same manner as are commendations and recommendations and, therefore, an auditee must be able to demonstrate the processes and evidence that it has used to arrive at the decision that improvement is required. Further, the panel may discuss with the auditee the action it has taken (or proposes to take) and may comment on its likely effect.

2.3 Writing the Audit Report

The writing of the audit report is the responsibility of the auditing agency staff member on the panel as explained in this guide, in consultation with other panel members. An iterative process is followed, allowing for all panel members to provide comments as desired. The indicative timetable for the production of the audit report is outlined in this guide. It should be noted that this process may take more or less time depending on the particular circumstances of the audit.

3- Approval of the Audit Report

3.1 The Definitive Draft

When the panel is satisfied with the report, it becomes a definitive draft and is sent to the responsible of the institution “auditee” for identification of any errors of fact and comments on emphasis or expression.

For comments other than the correction of typographical errors, it is most helpful to the auditing agency if the auditee provides, for each of its comments: a precise reference to the relevant text in the audit report; an explanation of the point at issue; the background reasoning or evidence to support the comment; and a suggested rewording where appropriate.

The auditing agency staff member copies the auditee’s comments to other panel members and the auditing agency Executive Director. In consultation with the panel chair, the auditing agency staff member produces a preliminary version of the final report and discusses this with the Executive Director and panel chair (and with other panel members as necessary).

3.2 Responsibilities of the auditing agency Board with Respect to Audit Reports

At the same time as the definitive draft report is sent to the auditee, it is also sent to the auditing agency Board Directors. The Board is responsible for setting and ensuring the achievement of the auditing agency policies. In particular, it is ultimately responsible for audit reports, which are the public face of the auditing agency core activity. Therefore the Board approves the release of each audit report. The purpose of sending the definitive draft to the Board is so that the Directors have adequate time to read it, and subsequently can quickly approve the final version.

4- The Final Report

4.1 The Public Release

The auditing agency audit reports are public documents. Before its public release, and after the final audit report has been approved by the auditing board, a copy of the report is sent to the auditee institution. This allows the auditee time to prepare any public comment it may wish to make on the report or its findings. It also allows the auditee to seek a review of the report. It is the responsibility of the auditing agency staff member on the panel to negotiate an agreed public release date with the auditee.

On its public release, the auditing agency sends copies of the report to various individuals, including the members of the audit panel.

4.2 Review of Audit Reports

The auditing agency whole audit process is designed to ensure that auditees are treated fairly. In addition to the steps taken before and during the audit process, provision is made for the possibility of a final review that may be used under exceptional circumstances.

If, on receiving the final audit report, the auditee believes the report should not be published in its existing form because it contains gross inaccuracies or misrepresentations, the auditing agency Board will consider a submission from the auditee to this effect, and may approve a revision of the report.

K. Sign-off and Follow-up

The review will be completed when it is signed off officially. Where the review reports positive outcomes, in the form of broad confidence, and where investigations do not recommend issues of importance, urgency and attention, the audit will be formally signed off by the date of publication of the report. Only if the team has a source of concern in the light of what has been seen and heard, it is proposed that more activities should be conducted.

If an audit team makes a judgment of limited confidence or no confidence, the report is released and should include a follow-up program of actions. The team imposes an action plan on the establishment and demands progress reports at regular intervals. The review would not be extinguished, as a result of the institution declaration that the action plan has been completed and successfully implemented, with a maximum period of 18 months. If at this time, there are concerns about the effectiveness of measures taken, the team should be ready to conduct another visit. While the body can not act as an adviser to the institution with regard to action plans, it should be ready to participate and comment on the institution's proposals.

IX. Audit Administration and Institutional Contacts

The coordinator of the audit team is responsible for coordinating and managing the various examinations and audits. All efforts should be made by the team and the coordinator to ensure that close and constructive cooperation with the institution is established, and that this cooperation should be managed beyond the specific requirements of the institutional audit course.

X. Complaints and Representations

Complaints about the conduct of the examination and representations against the judgments of the audit team should be addressed to the body, in accordance with the formal procedures.

IX. Audit Staff

A. Size

The basic size of the audit team would be three to five auditors (**basically a panel chair, an agency staff member as a coordinator, an observer**) and a team assistant (**Typist**). In the case of large institution or when the structure of the institution is complex other teams of auditors must perhaps get involved to ensure that there is sufficient coverage of the institution's portfolio of activities to justify the judgments and comments.

B. The Coordinator of the Audit Team

Each audit team should have a coordinator. During the period preceding the visit, the coordinator consults with the Institute about his audit examination preparation, and works with the audit team on the preliminary analysis of documentation. The coordinator accompanies the team during the visits until the last part of the review

visit, giving all appropriate advices. It is the responsibility of the coordinator to determine whether findings of the team are supported by adequate and justifiable materials, and that the audit report contains information easily accessible, supported by reference to facts and detailed analyses.

C. Selection Criteria

At the time of their appointment, the auditors are supposed to have the know-how and experienced in teaching and management in the field of higher education. They are appointed, after reviewing their capacities, by the body. The auditors' nominations are made by the body, and it is expected that the body nominates people with sufficient seniority, knowledge and technical skills to ensure that the auditors are competent, professional and credible. The selection criteria for the auditors will be made public. All attempts should be made to ensure that the examiner cohort reflects appropriate sector, discipline, gender and sectarian balance.

Assistant audit is usually recruited from among senior management staff in the institutions. They offer administrative support and fulfill the main function of coordination and liaison during visits within the organization.

1- Auditor Characteristics

The following are desirable qualities and attributes of auditors. Audit panels as a whole possess a breadth of the experience indicated.

Quality audit and higher education related attributes:

- Commitment to principles of quality audit and quality assurance in higher education
- Knowledge of quality assurance methods and terminology and their appropriate uses
- Knowledge and understanding of the higher education sector
- Experience of undertaking quality reviews (audit, assessment, accreditation, etc.) in educational, professional or industrial settings
- Ability to understand and evaluate information provided by auditees in a manner that is sensitive to the particular context from which it arises
- Experience in teaching
- Experience in research.

General attributes:

- Experience in managerial skills
- Understanding of administrative law
- Understanding of governmental and legislative processes
- Breadth of perspective
- Ability to focus knowledge and experience to evaluate quality assurance procedures and techniques, and to suggest good practices and/or starting points for improvements relative to the auditee's particular context
- Ability to work in a team, firmly but cooperatively
- Ability to communicate effectively
- Integrity, discretion, commitment and diligence.

2. Training

Training of auditors and the audit secretary should be made in collaboration with training organizations that have knowledge in the broad area of the audit, especially in other countries.

The objective of the training is to ensure that all team members fully understand the objectives and tasks of the audit process. They participate in all proceedings, to understand their own role and the tasks expected to achieve, and the rules of the Codes of Conduct for the process, and they are capable enough to explore and practice data assimilation techniques and analysis, development programs visits, construction and verification of hypotheses, the implementation of meetings, education judgments and a relationship of trust and friendliness with the institutions.

The effectiveness of training and the first selection process, continue to be the subject of formal evaluation by the body.

Topics typically covered in the induction training include:

- An overview of the audit process
- Responsibilities of audit panel members
- Current pressures, directions and changes in the higher education sector
- Higher Education Institution/ auditing agency quality frameworks
- Analyzing the **Performance Portfolio or self study report (SSR)**
- Using performance measures and evaluating evidence
- Effective information-gathering

3- Responsibilities:

Roles and Responsibilities of Panel Members

Panel members are selected so that the panel as a whole possesses the expertise and experience to enable the audit to be carried out effectively. Members may translate their different perspectives into different emphases in their attention to the process, and a concentration on certain aspects of the audit.

The expectations of persons serving on an audit panel are summarized below. Note that the panel chair and the auditing agency staff member have additional roles and responsibilities

Audit stage	Responsibilities
Prior to appointment	<ul style="list-style-type: none"> • make known to the auditing agency any matters that are or could be perceived to be a conflict of interest in undertaking the audit.
On receipt of Performance Portfolio or self study report	<ul style="list-style-type: none"> • read thoroughly the Performance Portfolio or self study report and associated documentation provided to become thoroughly familiar with the auditee's policies, procedures and criteria for quality and the purpose and possible outcomes of the audit • provide brief written comments on the Performance Portfolio or self study report to the auditing agency prior to the Portfolio or self study report Meeting.
During Portfolio or self study report Meeting	<ul style="list-style-type: none"> • participate fully in the meeting • be willing to accept special responsibility for one or more areas or topics • refresh knowledge of the auditing agency audit method.
Following the Portfolio or self study report Meeting and before the Audit Visit	<ul style="list-style-type: none"> • comment as desired or requested on the documentation prepared by the auditing agency staff member on the panel as an outcome of the Portfolio or SSR Meeting • read supplementary documentation supplied by the auditee in response to the panel's requests • participate in the development of questions to be asked by the panel at the Audit Visit • follow-up any areas of special responsibility accepted at the Portfolio or SSR Meeting, as necessary
During the Audit Visit	<ul style="list-style-type: none"> • participate fully in all aspects of the Audit Visit, including interview sessions and panel-only discussion and decision-making. • where the panel divides into subgroups for parallel sessions, panel members may be asked to provide notes on their subgroup's discussions.
After the Audit Visit	<ul style="list-style-type: none"> • read and provide comment on draft(s) of the audit report. If desired, panel members may also contribute to its actual drafting more directly by developing suggested new or revised section(s). While responsibility for writing the report is assigned to the auditing agency staff member on the panel, all panel members should be satisfied that the audit report is accurate and balanced. • as desired, provide feedback to the auditing agency on the entire audit process.

4- Additional Roles and Responsibilities of the Panel Chair

The panel chair has responsibilities for planning and managing aspects of the audit process, including leading the panel to ensure that:

- The panel works effectively as a team, especially during the Audit Visit, and manages its time well, and
- All panel members are able to contribute effectively to open and informed panel discussions, leading to audit findings that are rigorous, balanced and based on sound evidence.

Prior to the Audit Visit, the panel chair takes on at least two major additional responsibilities. The first is to chair the Portfolio **or SSR** Meeting at which the panel discusses the Performance Portfolio **or SSR** and agrees on the issues to be investigated in the audit. The second is to accompany the auditing agency staff member on the Preparatory Visit to the auditee, to discuss details of the Audit Visit.

Particular expectations of the panel chair at the Audit Visit include:

- At the start of each group meeting, the chair may quickly outline the major items which the panel wishes to cover during the discussion.
- The chair and the auditing agency staff member must balance adherence to the agreed program with flexibility in admitting unanticipated issues. Any revisions should be clearly understood by the panel, the auditee and the group(s) involved.
- If, for any meeting, the panel splits into subgroups, chaired by other members of the panel, the chair should ensure that the sub-chair has an agreed agenda for the session and reports the results of the subgroup for inclusion in subsequent sessions (and, as necessary, the audit report).
- At the end of the Audit Visit, the chair and the auditing agency staff member should guide the panel towards decisions or conclusions which are appropriate, carefully thought through and clearly expressed.
- In the final session, the chair orally presents an outline of the panel's conclusions

Following the Audit Visit, the main responsibility of the chair is to coordinate with the auditing agency staff member to ensure that the final audit report is accurate and fair in all respects.

Following publication of the audit report, the chair may be requested by the auditing agency staff member on the panel to assist if further interaction is required with the auditee or the auditing agency Board.

5- Additional Roles and Responsibilities of the auditing agency Staff Member

In addition to the responsibilities of all panel members, the auditing agency staff member on the panel is responsible for managing and overseeing all aspects of the audit process and **liaising** with the auditee on all matters related to the audit. The auditing agency staff member on the panel has the authority to ensure compliance with the auditing agency Board's approved procedures.

Prior to the Audit Visit, particular responsibilities of the auditing agency staff member include:

- establishing dates for the panel's meetings and visits and overseeing the formal appointment of the panel
- making necessary arrangements for the Portfolio **or SSR** Meeting and assisting the panel chair in the conduct of that meeting
- making necessary arrangements for the Preparatory Visit to the auditee and attending that meeting with the panel chair
- **liaising** with the auditee regarding the panel's requests for additional information and ensuring that the information is provided in an appropriate and timely fashion
- liaising with the auditee regarding the Audit Visit program
- preparing draft worksheets for each interview session

During the Audit Visit, particular responsibilities of the auditing agency staff member include:

- assisting the chair in keeping to (or amending, as necessary) the planned program
- liaising with the auditee's nominated contact person throughout the visit (including seeking further information or requesting additional meetings, as necessary)
- assisting the chair to ensure that all panel members fully understand the agreed agenda for each session
- supervising the work of the audit typist to record a transcript of the interviews and discussions
- recording succinct summaries and notes of issues for clarification, reconsideration and reporting
- in conjunction with the chair, guiding panel members towards decisions or conclusions which are appropriate and carefully considered
- advising as necessary on appropriate actions and conclusions for the panel to take or reach

- ensuring that administrative and logistical arrangements for the Audit Visit proceed smoothly.

Following the Audit Visit, the auditing agency staff member has responsibility for producing the audit report, in consultation with other panel members, the auditee and the auditing agency Board, as appropriate.

6- Observers on Audit Panels

Requests to observe audits may come from a variety of people, including staff of overseas agencies, overseas academics, prospective auditors, and members of the auditing agency Board. Observers are required formally to declare that they have no conflicts of interest with the auditee and, furthermore, would not be permitted to act as an observer if the auditee were to object.

The key principles which usually guide auditing agencies in agreeing to accept observers are:

- The integrity of the audit process
- Minimal inconvenience to the auditee
- No more than one observer per audit panel
- Preferably, the panel should be quite experienced, and
- Appropriate experience and understanding of higher education by the observer.

The procedures for the observation of an audit include:

(i) The observer will be briefed by the auditing agency staff member responsible for the audit.

(iii) The observer will normally attend the main onshore Audit Visit but not the Preparatory Visit. It is also preferable for the observer to attend the Portfolio or SSR Meeting, but s/he does not normally attend any other visits.

(iv) The observer will receive a copy of the Performance Portfolio or SSr submitted to the auditing agency for the audit and lists of any subsequent documents requested of the auditee by the panel.

(v) The auditing agency reserves the right to withhold documents at its discretion.

(vi) The observer must remain silent throughout Audit Visit interviews.

(vii) The panel chair and/or the auditing agency staff member responsible for the audit may exclude the observer from any meeting or interview at their discretion.

(viii) The observer may, at the invitation of the panel chair and/or the auditing agency staff member on the panel, offer comments during private meetings of the audit panel.

(ix) if the observer wishes to raise any questions during the course of the Audit Visit, they should be addressed, in private, to the auditing agency staff member responsible for the audit. The observer should avoid placing demands upon the staff member which would significantly deflect her/him from primary responsibilities as a panel member.

(x) Otherwise, any questions and/or issues arising from the audit shall be discussed after the Audit Visit, with the auditing agency staff member responsible for the audit.

(xi) The observer will adhere to the requirements of confidentiality and privacy of information

(xii) The observer will refrain from taking notes relating to the content of panel discussions or Audit Visit interviews.

(xiii) The observer may not use any electronic recording device at any time during the audit.

(xvi) The observer may be invited to provide to the auditing agency comments on the audit process.

XII. Conflict of Interest

A- Purpose

Due to extensive interaction across the higher education sector, Audit Board members, staff members and honorary auditors may all experience conflicts of interest between their role(s) as auditors and their other activities. This statement is primarily concerned with conflicts of interest relating to audit panels. There may also be a conflict of interest between any panel observer, the assigned audit typist and the auditee.

B- Types of conflict.

For audit panel members, possible conflicts may be categorized as **personal**, **professional** or **ideological** (between which there may be some overlap).

Personal conflicts could include animosity, close friendship or kinship between an auditor and one or more of the senior staff of the HEI), or if an auditor were biased for or against the auditee due to some previous event. It is normally preferable to avoid having graduates of the institution on an institutional audit panel.

Professional conflicts could occur if an auditor had been a failed applicant for a position in the higher education institutions (HEI), were a current applicant or prospect for a position in the HEI, were a senior adviser, examiner or consultant to the HEI, or were with an institution that is strongly competing with an institution being audited.

Auditors are obliged to declare formally to the auditing agency any matters that could influence or be perceived to influence their ability to serve effectively on an audit panel

Audit Typist

The auditing agency usually employs an audit typist to record the interviews conducted by the audit panel during the Audit Visit. The audit typist is required formally as well to declare that s/he has no conflicts of interest to working on the audit.

Auditing Agency Directors

The policy on Responsibilities of the Auditing Board states that for Board members to be able to exercise their responsibilities in relation to audits, they need the distance and independence of not being members of audit panels'. Also, where the Director has a material personal interest in a particular auditee, s/he is excluded from any of the Board's usual duties with respect to that audit, including any discussion of that auditee at a Board meeting. To ensure this can be achieved, drafts and the final version of the audit report, and any reports containing feedback on a particular audit, will not be distributed to a Director who has an interest in that auditee.

C- Guidelines

Auditors

As an audit panel is being selected, prospective auditors and the auditee are asked to declare in writing any matters that could pose a conflict of interest in the prospective auditor being appointed to the audit panel for that HEI. If the prospective auditor responds in the affirmative, the auditing agency may remove her/him from consideration, or, having considered the reasons, decide that in fact no conflict exists. If the auditee responds in the affirmative, or wishes on other grounds for a person not to be selected as an auditor, the reasons must be given. The final decision whether to appoint a particular person to any given audit panel rests with the auditing agency.

Audit Typist

An employment agency is usually contracted to assign an audit typist to an audit. The agency is also informed that the prospective audit typist must declare in writing that they know of no conflict of interest in their being appointed to working on a particular audit.

XIII. Audit and Accreditation (D-First Party, Second Party and Third Party Audits)

First Party – Internal Audit

A first party audit is usually performed by the institution (or a faculty/department within the institution) upon itself. It is an audit of those portions of an institution's quality assurance program that are "retained under its direct control and within its organizational structure."

If performed properly, first party audits and self assessments:

- Provide feedback to management that the quality system is both implemented and effective, and;
- Are excellent tools for gauging an institution's continuous improvement effort as well as measuring the return on investment for sustaining that effort.

Second Party – External Audit

Unlike the first party audit, a second party audit is an audit of another institution's quality program **not under the direct control or within the organizational structure** of the auditing organization. Second party audits are usually performed by the customer (in the higher education industry: students, students representatives, future employers...) upon its suppliers (HEIs) to ascertain whether or not the supplier can meet existing or proposed contractual requirements. Although second party audits are usually conducted by customers on their suppliers, it is sometimes beneficial for the customer to contract with an independent quality auditor. This action helps to promote an image of fairness and objectivity on the part of the customer.

Third Party Audit

Compared to first and second party audits where auditors are not independent, the third party audit is objective. It is an assessment of an institution's quality system conducted by an independent, outside auditor or team of auditors. When referring to a third party audit as it applies to an international quality standard such as ISO 9000/ institutional accreditation, the term "third party" is synonymous with a quality system registrar/ International Higher Education Accreditation Agencies whose primary responsibility is to assess an organization's/ HEI quality system for conformance to that standard and issue a certificate of conformance (upon completion of a successful assessment).

The emphasis of the second part of this guide is on the third party audit (accreditation)

Part Two

Accreditation

XIV Introduction

A. Definition

Accreditation is a process that ensures the enduring quality, accountability and improvement of educational institutions and programs of study.

It is also seen as a quality assurance in which institution's services and operations are tested by a third-party accrediting agency according to the latter's standards. Should the facility meet these standards, it will receive an accredited status.

In [some](#) countries this function is conducted by the ministry of education and is granted for a specific period of time usually every 5 or 10 years according to the accrediting agency's policy.

In the U.S, educational accreditation is performed by private membership associations based on the standards of good practice [not a specified law](#).

In Europe, after the Berlin Declaration in 2003, the continuous support of the governments has developed quality assurance at all educational levels.

B. History

It all began in the early 1950s where the federal government of the United States used a private system of self regulation to qualify institutions and programs for federal grants and loans.

After the standards were set, private organizations played the role of "gate keeper" in higher education. They were also given the right to determine whether institutions or programs are eligible to receive the federal grants and loans. However employers have also used accreditation to determine how their employees can access and use the aid benefits that their organizations offer.

As for the consumer, accreditation is usually defined as a legitimate protection from flagrant fraud and abuse and has significantly evolved over the years in response to the changes in higher education environment as well as the number of accrediting agencies or organizations.

Moreover, the growing public and private interest in assuring quality in specific programs such as business, education and engineering has led to the establishment of over 100 accrediting organizations with different quality standards and processes which are not fully comparable.

XV. Types of Accreditation

A. Institutional v/s Program Accreditation

A.1 Institutional Accreditation

The institutional accreditation acceptance is always useful to ensure the integrity of higher education, including international integrity,. In theory, the importance of accreditation is determined by a stage of development of higher education within any system. The need for institutional accreditation is essential for new private Institutes.

Staff qualification is one of many specified minimum standards for the evaluation of an institution in the process of institutional accreditation. To produce graduates that meet explicit or implicit academic standard, it might be based on an estimation of the potentials.

Formal judgement on recognition made by government departments or government-initiated agencies in Europe, and it's been undertaken by national bodies. There is little need for institutional accreditation in countries with a total or preponderant public sector higher education system. Upgrading of non-university higher education institution (colleges, polytechnics) to university status needs to be validated by an applied mechanism, as in the UK and Sweden.

Accreditation is a self-regulatory process of recognition of institutional viability by non-governmental voluntary associations that exist in huge private sector in the US. Colleges or universities used accreditation to convince other institutions that their students and courses should be accepted by them and *vice versa*. There has been a funding link through eligibility for federal aid, despite the voluntary nature of the process. To focus more on student learning outcomes, a shift in accreditation took place. To examine applications for offering degrees from institutions other than provinces, the government of Ontario has established the Post-secondary Education Quality Assessment Board. Americas and Eastern Europe are two regions that have 'institutional accreditation', especially 'initial recognition', which tends to be more prominent in countries with a significant new private higher education provision.

A.2 Programme Accreditation

To produce graduates with professional competence to practice, programmes may be accredited, and it's referred to as professional accreditation. North America tends to focus on professional areas in accreditation and re-accreditation. The graduates are being prepared to enter a profession subject to an approval by the accreditors, and it's recognised in 14 different non-governmental voluntary associations. UK control access to the profession by making accreditation of the programme a prerequisite for graduate entry that links the accreditation of programmes to provide a licence to practice. Before registering graduates as professionals, some bodies in the UK set and grade their own examination.

Many program accreditation agencies exist: Accreditation Board for Engineering and Technology (ABET), American Association to Advance Collegiate Schools of Business (AACSB), American Library Association (ALA) for library science, American Psychological Association (APA), Commission on Collegiate Nursing Education (CCNE), National Council for Accreditation of Teacher Education (NCATE)

B. National v/s International Accreditation

National accreditation is considerably different from International accreditation. Sometimes nationally-accredited institutions are also Internationally-*accredited*, but

generally they are not. Internationally-accredited institutions generally will only accept degrees/credits from other Internationally-accredited institutions.

On the International level, each accrediting organization defines its own standards, based on the state of the higher education community and government activities through the Higher Education Act. International Accreditation provides public confidence in the authenticity of the value of the education offered and a basis of recognition of degrees for academic and employment purposes; student mobility and transfer of credit; etc.

National accreditation refers to accrediting bodies that review and accredit specialized or special-interest institutions. Institutions with national accreditation generally will recognize degrees/credits from other similar institutions that are recognized by the same accrediting organization.

C. Fake v/s Trustful Accreditation

The process of accreditation, like all other processes has standards and norms. However the procedure which an institution goes through to get accreditation is surely not a pleasant one for it would take in consideration all the possible details for evaluation like visits by peers, checklists etc...

In contrast, many institutions claim that they are accredited. The important question is "by which organization?" There is a big difference between licensed and accredited institutions. These institutions are called Diploma Mills. These diploma mills usually use photograph of other buildings in their advertisements with official P.O. boxes. They advertise low fees for their degrees and complete facilities. Because accreditation agencies in general are partners of the institutions that they accredit, it is of high importance to know the source of the accreditation an institution has. The low standards the accreditation agency has set for it indicates that it only exist for the purpose of fraud. Such accrediting agencies or services are not approved by either the U.S. Department of Education (DOE) or the European network of quality assurance agencies ENQA),

D. Total Quality Management and Accreditation (TQM)

As defined in guide I, Total Quality Management (TQM) is an organizational philosophy and a management approach which involves all employees and is aimed at continuously improving the organization's effectiveness in achieving customer satisfaction.

Agencies are actively embracing and promoting TQM, and other corporate methods to improve the quality of higher education. Applying TQM across HEI would be essential if these institutions wish to be re-accredited because the accreditation institutes themselves will demand it from them soon. Colleges and universities are organizations like corporations and, if business improvement methods work for corporations, then they should also work for higher education. After all, teaching-and-learning is a product and, like all other products, it is also sold to consumers.

XVI. The Trend for Accreditation

A. Rationales for Accreditation

Accreditation has assorted benefits and rationales as long as diversified external effects.

In the student approach, it is a consumer protection rationale which certifies that the quality services or programme of an institution meet the minimum standards set by its accrediting agency and also guarantees that the degree awarded will be recognized by third parties, especially employers.

In the government approach, accreditation plays the role of a tool used to ease the comparability of degrees and establishing market transparency which appears to be indispensable in the higher education market that is becoming increasingly complex due to globalisation, the expansion of institutions and the development of virtual and fake institutions. However, governments are trying to limit the access to state recognition or state funding procedures because of the diminishing state funding. On the other hand, accreditation offers the possibility for new providers to enter the market with a formal recognition according to the standards and that with or without state funding.

In the employers approach, accreditation is seen as a prerequisite to prove the quality of the job applicants' degrees where market transparency plays a vital role by providing assurance of the quality of programmes and institutions. Although in an elitist higher education system, informal mechanisms are sufficient to ensure trust. Mystified higher education system guarantees the minimum quality levels of qualifications. Employer's organisations are unsatisfied with uniformity and standardization on the subject of quality levels. This issue has led to the development of accrediting procedures based on standards of excellence (e.g. EQUIS). In some sectors accreditation of programmes or institutions by professional organisations is necessary for recognition by sectors of diplomas and degrees which are in their turns governed by national or international regulations.

The benefits of accreditation are not only restricted to students or employers but also for institutions and programmes themselves. Like the most important outcome of accreditation; the formal external recognition of quality, which is essential to state funding, acquiring legitimacy in higher education system toward not only other institutions but also toward employers, stake-holders, student and the general public.

Accreditation is also seen as an affirmation of the self-regulating capacity of institutions that leads to a higher autonomy which governments all over the globe are granting to the institutional level of the higher education system in exchange of the establishments of trustworthy quality assurance procedures. Progressively more, institutions also see accreditation as a positive factor in their mutual relationships.

In this framework the rationale of accreditation is located in the reciprocal recognition of each other's quality and the shared responsibility in upholding standards. In the future there is a great possibility that inter-institutional accreditation networks may become an observable fact in the global higher education system.

B. Internationalization and Education

Despite the various forms and aspects of internalisation in higher education, few accreditation and quality assurance procedures take that into account. Nowadays the

number of accreditation procedures on national schemes is much higher than the international one, in contrast to higher education that is considered as a mere international activity. Moreover, globalization is positively affecting the quality in higher education and has a mature strategic significance perhaps not much on a truly global scale but certainly on a more regional one e.g. European level.

Observers and experts are longing for a linking of the tendencies of globalization and quality assurance that leads to the globalization of quality assurance and vice versa. This can be seen as a result of the increased contradiction between the internationalisation of higher education and the domestic nature of quality assurance and accreditation.

There are many challenges, relatively urgent, concerning the fast-paced globalization and the accreditation systems:

- The credit transfer problem due to the increasing students mobility
- The joint development of programmes from different countries
- International recognition of degrees
- International activities of higher education institutions escaping national quality assurance.
- The rapid expansion of trans-national delivery of higher education by franchising arrangements
- The arrival of ‘new providers’ such as commercial private institutions for higher education.
- The development of distance education and virtual universities.

Internationalisation and globalisation sincerely affect the regulative procedures and characteristics of higher education markets.

The concept of quality increasingly becomes involved in inter-institutional competition, it is referred to as the same as corporate quality identifiers such as ISO-Certification. However, the national nature of accreditation procedures leads to a confusing variety of standards and criteria. To a large extent higher education systems, including accreditation procedures, remain embedded in national frameworks that are not transparent to others.

There is a serious lack of procedures of quality assurance and accreditation that can apply trustworthy definitions of standards on an international scale.

Unless specific international forms of accreditation will develop, the globalisation of higher education risks leading to increasing confusion and a backlash in overall quality levels. A decline in the capacity of quality assurance procedures to regulate international higher education markets and a subsequent break down of trust will provide opportunities to untrustworthy institutions to enter the market. There are already numerous examples of questionable institutions and practices, leading to abuse of confidence of students, their families and society at large.

The lack of international procedures of academic accreditation of programmes and institutions to some extent is compensated by the establishment of international systems of professional accreditation. In some professions, professional organisations are developing into real international accreditation agencies, such as ABET in the engineering profession. Another development is the establishment of organisations devoted to the accreditation of trans-national programmes in higher education. The clearest example is Global Alliance of Trans-national Education (GATE). The establishment and growing importance of these

organisations, together with the lack of procedures of international academic accreditation however risk resulting in a one-sided approach and a decrease in importance of academic standards and criteria in the evaluation of international higher education.

What is needed is not the establishment of one international agency for academic accreditation. This not only is unrealistic, but also would run counter to sensitive issues such as the autonomy of institutions and the autonomy of national decision-making processes and policies in higher education. Moreover, it is not desirable to enforce similar standards and quality assessment criteria to higher education institutions all over the globe, leading to uniformity and a loss of cultural diversity and heterogeneity. What higher education really needs are instruments and mechanisms that can translate the effects and consequences of national accreditation procedures to the international academic community and promote the exchange of standards and criteria on a global scale.

C. The Development of National Accreditation Systems

Increasingly countries are developing systems and procedures of academic accreditation of higher education programmes and institutions. The overall picture however still is very confusing.

Because of the oldest traditions of accreditation processes and the highest experience the U.S has, voluntary associations, either regional/institutional, specialised or professional bodies, grant accreditation on the basis of reviews of institutions or programmes. They don't derive their authority directly from the state, but governments rely on accreditation for establishing eligibility for various forms of funding. Among institutions accreditation results in reciprocal trust and permits credit transfer and admission to graduate programmes. Reviews use the basic methodology of self-study and site visits by external expert teams and try to verify whether an institution or a programme meets the minimum threshold standards and criteria set forth by the accrediting body. The US accreditation system has much strength, but also some weaknesses and criticism has been rising recently. Many see the system as too complex and not transparent. Questions have been raised by rectors and vice-chancellors whether accreditation procedures are discriminative enough and conducive to quality improvement. The 'meta-accreditation' of accrediting bodies is perceived to be functioning not very well. Because of its conformity to the delicate balance between the state and the voluntary private sector typical for American culture, the voluntary nature of accreditation is seen as an advantage, but the relationships between accrediting agencies and government are very sensitive and have become rather problematic during the nineties. The founding of the Council for Higher Education Accreditation (CHEA) possibly will lead to a reformulation of relations between the state and the voluntary accreditation agencies. Finally, the international dimension is completely absent in the US accreditation system, but this doesn't prevent the system to exert a great influence on other countries developing their own approaches.

C.1 General Overviews

U.S. Experience: In the U.S accreditation has been seen as exemplary by many nations and some of them have established more or less equivalent accreditation systems.

The Philippines experience: there has been already in the seventies a system of voluntary accrediting associations developed besides the formal recognition of programmes by the state. The voluntary accrediting associations have formed the Federation of Accrediting Agencies of the Philippines (FAAP), acting as the official partner of the ministry regarding policies and procedures of accreditation.

The Japan experience: in 1947 the Japanese University Accreditation Association (JUAA) was founded. From 1995-52 this independent association of universities functions as an accrediting body, since accreditation is a necessary condition for membership. Since 1956 the association applies the standards agreed upon by the government.

Colombia Experience: Another example of voluntary accreditation is Colombia, where a National Accreditation Council (NAC) is operational since 1992, acting as a voluntary accrediting body.

The European Experience: The interest in establishing accreditation procedures in Europe is increasing, but national developments are very uneven. Generally, accreditation is perceived to be a possible further step in the evolution of quality assurance mechanisms. Quality assurance, which is operational in most European countries for approximately ten years, undoubtedly has strengthened internal quality improvement, but did not yet lead to external sanctioning of quality. Since most European higher education systems are state-run, institutions and programmes derive their formal recognition and degree-awarding capacity directly from the state. In accordance with increasing institutional autonomy, accreditation is seen as a possible answer to the need of transferring the recognition of institutions and programmes from the state to autonomous procedures based on the external assessment of quality. A clear impetus to these developments was given by the Bologna-declaration. Signed in June 1999 by the ministers of education of 29 countries, this declaration aims to establish a 'European space for higher education' by improving the 'readability', transparency, compatibility and comparability of European higher education systems. Besides other things, the declaration makes a plea for the establishment of a European credit system on the basis of the already existing ECTS, the introduction of a convergent two-tier degree structure and the promotion of European cooperation in quality assurance. Accreditation is mentioned as a possible means to guarantee minimum standards of quality on a European scale. The Bologna process is leading to an intensive elaboration and exchange of ideas, in the short term towards the follow-up conference in Prague in 2001, so things have not crystallised yet in clear decisions and actions. However, the basic outlines of a future European approach to accreditation become discernible. The delicate balance between national autonomy in quality assurance and an integrative European approach still will have to be respected. A centralised European accreditation agency is not feasible, but European cooperation leading to a common framework of reference for developing minimum criteria and benchmarking is seen as a promising way out. A further step then would be the reciprocal recognition of the results of national quality assurance or accreditation procedures in multilateral agreements. In this bottom-up approach a European convergence and integration of quality assurance and accreditation procedures can be envisaged.

In some countries developments towards that direction are taking place already. The clearest example is Germany, where the introduction of bachelor-master programmes was accompanied by the establishment of an accreditation system for those programmes in 1998. In fact, the *Akkreditierungsrat* functions as a sort of 'meta-accreditation', by setting the standards for and recognising accreditation agencies. In The UK a new approach to quality assurance is being prepared and will become operational in 2000-2001. This approach follows the recommendations of the Dearing report, calling for the establishment of a national framework for higher education qualifications. In the future the Quality Assurance Agency will review the fitness of programme objectives and outcomes in relation to the national qualifications framework, which acts as a standards benchmarking

system. It is not yet clear whether the new quality assessment procedures will function as real accreditation procedures.

In the Netherlands, with a well established system of external quality assurance – to which also the Flemish universities participate – the recent higher education and research policy plan of the Dutch government announces the introduction of international accreditation procedures and bilateral cooperation in these areas with neighbouring countries. In the university sector there is no ambition to develop specific accreditation procedures, but the association of universities (VSNU) has opened the possibility for institutions and programmes, especially internationally oriented specialisation programmes, to participate in various forms of external accreditation. The VSNU or the Inspectorate for Higher Education then can function as a meta-accrediting body. In the non-university higher education sector the *HBO-Raad*, the association of *hogescholen*, is starting an experiment of pilot projects with accreditation in two disciplines. Threshold standards are being developed in order to assess curricula and to promote international recognition of degrees. Dutch *hogescholen* also has developed master's programmes outside the national legislative framework, often in cooperation with new universities in the UK. Since 1999 a validation council is set up for the 'certification' of those programmes.

Another interesting European example is Finland. In 1996 an independent body of the ministry, the Finnish Higher Education Evaluation Council (HEEC), was established. Besides other activities in the field of quality assurance, it carries out two types of accreditation; the assessment of institutions applying for the polytechnic status, and the accreditation and registration of professional courses in the field of continuing higher education, for which a separate Accreditation Board of Professional Courses has been set up. In Austria an Accreditation Council has been founded; its mission is to accredit private institutions of higher education, thus allowing them to award officially recognised degrees. In as well the Dutch, the Finnish as the Austrian case, but also in many other countries, accreditation is used as an evaluation and recognition procedure for specific programmes, developed outside the core-activities of higher education institutions. Other European countries have well-developed and renowned quality assurance systems, such as Denmark for example, but have not yet transformed them into accreditation procedures.

The Ministry of Education in France has a Validation process called (*habilitation*) however; university degrees are given by universities and need to be validated by the national curriculum into national degrees funded by the state itself. The process is based on a dossier evaluated by academic peers on behalf of the Minister. Unlike the majority of other countries, no site visit occurs during the "*habilitation*" process and the "*habilitation*" status is given once thus there is no need for a rehabilitation process.

In Central and Eastern Europe state-controlled accreditation procedures are very common. In the course of the 1990s many Central and Eastern European countries have developed new legislative basis for their higher education systems, including state-controlled accreditation procedures both for the old, state-run institutions and for the new, private institutions rapidly entering the higher education market. In Hungary the Hungarian Accreditation Committee is operational since 1994. It is responsible for the assessment of the quality of educational and research activities in higher education institutions and advises the minister regarding the recognition of institutions and programmes. A credit system based on national standards is implemented. Also in the Czech Republic an accreditation procedure by the state is in function. The Accreditation Commission gives an expert opinion, on the basis of which the minister awards accreditation to programmes. More or less the same can be observed in Bulgaria, where the National Evaluation and Accreditation Agency (NEAA), operational since 1997, is the responsible accreditation

body. In Russia the State Committee for Higher Education of the Russian Federation acts as an accreditation agency for all higher education institutions, granting them the right to award officially recognised diplomas. Many other countries follow the same path.

State-controlled accreditation systems also have emerged in other parts of the world. In many countries governments have established autonomous or semi-autonomous agencies which are charged by law to carry out accreditation procedures of programmes and institutions. Much of such legislation is provoked by concerns about quality of traditional institutions in the context of mystification and limited state funding, but also in the context of the arrival of new, often private institutions. For example, in Latin America governments are tightening their grip on the higher education system by expanding and strengthening accreditation procedures. In Argentina the Comisión Nacional de Evaluación y Acreditación Universitaria (CONEAU) was created by the 1995 law on higher education and has the mission to accredit all undergraduate programmes in regulated professions and all graduate programmes. The state and the universities work together in the development of frameworks of standards applied in accreditation procedures. Also in Chile the Comisión Nacional de Acreditación (CNA) acts as an obligatory accrediting agency. Licensed higher education institutions regularly must have their programmes accredited. Also in Mexico, Brazil and other countries important developments towards accreditation are taking place. A very interesting example also is Hong Kong, where the Council for Academic Accreditation (HKCAA) was established in 1990. It is a statutory body, which conducts both programme validation procedures and institutional accreditation. Accredited institutions achieve self-accrediting status, but have the obligation to develop systematic quality assurance procedures, which in turn are subject to audit.

Argentina experience: The Comisión Nacional de Evaluación y Acreditación Universitaria (CONEAU), created in 1995, 'has the mission to accredit all undergraduate programmes in regulated professions and all graduate programmes' (van Damme 2000: 8).

Brazil experience: Brazil has accreditation procedures in place.

Chile experience: The National Commission of Accreditation (CAN) accredits the programmes of all licensed higher education institutions (ibid).

Hong Kong experience: In Hong Kong, accredited institutions have the privilege of self accrediting status.

While the council for academic accreditation (HKCAA) does not have in its sphere of activities the accrediting of universities. However, self accrediting institutions are obliged to develop systematic quality assurance procedures which in turn are subject to audit.

Accreditation Experience in Lebanon

Directorate General of Higher Education (DGHE)

The Directorate General of Higher Education (DGHE) is responsible of the public and private higher education in Lebanon. DGHE was first founded in 1992 as Directorate General of Culture & Higher Education and belongs to the Ministry of Culture &

Higher Education. In 2002, the Ministry of Education & Higher Education is created and DGHE became Directorate General of Higher Education.

DGHE is directly related to the Council of Higher Education (CHE) which is in charge of:

- Advising the council of ministries for new university license demand.
- Define the Policy Statement of Higher Education
- Supervise the activities of private universities in Lebanon

DGHE includes CHE, Colloquium, Engineering and Equivalence departments as well as four corresponding committees:

- 1- The Technical Committee which is created according to the decree 9274/96 and responsible for
 - Studying the files presented for the creation of new universities or new departments and programs in existing universities.
 - Surveying private universities and institutes in Lebanon with respect to references given in the decrees 9274/96 and 8864/96 and with respect to the law organizing higher Education in Lebanon
- 2- The equivalence Committee which is created in 155 and responsible for :
 - Recognizing the diploma of private universities and institutes inside Lebanon.
 - Giving equivalence to HE diplomas from outside Lebanon.
- 3- The Engineering Committee which is created in 155 and responsible mainly for advising the Ministry of public works to give authorization of practice as Engineer.
- 4- The Colloquium examinations Committees which are created in 155 and responsible mainly for practicing Health Specialties (Medicine, Dentistry, Pharmacy, Physiotherapy, Nutrition, Nursery, etc...)

In addition DGHE has the following responsibilities:

- Providing information guide about higher education system and institutions
- Organizing the relationship with the National Council of Scientific Research as well as with the research centers in higher education institutions inside and outside Lebanon
- Organizing and supporting workshops and conferences about higher education
- Providing the required cooperation and coordination between the higher educations institutions inside and outside Lebanon
- Defining and developing the conditions and the academic criteria for the operating programs in the higher educations institutions in Lebanon

AUB experience:

- **The American University of Beirut (AUB):** AUB is a teaching-centered research university, convinced that excellence in teaching and research go hand-in-hand. Its mission is to enhance education, primarily the education of the peoples of the Middle East, to serve society through its educational functions, and to participate in the advancement of knowledge. AUB bases its educational perspective and methods and its academic organization on the American model of higher education.

AUB began the process of applying for accreditation by preparing a Pre-application Review document and submitting it with a Letter of Intent to the

Middle States' Commission on Higher Education in October of 2000. The document, a compilation of information about AUB in four volumes, substantiates how AUB fulfills the eligibility requirements established by the Commission. AUB's application for candidacy was completed over a period of several months with the submission, at the end of February 2001, of a two-volume Self-Assessment Document.

Every six months during the candidacy stage, the university is required to make an Interim Report to the Commission on progress toward its goals. AUB's first Interim Report was filed by Provost Peter Heath, who also serves as the chairperson of the Self-Study Steering Committee, on February 15, 2002.

The Middle States Commission on Higher Education granted initial accreditation to the American University of Beirut on June 2004 and commended the institution for the quality of the report and the quality of the self-study process. The Commission requested a monitoring report documenting the development and implementation of 1) a comprehensive Institutional strategic plan which links long-range planning to decision-making and budgetary processes and assessment results, and 2) a written plan for the assessment of student learning at the institutional, program, and course levels.

Arab open University experience:

- **The Arab Open University (AOU):** The AOU has established a strong partnership with the Open University in the United Kingdom (UKOU) as manifested through specific terms of agreement for collaboration. Agreements were signed with the UKOU covering three areas, namely, the licensing of materials, consultancies, and assistance in getting accreditation and validation. The wealth of UKOU expertise in areas such as student services, course material design, production and application of IT platforms, and training of faculty and tutors, is employed via consultancy tasks to build the relevant experiences of AOU.

In 2007 the AOU has acquired both institutional accreditation and validation of its programs by the British accrediting agency (OUVS). This accreditation has been essentially a process through which the institution was judged by a group of external peers to meet certain principles in a satisfactory environment for the conduct of the programs that led to the validated awards. A group of peers and external members had judged the program of study that concluded that AOU does in fact meet the principles and requirements of that award.

This short overview illustrates that in more and more countries accreditation is perceived as a procedure necessary to impose external quality assurance policies and to monitor the expanding higher education market. Due to the complexity of higher education systems and policies, national developments are very uneven, but in many ways also are converging. However there is not yet much international cooperation and exchange of ideas, concepts and practices. Accreditation procedures that surpass national boundaries are almost completely lacking.

D. High Opportunities and Expectations

The international exchange of ideas, concept and experience is indeed an issue of high importance. The contrast between national accreditation procedures, quality standards and frameworks on the one hand and the internationalisation of higher education is very problematic. The international landscape of higher education accreditation is very complicated and there is a sincere need for clarification. The level of accreditation should be moved from the national to the international level. From the viewpoint of an institution seeking international cooperation however, the basic questions are very simple: is institution x to be considered as trustworthy with regard to quality or not; has that institution an accredited status in its own country, etc.? What concepts can be applied on international basis? Are the current quality assurances and accreditation systems in a country trustworthy?

The next few years will show how quality assurance networks would move ahead and how successfully they would be to meet international expectations.

XVII. Accreditation challenges and future trends

The Contemporary Challenge is arising between the very foundations of traditional accreditation and the raising questions about whether accreditation must undergo amore fundamental transformation.

There are at least 5 major developments that are posing to the existing accreditation system.

A. Global Competitiveness & Quality

In our era, meeting the minimum quality standards is no longer sufficient due to the mounting concerns over the ability to compete globally and maintain the quality of the higher education system where a full-bodied education system has become essential to the future economic competitiveness of every nation.

Accreditation should play a key role in influencing higher education to move beyond the satisfactory quality to performance excellence. For achieving this many variables should be taken into consideration like the unstable programs and missions of institutions per example. The process should be based on the principles of continuous performance improvement for achieving or retaining accreditation.

B. Accountability

There are 3 major players with growing demand for accountability, the government, consumers and the general public. The public is longing for transparency and information related to the performance of higher education.

This is especially where accreditation interferes taking its role in changing standards and emphasizing on performance outcomes, especially student learning outcomes.

Despite the noteworthy efforts [of the public](#) institutions and programs to incorporate new accountability requirements, a remarkable detach still exists due to the varying requirements between public accountability systems and private accreditation.

In addition, accountability which may not necessarily reflect the public interest. This concludes that:

- Outcomes are not clearly translated to the public
- Comparability lack across institutions

Accordingly, accreditation should build up this link by requiring the reporting of information to the public based on a comparable reporting template which is applicable to stakeholders and general public with respect to differences in institutional and programs missions.

C. Changing the Structure of Higher Education

New types of educational institutions and the use of distance learning have given them a new face or identity. This new image has given the educational institutions the allowance to operate on a global scale where the geographic boundaries, academic disciplines and delivery modes are blurring.

According to these new realities, new solutions are required for an easier process for transfer. While responding to institutional and programmatic interests, the accreditation process may not be equipped to synchronize with new environment where accreditation itself is overloaded with new requirements. One of the main concerns facing accreditation is that peer review and volunteerism in the current system will be overcome by '[step by step legalism](#)' where the complexity in higher education system is increasing on the other hand.

D. Transparency

Because of the complexity of accreditation, more transparency is required at the public-private system of accreditation to assure the balance of interests between institutions and the public sector in setting standards. As a result, stakeholders need more involvement in the accreditation process.

E. Value and Affordability

The accreditation process has a contrasted view; it is seen as an investment by the accreditors and as a significant cost with little return on investment by institutions. Higher education institutions are being put under pressure with the rising costs in way that they have to increase the affordability and improve the value and returns on higher education.

XVIII. Standards/Criteria of Accreditation

Differences between universities from one country to another are vast. In addition the requirements of the three levels of higher education are different and they are based of different approaches.

Level I (bachelor or equivalent) requires a strong emphasis on the legibility of the curriculum (in terms of basic, characterising culture, knowledge and skills, target levels, areas of competence and professional roles envisaged, national and international benchmarking, if applicable) and on organisational aspects.

Level II (Master or equivalent) must take into account the fact that learning contents are geared to the highly specific (professional or research) goals of the reference departments. A sizeable majority of international student exchange activities should be concentrated at this level.

Level III (PhD or Doctorate) should be based on the ability to provide a markedly research- oriented learning environment. It is closely interconnected with the evaluation of the research activities of the departments.

This means that the evaluation objectives are:

- Sound and diversified
- Allocate common requirements
- Based on a constricted final set of key quality aspects.

After the review of the general principles, a pinpoint of a minimum set of desirable characteristics that should be present in the evaluation models of both levels I and II. Identifying the “minimum set” of evaluation requirements suitable for programmes of the first and second level, common to all countries and to all scientific sectors, appears to be a reasonable and achievable objective. This Minimum set could support the progress of a common methodological framework and common comparative criteria.

[Guide II of this series gives detailed guidelines on the standards and criteria for accreditation](#)

A. Areas evaluated and standards

Bearing in mind that the accreditation process is an effort to examine the validity of the self evaluation process, areas to be evaluated are identical to those prepared in the self-evaluation project being: Management of the institution, Partnerships and Cooperation, Research, Graduate Programs, Programs and Curricula, Faculty and Staff, Students and student infrastructure, Services and Facilities.

The accreditation evaluation should also examine the Annual faculty member activities report, Students Accommodation Evaluation Form, Faculty evaluation Form, Course Evaluation Form, Students Exit Survey, Faculty Satisfaction Survey, Employer Survey, and Alumni Survey. Pre-accreditation documents should cover Name and address of teaching establishment, Premises and resources, Chief institutional officers, Students Required documentation, Inspection documents, Academic programs, Academic Staff

Accreditation, being an evolving area, tries always to answer the question: “is there a better way of doing things?”. Fine-tuning the instruments and reducing the inter-team variance in peer assessment are the two areas where QAA, for example, look for better ways of steering the quality assurance processes. Accreditation agencies should continuously fine-tunes the instruments based on field experience and feedback collected from the accredited institutions, at the same time maintaining the consistency of its evaluation framework.

XIX. Success Factors of Accreditation

A. Stated Mission, Purpose and Stated Goals of the Institution

The activities of accreditation institutions should be guided by their missions that have, in general, to focus on making quality assurance an integrated functioning of higher education institutions.

The mission, in the big picture, is to make quality the defining element of higher education through a combination of self and external quality evaluation, promotion and sustenance initiatives.

The mission statement can be translated into action by the following engagement:

- To arrange for periodic assessment and accreditation of institutions of higher education or units thereof, or specific academic programmes or projects
- To stimulate the academic environment for promotion of quality of teaching, learning and research in higher education institutions
- To encourage self-evaluation, accountability, autonomy and innovations in higher education
- To undertake quality-related research studies, consultancy and training programmes
- To collaborate with other stakeholders of higher education for quality evaluation, promotion and sustenance.

In order to achieve its mission, the accreditation organization should assess the quality of higher education that fits the process through the:

B. Clearly Defined Systems and Recourses

It is a three-stage process, which is a combination of self-study and peer review, for assessment of a unit:

- a. Preparation and submission of self-study report by the institution
- b. On-site visit of the peer team for validation of the report and for recommending the assessment outcome to accreditation agency
- c. Final decision by the Executive Council of the agency

The self-study report to be validated by the peers is the backbone of the whole exercise. Manuals should be developed to suit different units of higher education, with detailed guidelines on preparation of the self-study report and the other aspects of assessment and accreditation.

As for the criteria of assessments they are as follows:

- Curricular Aspects
- Teaching-learning and Evaluation
- Research, Consultancy and Extension
- Infrastructure and Learning Resources

- Student Support and Progression
- Organisation and Management
- Healthy Practices

The self-study report is expected to highlight the functioning of the institution with reference to these areas.

C. Continuous Evaluation

Accreditation has a limited time validation while it is granted for a period of five to ten years according to the policies of the related accrediting agency. For this reason, quality sustenance should be involved on the institution's level. During the first assessment, the process should trigger quality initiatives in many aspects of functioning of the HEI. The preparation of the self-study report will serve as a catalyst for institutional self-improvement. The participation of the faculty members, administrative staff, students, parents and alumni has led to new initiatives. Interaction with the peers should assist this process and also provide a means for the wider dissemination of information about educational development. It triggers many innovative practices and paves way for institutionalising those practices.

Establishing internal quality assurance cells to coordinate the quality initiatives and use of technology in the learning process as well as for administration are a few such initiatives. These changes have a direct bearing on the quality of education and the re-accreditation will consider how these initiatives have been sustained during the accredited period.

D. Planning

The accreditation and evaluation processes have made a significant change in all aspects of institutional functioning (pedagogical, managerial, and administrative). One could see that the institutions had become more open and sensitive to the needs of the stakeholders. The need to keep abreast of changing trends was felt by one and all, and institutions now found it easier to introduce innovations as every one realised the importance of coping with the needs of the present world. The autonomous institutions that had the freedom to innovate in curriculum and the affiliated colleges that were offering additional programmes of their own restructured the curriculum. In the scheme of assessment, the criterion Teaching-learning and Evaluation carries the maximum weight. It gave a positive stimulus to institutional attention and oriented the institutions to improving their quality of teaching-learning by going beyond the routine examination-oriented outcome. Improved teaching methods using educational technology, projects and student seminars, providing of computer skills, encouragement of co-curricular activities, and incorporation of community orientation were observed.

While the characteristics mentioned above and the impact the process has made among the accredited HEIs is very encouraging in the case of first timers of the first cycle of assessment, the way which accrediting agencies move forward with the re-accreditation also needs a mention here. Based on a large number of national

consultations and building on the lessons of experience, the re-accreditation methodology is under planning.

E. Process Documents

1. Program quality (e.g. syllabus, learning goals, exam, etc.)
2. Teaching quality (e.g. volume input, quality and org. of teaching)
3. Resource quality (e.g. research, equipment, infrastructure, organization)
4. Steering quality (e.g. strategic and quality management)
5. Quality of outcome (e.g. failure rates, grade averages, no. of A's)
6. Relevance (or use for graduates and for society)

XX. Accreditation Regulations

A. Accredited Institution's Responsibilities

Responsibility for the quality of the formation is to be sought at the level where competences aggregate and are coordinated, that is, at the level of the programme. The programme has the primary responsibility for establishing:

- Training of the professional figure (integration between the university system and society or work market)
- The consequent learning objectives (expected level of knowledge and skill that the student should acquire at the end of his studies)
- The timing, starting from which prerequisites and with which resources these objectives are to be reached.

A.1 Responsibility in Action

It is relative to the programme:

- To verify the correspondence between the professional figure actually produced and the general prospects of the work market
- To implement tools to verify the good progression of the teaching programme (student progression in quantity, quality and time)
- To coordinate the different formative experiences, entrusted to the single teachers in the most varied forms (lessons, exercises, seminars, projects, field experience, etc.), check the coherence between these and against the objectives, ascertain the compatibility with the study timing and the available resources (human and material).

A.2 Transfer of Responsibility

Through these acts, documented in a reliable and verifiable manner, the programme provides the reference institution (Faculty, University) with the elements for judgement that will enable them to assume, with an adequate degree of confidence, the final responsibility:

- For the coherence of the study degree with the professional figure to be formed
- For the level of the titles conferred in its name (the effective knowledge and abilities of the graduating student)
- For the quality of the training provided to enable the students to reach that level.

B. Disclosure of Accreditation

There are vast differences between graduating from an accredited programme and having a licence to practice. In some cases, these are coincident, especially for graduates from some postgraduate programmes. Sometimes an undergraduate degree in a specified subject is a prerequisite for progression to a postgraduate course or diploma in that area. In some cases any good undergraduate degree is a pre-requisite for further professional training; for example, in law in the UK there is a one-year postgraduate conversion course that non-law graduates take before joining the law society postgraduate qualification programme. In many professional areas, graduation from an appropriately accredited academic programme is a preliminary step and full professional certification, and thus a licence to practice, follows only after some period of work experience. In some instances, such as teaching, a licence to practice may be virtually independent of studying on an accredited programme. To obtain a teaching license is not dependent on having an accredited teacher education degree as it is the case in many US states.

XXI. Maintaining Accreditation

A. Minimum Standards

Logically, the minimum standards required for the re-accreditation process will be the standards which have existed five years ago when the institution or the programme was first accredited. The evaluation must identify and respect certain essential premises:

- 1) The mandate of the evaluation
 - a. The evaluation will be used by whom
 - b. The principal use of the evaluation (summative or formative)
- 2) The primary objectives of who is being evaluated
 - know to what degree the evaluation must be oriented towards
 - Internal efficacy: comparison of the results obtained from the programme with the initial objectives
 - External efficacy: comparison of the results obtained from the programme with the outside requirements (economic and social context).

3) The instruments of observation and judgement

- Know the value system of the organisation implementing the action
- Define the indicators that describe the primary objectives coherent with the value system
- Know how to concretely gather the information that will enable us to draw conclusions (formative, summative or mixed) based on facts.

B. The Re-Accreditation Process

So far there are recommendations that re-accreditation should consist of the same three-stage process of normal accreditation:

- submission of self-study
- peer validation
- final decision by the accrediting organisation

Although the process of value creation and value standards regarding the obligations of the institution towards the general community and stakeholders have to remain the same, however, the point of time when re-accreditation is initiated may warrant a re-look at the assessment framework. First assessment has already initiated a quality culture among the HEIs of the country and re-accreditation has to further strengthen those initiatives. Therefore, along with the core values to which all higher education institutions should relate themselves in the changing context, the framework for re-accreditation should also consider the impact of first assessment. In other words, the framework for re-accreditation has to be built on two major considerations – core values in the changing context and impact of first assessment.

The following five core values have been identified for the re-accreditation process:

1. Relating to National Development
2. Fostering Global Competencies among Students
3. Inculcating the Value System
4. Promoting the Use of Technology
5. Quest for Excellence

In general, the re-accreditation framework will assess the institutional functioning with reference to the contributions the higher education institutions make towards the five core values mentioned above. The institutions are expected to demonstrate how they contribute to the core values through data collected during the accredited period. The evidence to the realization of these objectives may be in terms of inputs, processes and outputs. The re-assessment by the accreditation body will take a holistic view of all the inputs, processes and outputs of an institution and assess how the higher education institutions have progressed during the accredited period. In particular, the re-assessment would have a shift in focus in assessing three aspects – quality sustenance, quality enhancement and acting on the assessment report – that relate to internalizing the quality culture.

B.1 Quality Sustenance

During the first assessment, the accreditation process has triggered quality initiatives in many aspects of functioning of higher education institutions. The preparation of the self-study report has served as a catalyst for institutional self-improvement. The participation of the faculty members, administrative staff, students, parents and alumni has led to new initiatives. Interaction with the peers has assisted this process and also provided a means for the wider dissemination of information about educational development. It has triggered many innovative practices and paved way for institutionalising those practices.

Establishing internal quality assurance cells to coordinate the quality initiatives and use of technology in the learning process as well as for administration are a few such initiatives. These changes have a direct bearing on the quality of education and the re-accreditation will consider how these initiatives have been sustained during the accredited period.

B.2 Quality Enhancement

It is proper and educationally sound to expect that re-assessment has to bring to limelight how institutions have progressed over a period of five years with accredited status. It is reasonable that the re-assessment will give a due place to the quality initiatives promoted by the first assessment and the consequent quality enhancement that has taken place.

B.3 Acting on the Assessment Report

Much of the quality enhancement has been a result of institutional efforts to act on the assessment report and the re-assessment has to take note of that too. The post-accreditation reviews, feedback from the accredited institutions and the outcome of national consultations indicate that the first assessment report has been a useful document to initiate quality enhancement activities. The re-accreditation has to address how the higher education institutions have taken steps to overcome the deficiencies mentioned in the first assessment report and also build on the strengths noted in the report. With the special emphases discussed above, the methodology for re-accreditation has been evolving in consultation with the academia and there is a consensus that the methodological elements have to be similar to the first assessment. The existing seven criteria will be followed with revision and re-organisation in key aspects. The current nine-point scale will be continued to award institutional grades. To facilitate the HEIs to move towards demonstrating the special emphases mentioned above, institutional preparations for re-accreditation have started recently.

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