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Institut d'Administration des Entreprises,
École Doctorale SESAM,
Lille, France**

Thèse de Doctorat

**Pour l'obtention du titre de
Docteur en Sciences de Gestion**

Présentée et soutenue publiquement le 04 Juillet 2018 par

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**Quality Assurance in Higher Education Institutions:
Contingent Assessment System**

**Assurance Qualité dans Les Institutions D'enseignement
Superior : Système Contingent D'évaluation**

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“Quality is a diffuse term. As beauty or goodness, which is conducive to multiplying definitions and which is felt or perceived in absolutely different ways by different groups or individuals.”

(Doris Eder de Zambrano, 1989 cited in Von Ginkel and Rodrigues Dias, 2007, p. 41).

Acknowledgment

I would like to express my sincere gratitude to my advisors Professor Dominique Besson and Professor Ali Ismail for the continuous support of my Ph.D. study and related research, for their patience, motivation, and immense knowledge. Their guidance has helped me in all the time of research and writing of this dissertation.

I would like also to thank the reviewers Professor Zalpha Ayoubi, and Professor Gilles Rouet for their insightful comments and advisement that have enriched my research and work.

I would like to extend my gratitude to Professor Ahmad Jammal and Dr. Lidwine Maizeray for taking the time to act as jury members.

Last but not least, I would like to thank my parents, family and my colleagues at AUST for their encouragement and support.

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Abstract

The thesis discusses quality assurance in higher education institutions and the contingent quality assessment systems, and deliberates on the different factors that have impacted the higher education system and transformed the role of its institutions. The researcher then presents and discusses the different dimensions and variables that are interwoven into the quality assessment of these institutions. The Lebanese higher education structure is also discussed and analyzed. The following issues and points are studied and discussed:

The economic and societal transformation and the technological revolution have revealed pedagogical and institutional transformation within the higher education system, the role and mission of the higher education institutions, subsequently, the quality assurance and accreditation concepts in higher education.

To assess quality in higher education institutions, a wide framework of criteria and standards is developed and is complemented by a set of indicators which provide detailed information on how institutions are to be judged. Many worldwide initiatives and international bodies have developed quality assurance systems; however, these systems should not be adopted as standardized package without taking into account the national context of the higher education system.

As for the quality issue in higher education institutions operating in Lebanon, a template/model is proposed to assess the quality assurance in these institutions. In this developed template/model the national and institutional contexts, various international, regional and national initiatives and practices, conceptual analysis, and several quality dimensions and variables are taken into consideration. In this template/model, six areas of quality dimensions are considered. These are i) Institution's mission, vision and purpose; ii) Governance and management; iii) Physical facilities and environmental supports; iv) Educational dimensions and learning outcomes; v) Development and research; and, vi) Openness and reputation. Standards, criteria, and indicators are developed for each of these areas, and different coefficients are affected by indicators. A quality scale is established; the judgment is based on qualitative and quantitative evaluation justified by on-site observation and proofs.

The template/model is tested in a Lebanese private university. The assessment has led to the determination of scores within each area, an average score for each area and for the university as a whole. The results of this assessment have reflected many strong and weak aspects of said university.

The proposed template/model could be considered a practical assessment tool of higher education institutions, particularly for the 'young' institutions of higher education to evaluate the quality level of their different components. It could also be considered a national assessment step that precedes the acquisition of the international accreditation.

Résumé

L'assurance qualité dans les institutions d'enseignement supérieur (IES), les facteurs qui impactent et transforment les rôles des IES, les différentes dimensions et variables intervenant dans l'évaluation de la qualité dans les IES, ainsi qu'un système d'évaluation contextuelle, sont discutés, discuté, et analysés. La structure de l'enseignement supérieur au Liban et des données sur cette structure sont aussi présentées, traitées et analysées. Il en ressort les points et les propositions suivants :

Les transformations économiques et sociales et la révolution technologique ont conduit à des transformations au sein du système de l'enseignement supérieur affectant, dans leurs significations et fondements, le rôle et la mission des IES et par voie de conséquence, les concepts de l'assurance qualité, et de l'accréditation dans l'enseignement supérieur.

Pour évaluer la qualité dans les IES, des standards, et critères, ont été développés, et associés à des indicateurs qui fournissent des informations détaillées sur les éléments de jugement des institutions. Des structures internationales ont développé des systèmes d'assurance qualité. Cependant, ces systèmes ne devraient pas être adoptés à l'identique, en tant que méthodologies globales standardisées, sans tenir en compte le contexte national du système d'enseignement supérieur concerné.

Pour évaluer la qualité dans les IES au Liban, un modèle/gabarit est proposé. Pour le développer, les contextes national et institutionnel, des expériences et initiatives internationales, régionales, et nationales, des analyses conceptuelles, et différentes dimensions et variables ont été pris en considération à savoir : i) Mission, vision et objectif; ii) Gouvernance et management; iii) Logistique et environnement physiques; iv) Pédagogie et résultats de la formation; v) Développement et recherche; vi) Ouverture et réputation. Dans ce modèle/gabarit six domaines de dimensions de la qualité ont été considérés. Dans chaque domaine, des standards, critères et indicateurs ont été développés et un coefficient a été affecté à chaque indicateur. Une échelle de qualité est établie. Le jugement est basé sur une évaluation quantitative par des notes, justifiées par des observations et vérifications sur le terrain.

Ce modèle/gabarit, est testé dans une université privée au Liban. Des scores dans chaque domaine, un score moyen pour chaque domaine et un score général pour l'université sont déterminés. Les résultats d'évaluation montrent des points forts et des points nécessitant des améliorations.

Le modèle/gabarit proposé, est un outil important et pratique pour l'évaluation des IES, en particulier pour les ``jeunes`` IES qui cherchent à évaluer le niveau de qualité de leurs divers composants. Il peut être aussi considéré comme une étape d'évaluation nationale qui précède une accréditation par une agence internationale.

General Introduction of the Thesis:

The importance of the role that education is playing in the development of humans resides in their need to know, to discover, and to their innate desire for knowledge; hence, knowledge as awareness and consciousness becomes the essence of education (Atmapriyananda, 2008). But, the concept of human development is principally influenced by human personality developments which embody individual and social developments. The education's role in these developments is at the individual level, for physical and psychological welfare, for knowledge and value cultivation (moral, ethical, ...), and for peace and harmony. In parallel, at the social level, education should lead to collective physical, psychological, mental, moral, intellectual and spiritual well-being. These integral developments should lead to individual and social consciousness developments (ibid).

In this context, the role of the higher education institutions and the values that they should sow are undertaken through knowledge cultivation. This cultivation involves inquiry and exploration at individual aspect, and implies, at the social level, sharing knowledge and disseminating it to society at large. These values are “instilled by the example of teachers, the right environment, and peer groups that are focused on pursuing and sharing knowledge” (ibid, p.78). In such ‘holistic’ mission and environment “values are absorbed rather than taught” (ibid). Today, there are substantial changes in the mission and environment of higher education; in fact, globalization trend and information and communication technology advancement have placed higher education in front of many human and social development challenges.

In practice, higher education institutions are facing challenges that have made their roles complex and vital “with many political, economic, and social implications” (Taylor, 2008, p. xxiv). In fact, there is a shifting perspective on knowledge itself that influences the roles and responsibilities of the higher education institutions in society (ibid). In reality, these institutions are exposed to high pressure in their socio-economic and educative missions; many trends are contextual factors that lead to their deviation with respect to ‘holistic’ education purposes and objectives as have been aforementioned. Among these trends the following are cited: the massification in higher education participation, the emergence of market mechanisms, the emergence of privatization, the emergence of new study types and

student categories, the internationalization and globalization trends, and the advanced use of information and communication technologies in new learning approaches.

Within these contexts, higher education has become a competitiveness sector, commercialized and cross-border delivered. Moreover, a move towards knowledge-driven economies and society implies a great need for highly-individual-performance level of graduates to broadly participate in the new economy and societal activities. The role of higher education institutions started to have cultural, scientific, social, and economic effects; this implies the existence of new linkage to the labor market and new approaches in learning.

Moreover, in recent decades, learners' access to higher education, in most countries, has increased and diversified; this has led to an increase in the number of higher education institutions and the diversification of their types and to an increase in the private sector's level of participation accompanied with competitive international higher education service aspects. Consequently, higher education has become a worldwide issue. This has led to the introduction of new regulations to the existing educational services, and new standards pertaining to the issuing of diplomas; thus, quality requirements have become an urgent need. This fact has led to the promotion and implementation of many initiatives and approaches by national and international bodies and organizations. Although the proposal for full liberation of trade services in higher education forced many governments and organizations to stress the establishment of measures to maintain and improve the quality of these services; they, however, stressed the fact that they retain the right to determine their own domestic educational policies (Reinalda and Kulesza, 2006).

Furthermore, the resulting substantial increase in higher education participation, must be rationally planned and controlled (Teixeira, 2009); in addition, quality provision in a mass or universal high education systems needs different approaches and tools from the former elite systems to be applied. Hence, diverse mechanisms are developed to monitor and enhance the quality of higher education provision (Krcal et al., 2014). This new context has become the concern of most governmental and educational authorities have been implicated in these new contexts: quality assurance and accreditation systems have proliferated many countries and regions. However, the American and the European systems have wider dissemination at the international scale.

In spite of the internationalization and globalization trends, stakeholders in many countries consider that national contexts should be taken into consideration; hence, these countries are to start their own quality standards and criteria developments with objectives and approaches depending on the context, the needs, and the expectations of the concerned country. In fact, the approaches are diversified into those that maintain quality at a certain threshold level, or those under budgetary constraints pressure to improve the effectiveness of the educational system, to those that enhance quality so as to keep “higher education systems competitive and reactive to change in the external environment” (Krcal et al., 2014, p. 19). Note that the process of convergence and standardization have, in other respects, affected higher education systems (example the Bologna Process), and aims to ensure common understanding of academic functions and qualifications in order to arrive at comparable outcomes. Thus, particular focus should be undertaken to set assessment criteria and learning procedures that assure adequate qualifications that are mainly expressed in terms of competencies and skills.

Considering the challenges and trends that influence higher education systems, and the changes in the pattern of the labor market and required job qualifications, quality in higher education institutions has become a crucial issue that encompasses debate on what “the complex and multi-faceted concept of quality means in the contemporary context and provides an overview of the various quality monitoring processes and approaches to quality assurance” (OECD, 2014-a, p. 9). Though “any quality approach could be regarded from different perspectives”, yet “the three main purposes that different quality approaches serve are accountability, improvement and transparency” (Ibid). The approaches include strategic mechanisms, performance indicators, regulatory tools, quality assessment, standards and guidelines, quality assurance processes (accreditation, audits, benchmarking), learning and course assessment

The quality issues in higher education are in fact strongly related to the trust building aspect. Building the trust of public authorities, employees, students and international communities includes confidence in programs, graduates’ qualifications, and in the academic and administrative staff’s efforts and their endeavor towards perfection. Quality as reflective of trust is developed through a long yet slow process; it is built on reputation which requires continuous conscious and specific efforts. The quality in higher education institutions, which

are a part of the national higher education system, has to explicitly define the missions that are to be carried out by the institutions (Liston, 1999). Its assessment is pertinent to the assessment of the declared purposes, its compliance to national, educational and human bases which exceeds the development of a broad and advanced knowledge base and preparation for sustainable employment to the personal development and preparation for life as active citizens (Council of Europe, 2007, cited in Bergan, 2011); thus, these purposes are complementary and not separate (Bergan, 2011). However, it is legitimate for individual institutions to choose to focus on one or more of the higher education purposes; accordingly, the bases of evaluation of these institutes are contingent upon whether the said institute meets or fulfils the declared purposes. Hence, credible quality assurance systems are developed and independent recognized quality assurance agencies that operate according to adopted standards and guidelines that should be sufficiently flexible to take into consideration the national and institution contexts.

As such, the universities have to integrate in their strategic objectives quality approaches; they are to take measures in order to give more confidence in the delivered education through continuous improvement of the pedagogical processes and of the academic and administrative staff competitiveness and performance (Dollé, 2009). Quality is reflected in trusted diplomas and well-qualified graduates who have been provided with specific objectives and competencies as stipulated in the academic programs. To attain these purposes, higher education institutions must continuously develop, implement and assess learning outcomes of their programs; encourage creativity in teaching and service to society; and, should contribute to the development of the society, even influence it.

Quality in higher education institutions implies that students and staff constitute academic community and should be considered not as consumers and providers of services without structural interests, but as members who have common interest in the development of the community, and who work to improve the learning outcomes through the academic activities. '*Quality-worthy*' higher education systems should extend quality to all its institutions; a system with a few quality assured institutions and many insufficient quality level cannot be considered a good and trustworthy system.

As stated, quality in higher education has become ‘an international issue’; hence, the national higher education system is exposed to internationalization pressure that requires information about and transparency of quality and standards in order to secure qualification recognition (De Witt, 2002; Willing et al., 2007; Svensson & Wihlborg, 2007; Altbach et al., 2009; Blanco- Ramirez & Berger, 2014).

Quality has been considered one of the ‘buzzwords’ debated by the higher education community (Lueger & Vettori, 2007). Several terms, approaches and derived concepts have been introduced and promoted; most of which have emerged or are associated with quality concepts such as excellence, quality assurance, quality management, quality culture, quality development, quality improvement, quality assessment, learning outcome assessment, accreditation, audit ... (Harvey & Green, 1993, Harvey, 2006 a & b, 2007; Liston, 1999; Chauvigné, 2007; UNESCO, 2007; Drisko, 2014; Krcal et al., 2014).

To develop quality assurance standards and criteria and assessment approaches, analysis of quality dimensions and standards in higher education is required so as to answer the many conceptual and practical questions like:

- Is quality a symbolic judgment or does it reflect systematic specification or alignment with a set of standards?
- Does quality mean reaching the “consumers” requirements and satisfaction?
- Is quality a static state declared when detected or is it valued on a gradual scale level?
- What constitutes quality in higher education?
- What are quality dimensions and how are they represented by standards?

To analyze these issues, higher education is considered as “a transformative process that supports the development of graduates who can make a meaningful contribution to wider society, local communities and economy” (Gibbs, 2010-a, p.2). This implies that the relevant dimension is the improvement of the quality of student learning which should be on a par with quality learning outcomes; in other words, “what best predicts educational gain is measures of educational process” and “what higher education institutions do with their resources to make the most of the students they have” (ibid) to maximize educational gain, the most effective education to be implemented and to what objectives are to be considered.

Quality and quality assurance improvement should constitute institutional policy and practice; thus, institutional quality culture environment should be established where all actors are engaged in educational enhancement activities.

Quality as relative concept implies relativity aspect of the quality when taking into consideration educational contexts and purposes at institutional, stakeholders, or national levels. It implies also that quality does not mean meeting an absolute threshold standard to reflect the attainment of an adequate quality or a level that represents outstanding quality. Indeed, attaining a standard level does not necessary mean possessing expected quality outcome that the higher education stakeholders expect. Quality as transformation should involve enhancement of educational gain of the student; this transformation is a relevant fact in judging the quality of teaching and of educational effectiveness.

Practicing higher education activities is a complex issue that includes managerial aspects and varied contextual, intellectual, individual, and collective interaction. There are ‘input-presage’, ‘environment-process’ and ‘output-product’ variables interacting with each other (Biggs, 1993; Astin, 1993; Gibbs, 2010-a). Other elements in higher education institutions activities should be also included as impacting factors or quality learning issues; for example, institutional governance, research, international cooperation, society services, institution or programs labor market interaction.

Defining quality assurance criteria and standards that institutions should respond to is a fundamental step in a quality assurance procedure. It could also consist of the use of fitness for purpose approach by developing standards in relation to the purpose of the institution, complemented by an analysis of the adequacy of purposes.

In fact, each approach is interesting, but it is insufficient to assure quality in wide institutional and national diversity contexts; hence, quality assurance agencies should combine approaches or seek new ones to better adopt standards and criteria to the national or concerned institutional contexts.

In practice, some higher education institutions see standards and criteria as the minimum quality requirement level to be met, to attain quality recognition; while quality assurance should be sought by continuous quality improvement and enhancement to obtain advanced

quality level or to maintain high quality level. These considerations require us to propose an assessment outcome represented by a gradual quality level. The judgment is based on the response to quantitative and qualitative indicators that should represent how institutions practices align with pre-determined criteria.

The Lebanese higher education structure includes several higher education systems, within them, many higher education institutions have demonstrated, in the last years, progress in terms of educational policy and quality, but there is a difference between them as to credit cost and quality policy and practice. Many of them did not implement quality assurance or accreditation procedures that are conducted by recognized agencies.

Recently, many private higher education institutions started accreditation procedures conducted by US accreditation and European quality assurance agencies. In parallel, Lebanese educational authorities exhorted much effort to establish national quality assurance standards and criteria system. However, it is observed that quality assurance, or quality control or accreditation systems, always focus more on an institution's quality assurance than on educational process and outcomes. As for the quality issue in higher education institutions operating in Lebanon, and which adopt various higher education systems, we propose a template/model in order to assess the quality assurance in these institutions; it could be used by other countries that have comparable situations. American, European or other quality assurance or accrediting bodies should not impose their systems to assess the quality of the said institutions.

Thus, this research thesis is a contribution to the national quality assurance system to assess higher education institutions' practices through the proposed model. It includes developed standards, criteria, and indicators. The flexibility resides in the non-exclusivity of the areas chosen and of the standards and criteria developed; they should be adapted and could be extended or reduced, depending on national context and institutional functions and purposes. Moreover, each area could be independently assessed. The base and ground foundation of this template/model is a blend of conceptual analysis of quality, discussion of quality dimensions, national context synthesis, and international experiences on the assessment of quality assurance in higher education institutions.

Six areas of quality dimensions are considered in the proposed template/model; in each area, standards, criteria and indicators are developed; coefficients and assessment marks are affected by indicators that result in an average score in each area, and an average score for the institution. The institution assessment outcome receives a gradual quality level label with additional required conditions. The applicability of this template/model is tested on a Lebanese private university.

This thesis includes five chapters that are followed by a concise chapter (ch. 6) which contains a summary of the thesis and the conclusions. The first chapter treats the epistemological perspective and position adopted, which are mainly on interpretative approach. The methodology and research strategy and design are also presented.

Chapter two discusses challenges, approaches and trends in global higher education, with special focus on the emergence of market mechanism, the massification phenomenon, the impact of globalization and internationalization, and the effect of the digital technology revolution on higher education.

Chapter three presents public and private higher education sectors in Lebanon and their evolution, regulations, structure and organization. Particular emphasis is on the analysis of data on enrolment and graduation in relation to the learning sequence flowchart in all the education sectors and levels. The main indicator and aspects of higher education structure in Lebanon are analyzed and improvement actions are proposed.

Chapter four examines quality and quality assurance in education and higher education by discussing and analyzing quality concepts and focusing on quality dimensions, quality culture, quality approaches, quality management and structure of quality assurance models. The issues related to the assessment of higher education outcomes are also discussed.

Chapter five discusses quality assurance in terms of national and international contexts and initiatives, detailed analysis are presented, and which focus on structure, dimensions and practice quality assurance, taking into consideration the interaction of ‘input-presage’, ‘environment-process’ and ‘output-product’ variables. The Lebanese context is presented and a template/model of quality assurance assessment is provided. The results of the assessment practice using this template/model are discussed and analyzed. Finally, a summary of the work

is presented, followed by a set of conclusions reached as the result of analysis of data and results obtained from the proposed template/model.

Chapter six presents a summary and a conclusion of this thesis.

CHAPTER ONE

Chapter 1 : Epistemological Positioning and Methodology

1.1 Introduction:

A research question combines a subject (theme), a purpose and a process (Thietart et al., 2001). As presented in the introduction of the thesis, the subject concerns quality and accreditation in higher education institutions. The purpose of the study is to propose a national quality assurance template/ model that could be applied in higher education institutions for self-assessment and for quality assurance and accreditation processes' evaluation. The frame of this template/model also includes assessment rules and results of the evaluation outcomes presented in gradual-level framework. The process first analyzes the challenges, approaches and trends in the global higher education, and then analyzes the conceptual and practical issues of quality and quality assurance in higher education as well as the pedagogical and socio-economic issues of the higher education systems in Lebanon.

The discussed, analyzed and the resultant issues pertaining to knowledge generation and hence to epistemological perspectives should be chosen, and the research procedure should be designed and planned. However, the global knowledge generation approaches, which include the process, the conditions, the legitimacy, and the validity of the knowledge obtained (Cohen, 1998 cited in Akale, 2012), could not be directly and systematically conducted with rigor in many research subjects due to the fact that they require the researcher to have philosophical epistemological background as well as rigor procedure, methodology, attitude and commitment on one hand, and due to the complexity that characterizes some subject domains on the other hand.

Hence, it is of interest to present and review, within the frame of the global knowledge approaches, the principle elements of research paradigms in terms of ontological, epistemological, methodological and ethical approaches. The research process and epistemological perspectives are presented, taking into account the specificity of the field of higher education that includes institutional management, educational approaches, physical requirements and socio-economic and cultural dimensions.

Literature abounds with epistemological approaches which are mainly the positivism, the constructivism and the interpretivism approaches as well as other derived or independent approaches. These approaches are the subject of the research debate, in particular in the field of Management within the social domain.

In this research study, certain cases and dimensions are debated upon, taking into consideration the fact that actors are involved and implicated within this process. An intersection of interpretivism, moderate positivism or constructivism approaches are adopted within a tri-part framework, namely, positivism, phenomenological and critical-dialectical understanding. (Thietart et al., 2001; David, 1999).

1.2 The Principles of the Research Paradigms:

Paradigms are considered as a research approach model; a research intellectual framework; and, a research frames of reference (Kuhn, 1962 cited in Thietart et al., 2001).

A paradigm is the adoption by the researcher of a vision of the reality in which the research is conducted, whereby the investigation is guided in terms of ontological, epistemological, methodological and ethical choices (Akale, 2012; Girod-Seville and Perret, 2001; Guba and Lincoln, 1994).

The choices listed above are defined as follows by Akale (2012):

- The ontology: It gives answers to the following questions: What is the form and the nature of the reality? What does reality present in problems and curiosity that needs to be elucidated?
- The epistemology: It takes interest in understanding the nature of the relationship between the subject (researcher/observer/investigator) and the object to be known.
- The methodological question: it is concerned with the procedure conducted by the researcher to find knowledge that he/she considers deserving to be discovered.
- The ethical question: It permits the identification of the validity criteria of the produced knowledge.

Globally, epistemology is defined as the study of nature, validity, value, method and scope of knowledge in a scientific approach (Girod-Seville and Perret, 2001).

1.3 The Principle Epistemology Paradigms:

1.3.1: Positivism Epistemology

1.3.1.1: Status of knowledge and nature of reality.

1.3.1.1.1: Status of knowledge– Ontological hypothesis

According to Girod-Seville and Perret (2001, p.15), knowledge and reality are characterized by:

- Understanding reality
- Reality is potentially recognizable. The goal of science is to discover this reality
- Knowledge is cumulative
- Knowledge describes the object
- The knowledge object has its own essence
- The criterion of truth: Every proposition which effectively describes the reality is considered as true.
- The reality is independent of the observer-investigator who describes it. Positivism postulates the independence of the subject (researcher) and the object. A real object is not altered by the observation, nor is the observer affected by the observation (principle of objectivity).

1.3.1.1.2: The nature of reality: Determinist hypothesis

- “The world is made up of necessities.” There exist several determinations forms (internal, by itself) for recognizing reality that is susceptible to be known.
- The laws of nature exist and determine reality. The goal of science is to discover the hidden truth that lies behind the observed object.

- The determinism is expressed under the causality form that states:
 - _ Each effect of the reality is produced by an initiative cause that is possible to determine by going up the chain of causes (Descartes); the same causes produce the same effects.
 - _ If the available instruments do not permit us to establish the laws determining the reality, this doesn't imply that the laws don't exist (ibid).

From the aforementioned axioms and principles of positivism, answers are given to the two following questions:

- a) How is knowledge generated?
 - By discovery: Everything discovered through natural logic is true (Principles of the neutrality of the logic), and can be considered as the Law of Nature.
 - "The research question is formulated in terms of 'For what reason?'"
 - "Privileged status of explanation" (Ibid)
- b) What is the value of the generated knowledge? (The criteria of validity)

The generated knowledge is submitted under specific criteria that describes it as a scientific or non-scientific knowledge. The criteria include:

- Verification
- Degree of confirmation
- Refutability
- Logical consistency

The *verification* depends on the degree of confirmation and consequently on the degree of the rejection of the knowledge, hence assuring the truth of this discourse by parametric verifications. The verification criteria oblige researches to assure the truth of their statements through their empirical verifications (Blang, 1992, cited in Thietart et al., 2001).

The *degree of confirmation* is based on proving the reality of knowledge by comparing it against experience and circumstance. Hence, it is impossible to prove all theories. This presents different degrees of probability.

Refutation: According to Popper's Principle of Refutation as stated by Girod-Seville et al. (2001, p. 24) we can never maintain that a theory is true, but we can say it is not true, meaning

it has been refuted. A theory that has not been refuted is then a theory that is provisionally corroborated. Popper also distinguishes between corroboration and confirmation.

Logical consistency: It is attained once the methods that respect formal logic, deductive logic, are recognized as scientific when assessing the validity of a research (Ibid, p.25)

1.3.1.2: Methodological principles in positivism positioning.

1.3.1.2.1: The principle of analytical modelling

This principle implies that recognizable reality exists and can be divided into recognizable parts. In this context, we can cite the proposition of Descartes “To better solve difficulties, divide every examined difficulty into sub-parts when possible” (Nellisen, 1999), but we can find a counter example. In fact, separating a person’s body into organs, tissue...etc. might cause the loss of valuable information concerning the linkage between these elements that are being studied. Hence, the follow questions: Can we study or comprehend history when excluding geography, ethnology and culture and the psychology of the responsible decision maker? Does this indicate the shifting from analytic to reductionism? (Ibid)

1.3.1.2.2: The principle of the sufficient reason

This principle was stated by Leibnitz in 1715 in “*Nothing Happens Without Cause or Without a Determined Reason*”. This principle agrees with the deductive logic that states: If A causes B, then A is the sufficient reason; A is the certain explanation of B (B does not cause A). The deductive approach suggests a de-composition and re-composition and a long claim of simple reasons. This strengthens the deductive logic (search of the cause) on the detriment of the inductive logic (search of the effect) (Ibid).

Generally, the positivism in an epistemological position attributed to researchers in the science domain named exact or hard sciences (Remeny et al., 1998 cited in Akale, 2012; Le Moigne, 1990) and in applied sciences research domains.

In management sciences, the positivism approach is adopted when discovering general laws based on data of observable social reality, where, the credible knowledge is considered as being produced as a result of objective observations of observable phenomena.

The positivism includes a scale of positioning which has realism as principle (the direct realism, the initial realism, the post-positivism). It exists in an independent reality where the cognitive construction permits to its understanding (Saunders et al., 2007; Guba and Lincoln, 1994).

In summary, in the positivism approach, the results of the research are validated by one of the following three prepositions:

- Total confirmation
- Partial confirmation
- No confirmation, leading to refutation

The researcher adopts this approach since his research is conducted in an independent manner, without any influence or interference occurring between the researcher and the research object and the judgment of the result (objectivity). We can ask about the validity of the application of this hypothesis on all branches of knowledge, even in some branches of the exact, hard, and applied sciences, particularly in the development of the statistic thermodynamics, quantum physics and chaos ...etc. Furthermore, can we apply this ideal approach to a research object in social sciences, in management or in education? Is everything recognizable? Shouldn't the observer's point of view and approach be part of the observation? Although some researchers in management sciences try to adopt an objectivist attitude, others consider that the human limitation doesn't permit the attainment of this ideal level in these domains (Gadamer, 2002 cited in Akale, 2012; Miller, 2005).

1.3.2: Constructivism Epistemology

1.3.2.1: The axioms.

The constructivism epistemology as described by Le Moigne (1995), Girod-Seville and Perret (2001), and Akale (2012), includes axioms, methodological principles and validation criteria of knowledge.

The word “Constructivism” proposed by Piaget (1970) is a neologism of the mathematician Brower when referring to the constructed character of the knowledge (Nellisen, 1999). The two basic axioms of this approach are:

1.3.2.1.1: The phenomenological axiom

The reality is not recognizable; the knowledge is constructed by interaction between subject (researcher) and object. Piaget identified the principle of inseparability as the interaction between the phenomenon (object) to be known, and the subject (researcher/investigator) who produces the knowledge which is related to the object and the mode of knowledge generation (the intelligence or the act of knowing).

The scientific researcher is a designer, observer, modeler (the principle of the intelligent action). The knowledge constructed by the subject based on his experience, organizes at the same time the knowledge construction process. Then, the knowledge is the result of the knowledge production process and the process itself (Ibid).

The constructivist ontological hypothesis proposes that the subject does not know the object itself (entity), but knows the act by which he perceives the interaction between the objects (entities, things).

1.3.2.1.2: The teleological axiom

The cognitive act is intentional; the subject (researcher) has a decisive role in knowledge establishment, where finality should be taken into consideration; consequently, the observed object is in itself ‘finalized’. When the subject constructs the knowledge, he refers to the finalities that he explicated.

1.3.2.2: The methodological principles in constructivism positioning.

The methodology of the constructible knowledge is formulated by two principles, namely:

i) The principle of the systemic modelling

The systemic modelling privileges the modelling of the act (What does it do? Why?), over the modelling of the thing (analytical modelling; from what does it consist?); modelling the verb and not the object. This modelling is a project which expresses the complex interaction between the subject and the object rather than

the complexity attributed to the object. It permits the producing of the rational statement (Charreire and Huault, 2001).

ii) The principle of the intelligent action

This principle characterizes the capacity of the cognitive system to explore and construe the symbolic representations of the knowledge that it discusses, called the problem resolution (Ibid).

In this principle, the cognitive process alters the implementation of the means adopted for the intermediate objectives that suggest new means which evoke other possible objectives. This reasoning mode is named dialectical mode. It permits by the system of symbols the generation of knowledge which is constructible and producible.

This principle proposes the elaboration of a descriptive posterior action. The finality is to propose a solution that agrees with the observer (Ibid).

1.3.2.3: The validation criteria of knowledge in constructivism approach.

The validation criteria of the knowledge are always the subject of debate. The validity is proven by considering these two main criteria:

- The adequacy or suitability: the knowledge is valid when it fits a given situation (Glosersfeld, 1988 cited in Akale. 2012).
- The teachability of the acquired knowledge: this criterion explains that knowledge can be reproduced intelligently and constructively; the knowledge must be transmissible (Le Moigne, 1995; Gadamer, 2002 cited in Akale, 2012).

The validity criteria applied by constructivists does not impose a single method of constructing knowledge, but are able to accept and defend a multiplicity of methods. Constructivists do not consider that deductive reasoning is the only valid reasoning method. They accept several methods, such as analog or metaphor or other proofs or evidence form of reasoning (Akale, 2012).

The differentiation between scientific and non-scientific research is not relevant because the existence of a universal norm of rationality used to evaluate a scientific theory is rejected (Chalmers, 1987 cited in Charreire and Huault, 2001); “only the pragmatic value of

knowledge permits the assertiveness of its scientific status. This status is acquired from the evaluation by an observing system” (Charreire and Huault, 2001, p 3).

From the constructivist approach we conclude the following:

- The reality is never independent of the researcher and is specific in nature. It is dependent on its form and content from the individual or individuals who are responsible for constructing the reality (Akale, 2012).
- The reality is apprehended in a non-tangible mental construction with the negation of an ontological pre-supposition (phenomenological hypothesis).
- The experimental and social base of reality is based on the social local context.
- The reality cannot be directly reached. The researcher must develop means and adequate analytical analysis methods in order to attain it. Certain constructivists ask: does reality exist? (Girod-Seville and Perret, 2001; Glosersfeld, 1988 cited in Akale, 2012).
- The social world of the constructivists is formed by interpretation that is constructive due to the interactions between actors in particular contexts. Then, the produced knowledge is always contextualized (Le Moigne, 1995 cited in Akale, 2012).
- The path of knowledge passes through the comprehension of the meaning that actors give to the reality. This reality must be understood from the interpretation given by the actors.
- The comprehension process participates in the construction of the reality of the actors being studied. The reality is “constructed by the act of knowing rather than by being a given objective perception” (Le Moigne, 1995 cited in Girod-Seville and Perret, 2001, p. 23).
- The validity of knowledge is based on adequacy and teachability.
- The constructivists accept, in general, all proven forms of reasoning.

1.3.3: Epistemological Interpretivism Positioning

1.3.3.1: Status of knowledge and nature of reality.

In interpretivism positioning, obtaining knowledge requires that researchers seek the understanding of how social reality meaning is constructed by the actors (Thietart et al., 2001). There are some common epistemological questions between the constructivism and the interpretivism paradigms: both are based on a phenomenological hypothesis, where the essence of the object, reality, in the interpretivism approach is multiple. For radical constructivism, this reality does not exist. Both paradigms share the same assumption concerning the dependency of the subject (observer) and object (reality) (Girod-Seville and Perret, 2001).

Concerning the nature of reality, the two paradigms, constructivism and interpretivism, are based on the intentional (finality) hypothesis, where, the world is made up of possibilities. The nature of the produced knowledge is subjective and contextual. The interpretivism is considered by certain authors as moderate constructivism (Akale, 2012, p. 161). Elsewhere, following the interpretivism approach, the knowledge is generated by interpretation. The research question is formulated in terms of: What motivates actors?

The privileged status of knowledge is:

- Explaining in positivism
- Constructing in constructivism
- Understanding in interpretivism

1.3.3.2: Interpreting reality

Interpretivism calls the possibility of uncovering links into question, because “all entities are in a state of mutual simultaneous shaping, so that it is impossible to distinguish causes from effects” (Lincoln and Guba, 1985, p. 38 cited in Thietart et al., 2001).

“The process of creating knowledge therefore involves understanding the meaning that actors give to reality, rather than explaining reality. Interpretivists try to understand it through actors’ interpretations. This process must take into consideration actors’ intentions, motivations,

expectations, motives and beliefs, which all relate more to practice than to facts” (Girod-Seville and Perret, 2001, p. 21).

“Understanding, or interpreting, behaviour must by necessity involve inquiring into local meanings (localized in time and place) that actors give to their behaviour. In the case of organizational structure, interpretivist researches will be drawn towards contextualized research to analyze the daily functioning of an organization. This involves carrying out field studies, which favor direct observation or on site interviews” (Ibid).

The interpretivism approach does not give positive or negative answers concerning the existence of the reality. It recognizes that the reality is not neutral, but is dependent on the observer. The knowledge path is to investigate and understand the reality of the actors under study, which is different from the point of view of the constructivist. Hence, admitting the contribution construction of this reality (Akale, 2012).

“There has always been a conflict between positivism and interpretivism, which defends the particularity of human sciences in general and organizational science, in particular” (Girod-Seville and Perret, 2001, p. 14). To obtain knowledge, researchers seek, in a positivist framework, to discover the laws imposed on actors, but in the interpretivist framework; they search to understand how actors construct the meaning they give to social reality (Ibid, p. 19).

1.3.3.3: Validity criteria in the interpretivist approach.

In the interpretivist approach, the validity criteria of knowledge (value of knowledge) are multiple; we cite in the following paragraphs the explanation of this criteria as given by Lincoln and Guba (1985 cited in Thietart et al., 2001) and Girod-Seville and Perret (2001, pp. 25, 26):

- a) *“The credibility:* How can one establish confidence in the ‘truth’ of the findings of a particular inquiry for the subjects which and the context in which the inquiry was carried out? Reality is considered a multiple set of mental constructions...To demonstrate ‘truth value’ we must show that the constructions that have been arrived at via inquiry are credible to the constructors of the original multiple realities... The implementation of the credibility criterion becomes a twofold task:

- 1- To carry out the inquiry in such a way that findings will be found to be credible in enhancing; and,
 - 2- To demonstrate the credibility of the findings by having them approved by the constructors of the multiple realization been studied.”
- b) “*The transferability*: How can we determine the extent to which the findings of a particular inquiry have applicability in other contexts or with other subjects? Interpretivists make the assumption that at best, only working hypothesis may be obstructed; the transferability of which is an empirical matter, depending on the degree of similarity between sending and receiving contexts. Transferability inferences cannot be made by an investigator who knows only the sending context.”
 - c) “*The dependability*: How can we determine whether the findings of an inquiry be repeated if the inquiries were replicated with the same (or similar) subjects in the same (or similar) context? ... An interpretivist sees reliability as part of a larger set of factors that are associated with the observed changes. Dependability takes into account both factors of instability and of phenomenal or design induced change.”
 - d) “*The confirmability*: How can we establish the degree to which the findings of an inquiry and not by the biases motivation, interests or perspectives of the inquirer? An interpretivist prefers a qualitative definition of this criterion. This definition removes the emphasis from the investigator (it is no longer his/her objectivity that is at stake) and places it where, as it seems to the investigator, it ought more logically to be: on the data themselves. The issue is no longer the investigator’s characteristics, but the characteristics of the data: are they or are they not confirmable?”

1.3.4: Other Epistemological Paradigms

Besides the principle research paradigms cited above, other paradigms are evoked in the literature, namely:

- The post positivism (Guba & Lincoln, 1994)
- The realism (Saunders et al., 2007)

- The functionalist (Burrelle and Morgan, 1979 cited in Akale, 2012)
- The pragmatism (Dewey); the empirism (Bacon); the idealism (Hegel) , as mentioned by Akale (2012)
- The critical realism (Lincoln and Guba, 2000; Bhaskar, 2008 cited in Akale, 2012)
- The relativism on which Al Amoudi and Willmott (2011, p. 127 citing Lawson, 2003, p. 161), give the following indication: “Epistemology relativism expresses the idea that our categories, framework of thinking, mode of analysis, ways of seeing things, habits of thought, disposition of every kind, motivating concerns, interests, values and so forth, are affected by our life paths and socio-cultural situations and these by make a difference in how we can and do ‘see or know or approach things’, and indeed they bear what we seek to know”.

1.3.5: A Plurality of Paradigms

Although researchers must generally conform to the principles of a known epistemological category, recognized by the scientific community (Verstraete, 2007), but the debate remains in this community concerning the necessity or not of enclosing research practices in canonic diagrams of epistemological approaches.

- For positivist, determining a strict frame of scientific practices is a good practice, because it permits an objective judgment of the results and thus, facilitates the comparability (Miller and Tsang, 2010).
- LaTour (1987) and Peyerabend (1979, cited in Akale, 2012) oppose the following of a canonic diagram in the research projects. Peyerabend stated that the idea that sciences can and must be organized under fixed and universal rules is at the same time, utopian and pernicious. This idea is utopian because it neglects the human creativity which permits the researcher to open his path in diverse ways according to the circumstances and the idea is pernicious because it does not develop our humanity. Science is becoming more dogmatic, and does not favor its development.
- Certain eminent researchers refuse to indicate the epistemological framework for their research projects (LaTour, 2006 & Weppe, 2009 cited in Akale, 2012). However,

pedagogically, epistemology positioning presents a certain virtue for junior researchers in presenting coherent ideas and clear research procedures (Akale, 2012, p.163). Although many researchers consider that adopting a particular paradigm is a voluntary choice and is a veritable act of faith (Burrelle and Morgan, 1979 cited in Akale, 2012; Jackson and Carter, 1991 cited in Thietart et al., 2001), many others tend to see plurality of paradigms as an opportunity. “Certain authors who advocate integration, say we should direct our efforts towards seeking a common standard” (Leed, 1991 & Pfeffer, 1993 & Donaldson, 1997 cited in Thietart et al., 2001, p. 28). Leed proposes an integrated framework that reconsiders the three levels of understanding: subjective (constructivists), an interpretative, and a positive understanding. Other researchers advocate a multi-paradigm approach. “It is often said that much researchers in organizational science borrow elements from different paradigms, thus obtaining what could be called a mixed epistemological position” (p. 28).

Accordingly, researchers can gain from the multiplicity of the existing theoretical foundations and methodologies to reach the objectives of the conducted research. Researchers nowadays are combining the practical knowledge with the theoretical, whether in quantitative process¹ or in qualitative process². To take advantage of the various methodologies and epistemological paradigms, intersection approach is encouraged. “Methodologies dictated by the nature of the object studied and influenced by cultural tradition and epistemological paradigms often influenced by researchers own beliefs” (Girod-Seville and Perret, 2001, p. 3).

How can we define in a plurality environment a coherent epistemological position to examine a research object in higher education and management domain, where epistemological references are not definitively identified? (Schmidt, 2008)

¹ The quantitative method, utilize deduction as its means to attain control and precision (often named American Model of Research); through structural methods, researchers compare theory with facts to gather the required data.

² The qualitative method is an inductive one (often named the European Model) its purpose is to explain the dynamics of a problem within a context, thus giving more attention to the inherent meaning than to the method.

In all cases, researchers must be precise and demonstrate the coherence of their choice with the research object (Aronian, 2009 cited in Akale 2012).

1.4 Epistemology and Methodology in Social Science Research Domains:

1.4.1: Epistemological Perspective in Social Sciences

In the social sciences, there is no universal agreement as to the different ways of classifying epistemological perspectives. However, as presented in this chapter, the theory of the nature of knowledge has “foundation and established analysis” and is considered within a tri- part framework: positivism, phenomenology (often called interpretativism or constructivism), and critical-dialectical understanding (Harvey, 2007). Herein is the basis on which these paradigms have been identified:

- In the positivism approach, determining reality is through seeking to know of possible cause factors
- In phenomenology the objective is to know the social process which is made up of acting and thinking subjects (social actors) which is fundamentally different from the study of the natural world, and is based on potential to discover and interpret rather than explain what they mean.
- The critical-dialectical understanding approach asserts a situated understanding of the social world which is made up of reflective people in a specific historical and socio-economic context. Thus, understanding a social event from a social-interactive process perspective without seeing it as a whole and without taking into account the wider social and political context remains too limited.

It is worth mentioning that the objectivity argued in the positivism paradigm is criticized by phenomenology and critical-dialectical understanding approaches which consider it as an illusory concept “because facts do not exist in isolation of theories that frame them” (ibid, p. 2).

1.4.2: Epistemological Positioning in Management and Education Domains

The epistemological status in management and education is a subject of debate (David, 1999). Three hypotheses are discussed about the generation of scientific knowledge, namely:

- a) Overlooking the classical opposition between inductive and ‘hypothetico’ – deductive approaches by considering a recursive loop abduction/deduction/induction. It is not necessary to cover this loop, but, it is acceptable that this loop is collectively covered by the scientific community.
- b) Overlooking the opposition between positivism and constructivism paradigms and dissipating certain confusion resulting from wrong systematic association between positivism – quantitative methods, and constructivism – qualitative methods, to explore several implications of the constructive conception in three domains.
- c) Overlooking the opposition between the usual and various methodologies considered as competitors or in opposition, to construct a conceptual diagram combining the different approaches.

Indeed, management and education are general social activities; however, they are not limited to firms, institutions, or public administrations. Management can be also discussed at the individual level, social political management, natural resource management, human resource management, risk management, environment management...etc. As management is the coordination of the finalized piloting of some pre-identified functions (David, 1999), then management sciences permit the engineering of social organization.

We can admit that in this domain, the reality exists, but it is constructed in two manners (David, 1999), as discussed herein:

- 1) Constructed in our mind since we only have the representation of the reality. Constructed because the different actors, including the researcher, construct or help in its construction.
- 2) The reality is not collectively constructed with complete coordination between actors. For an actor or group of actors, the reality is intermediate: only a part of this reality

can be reasonably considered as a target of ‘project action’, the rest may be considered as ‘data’.

Then it is legitimate for the researcher to claim the modelling of some phenomenon categories. Thietart et al. (2001) define management as “The operating condition of the social entity, the enterprise, institution...so that each member can contribute his/her best collective effort” (p.1).

In management and education, the reality is in permanent construction and transformation process. It is not guided and managed by independent rules. Then, it is necessary, from an epistemological point of view, to understand the factors that specify the researchers’ position and the scientific characters of the produced knowledge.

From a research perspective, management and higher education systems are the boundless source of queries that vary depending on subject and aim of the adopted research approach (Girod-Seville and Perret, 2001). It can be a research of content or an analysis of process with an objective to describe organizational learning to establish norms that are apt to ensure the smooth operation of the organization or institution, or to enhance and optimize the functional aspect or to predict the outcome of a strategy or approach. Note that epistemological perspective in quality practices are discussed in Section 4.3.2.

1.4.3: Methodological Approaches in Management and Higher Education Systems

1.4.3.1: Experimental Approaches

Due to the complexity of the object in management and higher education systems, applying the experimental approaches will be difficult, since the reality where the human factor and the institutional factor (social and natural objects), cannot be reproduced in similar natural conditions. Field studies are privileged in these domains. In field studies, primary data are obtained using qualitative methods (interviews, inquiries, participating observations, scale analysis, protocol analysis, cognitive forms...), and quantitative methods (surveys, systematic observations, analysis of content). The problem is the fact that in these domains the studied objects are complex and are necessarily the product of numerous influences (Morin, 1977, p.

177 cited in Lesage, 2000). So, individuals are a principle element in social entity (institutions, public administration, enterprises...). Every individual has his own motivation and cognitive characteristics. This entity is strongly interconnected with its environment (physical and non-physical environment) and share common goals.

Although the data obtained from the field study permits a statistical processing, different effects can perturb their conditions of collection (internal validity) (Lesage, 2000, p.77):

- a) Test effect: The individuals try to rationalize their answers or present no interest in the answers.
- b) Instrument effect: The quality of the 'instrument' for data collection may present some deficiency (weak prepared questionnaire, weak prepared interviews).
- c) Selection effect: The sample includes a biased non-controlled attributes.
- d) Contamination effect: The subject contaminates the results through insincere answers.

1.4.3.2: Comparative method

Sophisticated statistical tools are used in social and educational sciences to simulate, without experimentation, the rigor of the experiment. But, these methods drift the researcher away from research question, reducing it to only quantifiable aspects (Curchod, 2003). In this context, the quantitative researchers neglect the inherent complexity of the management and educated phenomena, for the account of researching regularity (Ibid). Hence, methods based on case studies have been developed.

The two principle categories of the research in social and management sciences are: the approach by variables and the approach by cases. The approach strategy centered on the cases starts from the postulate of the existing of distinct entities, but, we must understand these entities in their global and complex context. Although there is opposition between qualitativists' and quantitativists' methods, these two methods are complementary. Hence, a comparative method, named quali-quantitative was proposed by Curchod (2003).

1.4.3.3: The case study method

The case study constitutes an empirical research strategy adapted to the questioning of the implicit interaction related to a phenomenon (Chateline, 2009). The selected case must permit

an access to multiple data sources (interviews, documents, questionnaire, observation...). The pertinence of the case study to the field problematic of certain research questions resides in the aptitude of these data to express the non-quantifiable concept and theoretical proposition.

The scientific potential of the case study consists in its capacity to point out the observation of the singularity of the posed question (Ibid). In the case study, the researcher is nearer from the studied object than the case of statistical quantitative method and analysis (Curchod, 2003).

1.5 Quality Assurance and Accreditation in Higher Education, Mainly in an Interpretivism Approach:

The objective of the main adoption of the interpretivism approach is justified by the fact that in this domain, the institutions and the theme-related concepts constitute realities constructed and understood by actors. Interactions and influences between actors exist. These interactions are also objects that exist by interpretation and by highlighting of the observable facts. The actors (students, administration, faculty, campus and services, educational and research projects, programs and curriculum...) build a structure or a system (university, enterprise, research center, QA agencies, standards...). These structures are also in interaction with other actors or structures (educational system, government, society, economy, labor market...)

The effect of the internal variables is that they guide the internal actors of the structure or systems, while the external variables guide the choice of interaction between actors or structure. For example, the effects or influences which lead to imposing a standard, or to follow a standard, are the result of the effects incited by variables and interactions between variables on one hand, and actors on the other.

The nature of the objects and the context of the study (national or international contexts) and the capacity of the actors (structure and environment) to influence each other should be taken into consideration. the observations, the comprehensions, the explanations, the interpretations of the conceptual basis, the mechanisms and the process guiding the generation of standards

and the socio-economic context, organizational and institutional consequence, the politics of standardizing and globalization of higher education are given much importance.

Our study leads to a modelling and proposition generated from cognitive understanding and analysis. The interpretivism is mainly chosen as the research approach because it is moderate and flexible, which is more adopted in the study of management and education domains. This positioning recognizes the existence of the research/object relations. The generated knowledge is the result of the actor's contribution, a cognitive dialectic and the observations. Moreover, our access to reality is not neutral. The study is not objective as stipulated by the conditions of the positivism approach, but is not completely subjective as stipulated by the dogmatic constructivism approach. An interaction and influences between the actors exist. Indeed, the studied process of quality assurance and accreditation unfold in national and international socio-economic frame.

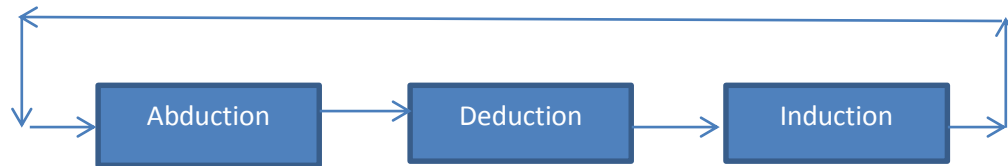
The deep involvement in the research object environment as suggested by the interpretivism (or the moderate constructivism) approach has permitted us to describe and to understand the process and the variables that interact with each other. It also permits us to conduct a study of the chosen case and to carry out a conceptual analysis to reach the objective of the study. We should keep in mind that the objective is to propose a modelling of standards and criteria of the quality assurance, accreditation, and assessment rules corresponding to the Lebanese higher education context or similar systems in other countries.

Although the researcher conducts the study within the entities (actors) of the research object, the results should not be strongly influenced by local, temporal and personal contexts of certain actors, so as to maintain acceptable judgment of the influencing mechanism in event production and in knowledge generation. In the following section, we present the research procedures and the coherence aspects with mainly interpretivism approach, and eventually other moderate approaches.

1.6 Research Procedures:

1.6.1: Logic of Inference

Scientific reasoning generally applies three logical reasoning which operate as a process in the following recursive loop (David, 1999; Akale, 2012):



The abduction logic permits the elaboration of empirical observation (B); construction of hypothesis, which relies on a general rule (A), to a consequence (C); the sequence is $A \rightarrow C \rightarrow B$.

In the deduction logic, a consequence (C) is concluded (consequence generation) from a general rule (A) and empirical observation (B); the sequence is $A \rightarrow B \rightarrow C$.

The induction logic permits the establishment of general rules (A), starting empirical observation (case B), taking into consideration the consequence (C); the sequence is $B \rightarrow C \rightarrow A$.

Within the study domain of this thesis, this logic combination is less evident; however, induction or deduction logic may be considered.

1.6.2: Methodology

Multiple research methods which combine qualitative and quantitative data and multi-level analysis (primary mechanisms and secondary mechanisms of event production contributing to the emergence of the phenomenon) are considered:

- i) Hybrid exploratory approach: This methodology approach is considered as the middle phase of the study. It permits for the enrichment and deepening of

previous knowledge. This is justified by the nature of the phenomenon under analysis (Standardization of QA and Accreditation in H.E.) and the dialectical conceptual approach (theoretical) accompanied with an empirical exploration study of management and functioning of higher education institutions.

- ii) Processes approach: The nature of the analyzed object is complex. This complexity is the result of the effect of multiple actors integrating on different levels, linked to organizational and environmental dynamics. The significant evolution of the phenomenon is sometimes revealed by approaches necessitating long intervals of time (De La Ville, 2000 cited in Akale, 2012).

To reach the objective of the study, conceptual study and analysis are conducted and the variables of the system, considered complex, (Outhwaite, 1983 cited in Akale, 2012) are identified and analyzed. Time is an element of the studied phenomenon, since some identified variables present temporal evolution.

1.6.3: Defining Mechanism

As the mechanism plays an essential role in all organizational institutions and systems, it is of interest to cite the following definitions:

- A mechanism is a structure performing a function in virtue of its components parts, component operation and their organization. The orchestral functioning of the mechanism is responsible for one or more phenomenon (Le Cocq, 2003 (thesis), cited in Akale, 2012)
- A mechanism is a collection of entities, actors, and structures having activities and/or interactions. The nature of the activities and the interaction influences the entities. Then, accordingly, these entities influence the activities and the interactions (Easton, 2010, cited in Akale, 2012).

The contexts of the mechanism operation are to be taken into consideration in the knowledge production (Anderson et al., 2005).

1.7 Research Strategy:

1.7.1: The Case Study

The case study is adopted as methodology when researcher could conduct empirical research that deals with complex phenomenon in its real context (Yin, 2003 and Easton, 2010 cited in Akale, 2012).

Generally, three criteria guide the researcher to choose the strategy of the case study (Akale, 2012, p. 186):

- 1- The epistemological positioning (Guba and Lincoln, 1994)
- 2- The research problematic (Yin, 2003 cited in Akale, 2012)
- 3- The research objective (Baumard and Ibert, 2011)

Guba and Lincoln (1994) consider that “both qualitative and quantitative methods may be used appropriately with any research paradigm. The applicability of our proposition that resulted from the in-depth analysis of different elements and entities of the research object should be tested in real and actual cases.

The adoption of the aforementioned methodology is justified by the following facts:

- The status of comprehension is privileged (interpretivism)
- The research is contextualized

On the other hand,

- The nature of the problematic (How, Why) concern contemporary events (Yin, 2003 cited in Akale, 2012)
- The research object presents particularity in terms of contexts and situations
- The study of a social organization (Higher Education System) is constituted of a set of components which are mixed and connected in a complex manner (Morgan and Smirich 1980)
- The study is performed in their natural environment (Stakes, 1978), where different forms of data can be performed (Easton, 2010 cited in Akale).

In fact, the researcher adopts a construction – interpretation – induction/deduction reasoning and proposition (Herishman, 1986), sometimes with moderate positivism approach. The criteria, in relation to the selection of the studied case, are limited by the material and temporal constraints of the researcher (Einsenhardt, 1989).

1.7.2: The Sources of Data and Mechanism Adopted

- Documents issued by public authorities, official documents (reports, decisions, decrees, laws...), thesis, publications, specialized books, archives...
- Observations and participation of the researcher himself/herself in the field.
- Interviews that permit the obtaining of data, discussions and analysis of entities in relation with the research objects.

In this research, the following mechanism study approach is adopted:

- Review and discussion of approaches and trends on the subject environment (global higher education, challenges ...) that could be considered as influential factors in the dynamics of subject evolution.
- Review and analysis of many standards constructed by actors that are considered as norm to be followed by other actors/users.
- Analysis that leads to deep conceptual discussion ‘framed’ in real contexts which constitute the mechanism of guiding and orienting norms and criteria to construct standards.
- Collection of data related to key entities and variables used in the constructed standard frame to generate knowledge results.

1.8 The Design of the Research:

The different compounds of the research are sequentially connected as per the following organization that is inspired from the research design proposed by Royer and Zaslowski (2001):

a. The Problematic:

- Globalization and standardization of quality assurance in higher education: Posing problems concerning the adequacy of internationalized standards and real/natural situations in Lebanon – norms and criteria imposed but not always adapted to national contexts.
- What is the objective of the emergence of quality standards in the higher education field in Lebanon?
- How is a quality standard in higher education constructed?
- Should the quality standards in higher education be globalized in all norms and criteria?
- The importance of taking into consideration the national contexts.

b. Research Object:

To answer the research problem posed, the object of the research is: To construct standards and criteria of quality assurance and assessment of higher education institution, and to propose indicators of the assessment adapted to real and national context (proposition of template/model of quality assurance assessment).

c. Epistemological Positioning and Methodology:

Intersection of epistemological approaches like moderate positivism, moderate constructivism and interpretivism; even interpretivism, paradigm positioning is mainly adopted.

- Methodology: multi-level analysis of the actors, case study, exploratory methods, qualitative and quantitative methods.
- d. Literature Review: This is about the problematic and research object in national and international context and data

- e. Conceptual Study: Presentation, discussion and analysis of concepts that are in direct relation with the research object
- f. Field study: Choice of the case study of quality assurance practice using the proposed template of quality assurance assessment in higher education institutions
- g. Results and Conclusions: Results analysis; applicability of the propositions; and, conclusion.

CHAPTER TWO

Chapter 2 Global Higher Education: Challenges, Approaches and Trends

2.1 Introduction:

Higher education is in continuous evolution in response to economic developments, and to permit people and countries to contribute to the advancement and progress of science and technology (OECD, 2014-a). Accordingly, higher education institutions have a major role to play in economic progress; knowledge economy; development of societies; the resolution of life's and environmental problems; and, the enhancement of the social mobility phenomena (Taylor, 2008)

In the context of globalization and internationalization, higher education becomes a competitive sector (Van Vught et al., 2002; Marginson and Van der Wende, 2007; Basri and Glass, 2014; Scott, 2014): competition between students to secure places in specialties of high demand that require high selectivity; and, competition between universities to attract the best qualified students and be concurrently classified as prestigious institutions to be ranked in international classifications, and to profit from governmental and private sector funds.

These competitiveness that are sometimes cruel and not always grounded on academic basis, could have positive or negative implications. In fact, they could act as a strong academic force to produce excellence; yet, they could also contribute to a decline in the mission and the values of the academic community.

Many subjects pertaining to the higher education sector are addressed, such as:

- Emergence of market mechanism and trends of internationalization and globalization of the higher education and their consequences, and of privatization trends in this sector.
- Availability of and accessibility to a wide population of young persons with the ability to pursue higher education studies.
- Diversification and convergence in higher education, and the quality of the provided higher education.

- Roles of universities and new linkage between the labor market and higher education institutions.
- Challenges that appear with the usage of Information and Communications Technology (ICT).

Our objective in this chapter is to describe the trends, the central reason and the contextual factors which, in the last decades, have strongly influenced the higher education evolution; they will continue to do so in the near future, since “Increasing competitions in higher education and the commercialization and cross-border delivery of higher education, have challenged the value traditionally attached to cooperation: exchange and partnerships” (De Wit, 2010, p.5).

2.2 Global Mechanisms and Trends that Affect Higher Education:

Since the last decades of the 20th century, new global mechanisms and trends at economic, managerial and establishment levels have affected and transformed societies, nations, and higher education institutions (NAHE, 1997; Van Vught et al., 2002; Amaral, 2006; Marginson and Van der Wende, 2007); this has led to the emergence of some transformations in educational activities, particularly in those related to the rational of quality control or to the use of these activities as compliance tools of assessment. New global mechanisms and trends are presented herein.

2.2.1: Market Mechanisms

The emergence of market mechanisms which are used as reasons of public policy to promote competition among public services, including higher education institutions, in order to “increase their efficiency and to maximize the provision of social benefits” (Amaral, 2006, p. 6). In many countries where markets in higher education are emerging, governments have been forcing the “higher education institutions to compete for students, for funds, for research

money” (ibid). The Bologna Declaration represents the European countries that are voluntary in agreement with this direction; it is “redefining the nature of content of academic programs, is transforming what were state monopolies over academic degrees into competitive international markets” (Amaral, 2006,p. 6).

However, in the context of competitive market operation, the consumer requires information about price, quality and other relevant characteristics of the proposed services. In ‘higher education market’, transparency of quality assessment results is considered as a tool to provide the required information (Dill and Soo, 2004), but the quality of the learning services “can only be effectively assessed by consumption. It is only after a student starts attending classes that he forms a true idea of what he has gotten in terms of quality, professors, and educational experiences” (Amaral, 2006, p. 6). Thus, we cannot consider that the student has always had a free choice; he/she cannot derive multi-educational market experiences (multi programs or institutions); the students or their families were considered as immature consumers. In fact, “The theory of behavioral economics assume that people do not regularly make rational and selfish choices... students do not know the real contents of the studies and do not know if they will get a proper job after graduation” (ibid, p.7). These considerations are the basic arguments that the government resorts to intervene to protect the education service stakeholders through licensing, accreditation and quality assessment.

In many countries, the state regulates some of the institutional freedoms through quality assessment in order to “maximize the provision of social benefits and the public good” (ibid, p. 8); it uses “an increasing number of mechanisms such as extensive array of performance indicators and measures of academic quality” (ibid).

2.2.2: Emergence of New Public Management Policies

The New Public Management (NPM) policies consider the public managers as entrepreneurs. In higher education, there is development of university entrepreneurialism; knowledge is seen as tradable product, “students are referred to as customers or clients, and quality assurance and accountability measures have been put in place to ensure that academic provision meets the client’s needs and expectations” (ibid). This is correlated to marketization of the higher

education services; however, in higher education, new public management policies have affected the academic profession, portraying many academics as “workers whose discoveries are considered work-for-hire” (p.9). New terms have been promoted, such as, efficiency, utility, accountability and various definitions of quality. In like manner, institutions have created “systems for evaluation and performance measurement of research, teaching and some administrative activities” (ibid; Meeke, 2002 cited in Amaral, 2006) considers these micromanagement controls to have contributed to the diminishing of the professional autonomy of the academics; these trends could result in the “loss of trust in institutions and their professionals” (ibid; Trow, 1996).

2.2.3: Globalization and Internationalization Trends

To market global economy creation, universal peace slogans are used, and universal prosperity resulting from the freedom of movement of goods and capital are promoted. As aforementioned, market mechanisms within economic globalization context have affected the higher education organization and functioning, particularly by including higher education services in The General Agreement on Trade in Services (GATS) agreements that required the removal of barriers to attain transnational higher education. Under this umbrella, many issues are developed such as franchised curricula and title, overseas campuses and e-learning; this has led to many problems pertaining to the protection of stakeholders’ interests, which are particularly due to lack of transparency, inadequate information available to the potential stakeholders, and the “existence of a number of ‘rogue’ transnational providers, degree mills and bogus institutions” (Amaral, 2006, p. 6). Extending quality and accreditation certification to transnational education could constitute tools that would limit these negative deviations and protect stakeholders’ interests.

The globalization and internationalization trends of higher education have become more acute by promoting higher education institutions’ ranking, thus pushing many institutions to compete in ranking exercises in their endeavors to acquire ‘excellence’ in their teaching and research activities. Within the same context of globalization and internationalization, the EU has implemented the European Higher Education Area, declared by the Bologna process. In

this transformation, there are “shifts from the social and cultural (cooperation paradigm) to the economic function of the university (neo-liberal model)” and the “increasing internationalization of the quality systems” (ibid, p. 10). On the other hand, “the new demands of mass systems of higher education and the emerging environment of global academic competition are altering the traditional institutions for assuring standards in universities” (Dill and Beerkens, 2013, p. 241). These trends and issues will be addressed in details in the following sections of this chapter.

2.3 Enrolment in Higher Education:

2.3.1: The Massification in Higher Education

After World War II, and under the pressure of social equity commitment, higher education grew and developed, and became to be a social escalator whereby universities became to be considered as “a ticket to success for the elite” (Usher, 2009, p.1). In the context of the confluence of massification and the emergence of new knowledge economy, “systems of higher education are gradually being asked to do more and more over time – to educate more students from ever more diverse backgrounds, in more subjects, in more ways, in more fields of study”(ibid, p. 3). In addition, each institution was required to do more research, and the results be widely shared so as to contribute not only to the local economic development but also to the global scientific debates (ibid).

Today, the expansion of higher education is a reality in response to the mass demand which leads to major transformation (Altbach et al., 2009, p. 8). This expansion is fast and has diverse origins, and corresponds to the strong populations’ demand for a larger/wider access to higher education in the world: political, social and economic sectors.

In fact, higher education is considered as a necessity for social mobility and for economic success. Throughout the past decades, the development and evolution of higher education

surpassed in importance, in role and in nature, and the fundamental changes that occurred in past centuries.

The nature and the number of institutions and individuals involved in higher education have vastly increased. In the period where the logic of massification dominated, higher education had to respond to this challenge. In this context, more social mobility was imposed, which forced the deep restructuring and diversification of the higher education systems (ibid).

Sociologist Marlin Trow classified higher education systems into three categories, namely, elite, mass, and universal access (2007, p.244)³. He foresaw that most nations will evolve to massification or universal participation in higher education. The results from massification, which is inevitable, could lead to

- Decline in academic standards
- Increase in social mobility
- New higher education foundation
- Diversification of higher education systems and other trends (Altbach, 2007)

On the other hand, the massification development was, in general, the detriment of 'quality' accompanied by violation trends of the academic standards. It also led to the decrease in the required levels in criteria and the regulations for pursuing higher education, as well as in the level of the learning outcome of the graduates.

The shifting towards the post industrial economy, the development of the service industry, and the knowledge economy have resulted in the need for this massification phenomenon.

The USA was one of the first countries which achieved mass higher education; in 1960, 40% of the age cohort was attending higher education institutions, while only 10% of the same age was attending higher education in some developed countries (Altbach et al., 2009).

During the last decades, the enrolment rates in higher education have shown continuous growth in the developed countries as well as in the developing countries. For example, the

³ Trow's classification is based on the ratio GER (Gross Enrolment Ratio) which represents the percentage of enrolled students of the age cohort, depending on the country , (for example, for higher education: 18 or 19 – 23 or 24 years, for GER <15% → elite systems; for GER between 16 and 50% → mass system; for GER > 50% → universal systems)

student number in North America and Europe exceeded 40 million, while it was just over 30 million at the turn of the past decade (Usher, 2009, p.3). Globally, the percentage of enrolment in higher education institutions increased from 19% in the year 2000, and to 26% in the year 2007. This increase is little bit less in the developed countries, where the increase was from 7% to 12% in the year 2007 (p. 38).

Several aspects accompanied the massification phenomenon in higher education:

- Financial aspect to respond to the infrastructure needs, such as the construction and the equipment of new campuses and classes.
- Qualified human resources, such as faculty, administration, and technical staff.
- Developed socio-economic networks to accompany and support this development in terms of training and employment.
- Expansion of female enrolment; women now form the majority of the undergraduate student body (ibid, p. 9)

Typically, in the early phases of massification, higher education had expanded through “attracting the relatively better- off in society-people with already high levels of social capital ... the barrier to their participation was not usually that they lacked aptitude or even finances; rather, it was simply lack of places. The engine of massification, therefore, was simply the creation and the construction of new institutions (public and private universities), and the mass hiring of new teaching staff” (ibid, p.6).

In parallel to the massification phenomenon, a problem of access and equity appeared and a problem of quality assurance was posed; issues which are discussed herein. Furthermore, in many developing countries massification and universalization have created specific set of problems (ibid).

2.3.2: The Universalization in Higher Education

Expansion in mass higher education systems does not mean securing access opportunities to all secondary graduates; in fact, different challenges are encountered during the post-secondary education under universalization conditions, and different types of students are

attracted to pursue higher education levels. Usher (2009) considers that “where massification means a focus on the raw number of students attending higher education, universalization necessarily means an increased focus on fairness in attendance. This is almost an arithmetic truth, because once the 50% mark is reached, to continue growing in numbers necessarily means taking in more students from groups that are historically under-represented” (p. 7).

In the context of universalization in higher education, it is legitimate to ask about and differentiate between effective student attendance and the number of attendees; actually, the evaluation of effective participation ratio depends on the criteria set by a specific country or this country’s definition of fairness or equity in participation. It is worth noting that no international standards have been set that cover the aforementioned issues.

Financing the large growth of higher education systems is a major impediment that needs to be dealt with when considering the phenomena of massification and universalization. Under the context of ‘economic crises’, governmental contributions have become limited, if not greatly reduced. In many European countries, policymakers believe that the allocated tuition should be considered as sufficient to satisfy the large higher education accessibility (ibid, p.8). Nonetheless, in countries where higher education tuition fees are the responsibility of the students’ parents, financial factors constitute a barrier to such an access. Hence, financial incentive was proposed as means to attract students; subsequently, widening the possibilities of students to enroll at this level of education, for example the student’s loan programs in the USA. But, the encountered problems cannot be simply reduced by financial funding; changing the type or nature of the higher education systems and the teaching approaches and methodologies could be considered part of the incentives process to attract the youth and make them interested in pursuing higher education, for “the most successful learners are the ones who are most academically attuned to higher education institutions... so there has been a move to create new forms of higher education at new types of institutions... thus, universalization has to some extent driven institutional diversification over the years” (ibid, p.9).

Frenette (2004) and Usher (2009) have indicated that the geographical location of the higher education institutions – the distance barrier, is yet another factor that has limited the participation in higher education. However, with the use of information and communication technology (the Internet mode), distance education is considered as a means to provide higher

education to the youths who live in regions where no higher institutions exist. Actually, distance learning is not only about distance, it reaches many categories of students such as those working and have attendance-time constraints; it is in fact more about virtualization and modularization of education.

Taking into account the published data on Gross Enrolment Ratio (GER) in many countries, and Trow's classification that admitted (arbitrary) 50% as passing line from mass system to universal, can we consider that the era of universalization has entered the higher education system?

2.3.3: Access and Equity

The declaration in the world conference on higher education 1998 insisted on the importance of the equity in accessibility to higher education institutions based on qualification. Also, the universal declaration by UNESCO on human rights reaffirmed in Article 26(1) that "...higher education should be equally accessible based on merit" (Haddad, 2008).

First, it is important to state precisely the significance of the term "Access". "In its simplest form, greater access to higher education means making it possible for more individuals to enroll" (Altbach et al., 2009, p. 39). "Truly providing equal access to higher education means overcoming the social and economic inequities within each nation and corresponding disparities that result" (ibid)

Despite initiatives and progress that have been made in the last decade, fewer students are still enrolled in poorer nations than in wealthier nations; "access to higher education is often the privilege of specific segments of society" (ibid, p. 37). There is inequality access in higher education between developed, developing countries and undeveloped countries. In 2007, the Gross Enrolment Ratio (GER) was about 70% in Western Europe and North America, while it was lower than 10% in sub-Saharan Africa and in south and west Asia (ibid).

Even with the increasing rate of enrolment, social situation, in nearly all countries, remain among the main factors that affect students inclusion in privilege specialties and/or prestigious higher education institutions, which in turn influence post-graduation position and destination.

However, despite greater inclusion in upper income countries, the social strata still affect the opportunities to attend the privileged classes (specialties) privileged classes have retained their relative advantage in nearly all nations (Shavit et al., 2007 cited in Altbach et al., 2009).

Looking at the case of France, the average enrollment ratio in higher education is high, but the existence of a hierarchical system often leads to limited access to elite institutions. “Despite significant increases in broad-based participation in higher education in general, the elite-post secondary- track graduates are still more likely to be male and to be children of highly educated fathers” (Insee and Dares, 2007, pp. 220 – 239).

Study and scholastic cost and fees “remain enormous barriers to access, obviously affecting some social sectors more than others” (Altbach et al., 2009, p. 46). To reduce the effect of these barriers or obstacles, several countries offer financial aid and scholarships and /or propose student loans; (Usher, 2006 & 2009). “These financing schemes, when available, lower the ‘net cost of pursuing higher education’ “These programs are demonstrating some degrees of success but cannot by themselves remove economic barriers” (Altbach et al., 2009, p. 46). Such aids cannot resolve the socio-economic disadvantage that influences the quality education of the primary and secondary years.

A research conducted by Hoking et al. (2008 , cited in Altbach et al., 2009), studied the influence of university teaching on the student’s engagement in the classroom, explaining the “social, cultural and educational diversity and the pedagogic practice that actively embrace or limit the potential for student learning.” They suggest that “some pedagogic do not engage the diverse interests or meet the needs of all students, while alternative approaches appear to create inclusive learning environments and increase academic engagement” (Altbach et al., 2009, p.48). But, it is difficult to provide such under represented students with upper level teaching approaches and learning styles as that provided to those coming from exceptional schools. We also see that disadvantaged students enroll in different majors than those coming from exceptional schools; “Greater participation rates in higher education do not open the same opportunities equally to all. Research shows that disadvantaged populations once enrolled are less likely to continue to degree completion. In addition, these groups also attend particular types of institutions and programs of study. These programs are typically those that offer fewer opportunities for employment and further study” (Altbach et al., 2009, p. 41).

In order for the society to benefit from the access that social equity provided for the student population, students need to fully complete their programs of study. Even though great efforts are made to increase the access to higher education for different social categories, inequality remains historically deeply embodied in pedagogical, cultural and economic systems and structures, and influences the ability of the disadvantaged individual to compete with other favorable categories. “Today universities are required to promote equity, fairness, and justice, on one hand, and maintain efficiency, quality and public accountability on the other” (Gupta, 2006, p.4).

In order to reduce the cost of normalized quality of higher education. without going into the international competitive race of prestigious universities, the education systems with equal opportunity objectives, must construct pedagogical approaches and take the necessary measures to optimize the

- ‘Teaching learning’ process and methodology.
- Academic and administrative movement.
- Infrastructure and technical equipment.

2.4 Higher Education within the Context of Globalization and Internationalization:

Globalization is the label of the 21th century, which is structurally due to the development of transportation technology, and to the advanced progress in information and communication technologies; it strongly dominates the economies in the world, the social life, and the higher education sector. Consequently, higher education institutions have been academically quasi-controllable by several elements and filled with international characters through the introduction of networks of information and knowledge, and the domination of the English language.

Undeniably, the international trends have an influence on higher education institutions which often follow in their teaching and research, foreign higher education systems. The rise of the English language as a dominate language of communication in science and information

technology has created a universal instantaneous contact, and has simplified the means of communication and support.

These changes have led to a restrictive monopoly in data bases and several information resources to a number of prestigious universities and some international companies, exclusively localized in developed countries.

Two terms are currently used that accompany the said evolution process: Internationalization and Globalization. In parallel, other terms are specifically used such as: International Education, International Partnership, Cross-Border Education, Borderless Education....

Altbach et al.(2009) noted that “The inclusion of Higher Education in the world trade organization’s General Agreement on Trade in Services (GATS) regime is another clear reflection of the way in which the international dimension of higher education has achieved a global profile” (p. 29).

2.4.1: Meaning of Internationalization and Globalization in Higher Education

Globalization and internationalization are frequently employed concepts that people use in varying contexts; however, these concepts are interconnected in many ways. Globalization was seen by Knight (1999 cited in Mitchell & Nielsen, 2012, p. 14) to be “the catalyst, while internationalization is the response”. She contends that “internationalization is changing the world of higher education, and globalization is changing the world of internationalization” (Knight, 2008, p.1). Mitchell and Nielsen. (2012) see internationalization as the “active ingredient” through which globalization is enacted and reinforced (p.4). To Nielson (2011 cited in Mitchell and Nielsen, 2012), internationalization can be seen as “a leading variable” that encourages and facilitates globalization. On these concepts, Hans de Wit (2010) rhetorically asks: “What do we mean with internationalization in particular in the context of increasing globalization of our societies and the development of a global knowledge economy?”(pp. 1 – 25)

Many experts and researchers have defined these two concepts; some these definitions are presented herein.

2.4.1.1: Globalization

Altbach (2007, p.7) defines globalization as “the reality shaped by an increasingly integrated world economy, new information and communication technology, the emergence of an international knowledge network, the role of the English language, and other forces beyond the control of academic institutions.”

According to Knight (2008), globalization is a process that increases “the flow of people, culture, ideas, values, knowledge, technology, and economy across borders, resulting in a more interconnected and interdependent world” (p. 7). This definition reflect a worldwide scope and movement; it differs from internationalization in that the latter which “emphasizes relations between and among nations” (ibid).

Mitchell and Nielsen (2012, p. 5) consider two dimensions of globalization, “international spatial awareness” and “transformation in the processes of interaction among individuals and groups.” In the spatial dimension, globalization is defined as “a compacted world where time and space are compressed” (Robertson, 1985, cited in Mitchell & Nielsen, 2012, p. 5, which also referred to Currie, 1988 and Harvey, 1989). In the context of geographic conceptualization of globalization, higher education institutions are seen as “at the center of this compressed world” (p.5). Nevertheless, researchers agree that higher education institutions “help to stimulate and clarify new way of thinking about space and time” (Carnoy, 2002 and Suárez-Orozco et al., 2005 cited in Mitchell and Nielsen, 2012, p. 5).

In the interaction process dimension, “globalization is defined as the practice of growing social interaction and connectivity among people around the world, creating economic, social, cultural, political, environmental, scientific and technological interdependence” (Levin, 2002 and Marginson, 2007 cited in Mitchell and Nielsen, 2012, p. 5)

From globalization perspective, social institutions must reflect “worldwide standards of organizations and operation ... these globalization forms can be applied to higher education institutions” (Mitchell and Nielsen, 2012, p. 6). What are then the transformative effects of globalization on the core functions of higher education institutions?

Globalization has transformed the objectives of higher education and the mission of the higher education institutions as follows:

- i) Higher education institutions are developing an entrepreneurial periphery and a consumerist mentality: research and development have commercial purpose and education has become a trade product in an open market (Slaughter and Rhoades, 2004; Altbach, 2004; Marginson and Van der Wend, 2007).
- ii) “Knowledge is being commodified” (Mitchell and Nielsen, 2012, p. 7). Knowledge production and distribution are turned “into symbolic status and power resources.” (ibid). Motivated to participate in the global arena, “research universities continue to play a predominant role with global competition and high number of international students” (ibid, p. 9)
- iii) Convergence/harmonization or diversification trends in higher education systems (Armstrong, 2007; Altbach and Knight, 2007; Usher, 2009). These trends are more detailed in Section 2.7 of this chapter.

Overall, many key elements of globalization have major impacts on the education sector; they include “the knowledge society, information and communication technology, the market economy, trade liberalization, and changes in governance structures” (Knight, 2008, p.7). These elements have implications on many aspects of higher education and subsequently on the international dimension⁴; “Academic systems and institutions try to accommodate these developments in different ways; internationalization is one way of responding to globalization” (Altbach et al. 2009; Mitchell and Nielsen, 2012, p. 98).

Teichler (2004) notes that in the public debate on higher education, the term ‘internationalization’ has substituted the term ‘globalization’; he observed that “the terms tend to be used for any supra-regional phenomenon related to higher education... and/or anything on a global scale related to higher education characterized by market and competition” (p. 22).

⁴ The international dimension of higher education includes both ‘campus-based activities’ and ‘cross-border initiatives’. “Cross-border education refers to the movement of people, knowledge, programs, providers, curriculum, etc., across national or regional jurisdictional borders through three modes: development cooperation projects, academic exchange programs, and commercial initiatives” (Knight, 2008, p. 5)

2.4.1.2: Internationalization

The definition of internationalization has evolved; it was defined by Van der Wend (1997) as “any systematic effort aimed at making higher education responsive to the requirement and challenges related to the globalization of societies, economy and labor market” (p. 18).

The definition given by Knight (2008) at the institutional level is “a process of integrating an international and cultural dimension into teaching, research, and services functions of the institution” (p.14). She acknowledges that constant updating of the meaning is needed; thus, she proposes a new definition that states that internationalization is “the process of integrating an international, inter-cultural or global dimension into the purpose, function or delivery of post-secondary education” (p. 15).

According to Altbach et al. (2009, pp 7, 23), internationalization is defined as “The variety of policies and programs that universities and governments implement to respond to globalization.” They include cooperation agreements, partnership between universities, opening branches abroad, and sending students to study abroad.

From the definitions and the observations cited in literature, we can conclude that a shift of the term Internationalization is actually more adopted, and is adequate within the higher education context.

It is worth noting that for centuries education has had international dimensions through knowledge and scholars exchange among nations, but, the concept of ‘internationalization’ came into focus on the onset of the 21st century, whereby it became “one of the forces impacting and shaping higher education”, and its emergence is “one of complexity, diversity, and differentiation in response to the challenges and opportunities of globalization” (Knight, 2008, p.1). Knight, in his last definition of ‘internationalization’ (pp. 16 – 17) notes that the specific following terms are deliberately chosen:

- The term ‘process’ represents evolution and development aspects
- The term ‘integration’ denotes “the process of embedding the international and intercultural dimension into policies and programs.”

- The term ‘international’ “reflects the sense of relationships between nations and cultures.”
- The term ‘intercultural’ “address aspects of cultural diversity.”
- The term ‘global’ provides “the sense of worldwide space.”
- The term ‘purpose’ “refers to the overall role that higher education has for a country/region.”
- The term ‘function’ “refers to the task that characterizes a national higher education system and also an individual institution.”
- The term ‘delivery’ “refers to the offering of education courses and programs either domestically or in other countries.”

The higher education institutions, functions and mission are ever changing within the internationalization era and context; in addition, significant transformations are taking place in the world at large. Hence the question: What are the incidental effects of internationalization on humans and social/educational institutional dimensions? Some of these effects are presented herein:

- i) In internationalization context, citizenship is re-conceptualized; “individuals see themselves as citizens of the world, free to move about, trade experiences, seek educational opportunities, and pursue work or entertainment” (Mitchell and Nielson, 2012, p.10).
- ii) Products and services are standardized; “the decentralization of service delivery, combined with the centralization of production standards, is achieved by having a long list of highly standardized products and services” (Wallace and Brady, 2001 cited in Mitchell and Nielson, 2012, p.11).
- iii) Work is specialized (no particular location) in response to “sharing knowledge and production of finished goods” (Mitchell and Nielsen, 2012, p.11). this specialization is reflected in the higher education systems in distance education programs, satellite research centers, satellite campuses, and the restriction of professional work into limited obligations (strong reduction in the number of full-time contracts) (ibid).

- iv) Cultural hybridization/convergence by having chance to share cultural diversity through studying in the same academic fields (Clarke, 2004; UNESCO, 2004)
- v) Development of university entrepreneurialism; advanced knowledge is seen as raw product “that can be owned, marketed and sold”. Academic capitalists notion rises and seek to “accumulate information resources and to control flows of information within and across national boundaries” (Mitchell and Nielsen, 2012, p.12); this control has required transnational agreements.
- vi) Shifts toward neo-liberal managerialism; the “labor/management relationships are driven by the technologization of the work itself ... the work specialization” (Wallace and Brady, 2001 cited in Mitchell and Nielsen, 2012, p. 14). As the production and maintenance of IT systems and sub-systems are designed in standardized modular parts and spatially distributed, these tasks can be technologically remotely monitored.
At institutional level, the labor/management relationships are shifting in higher education institutions “from permanent, full-time jobs toward work that involves contingent, intermittent, task contracting that is not tied to specific work locations. New managerial technologies make it possible to supervise outcomes rather than task performance” (Mitchell and Nielsen, 2012, pp. 14 – 15).
- vii) Development of advanced roles of higher education institutions in response to information age economy; their tasks became enormous and difficult. These tasks consist of sorting and assigning students to future roles in these new economy conditions. Education has become “the central economic resource of technological society” (Peter Druker, 1977, p. 78, cited in Mitchell and Nielsen, 2012, p.16, referring to Griffith and Connor, 1994, p. 78). Students must “live to support the information economy infrastructure” (Mitchell and Nielsen, 2012, p.15). The faculty must be “capable of teaching students how to become reasonably efficient lifelong learners (ibid, p. 16).

In sum, “internationalization and globalization work together to transform the self-understanding and organizational activities of higher education institutions ... They operate to create a global interdependence in economic, politics and cultures” (ibid, p.18). However,

a truly international experience in higher education requires and becomes internationalization as it integrates into the fabric of education programs.

2.4.2: Internationalization Reasons

In his study on “Internationalization of higher education in Europe” Hans de Wit (2010, p.9) asks the question, “Why are we internationalizing higher education?” Different categories of reasons for internationalization of higher education are evoked in the literature: De Wit (2002, pp. 83 – 102); De Wit (2010, pp. 10 – 11); Knight (cited in Altbach et al., 2009); Teichler (2004, pp. 5 - 26); Reinalda and Kulesza (2006, p. 99).

Though some reasons are not necessarily objectively justified; these reasons are categorized into:

- Political reasons could be related to a foreign policy; they are out of subject of this study.
- Economic reasons which are related to globalization that include the emergence of a new type of economy such as knowledge economy. We can also cite other reasons such as: financial incentives, competitiveness and labor market needs.
- Social and cultural reasons which are related to the role and the mission of the universities. The universities can, through teaching, research, dialogue and discussion, diffuse a social and an international understanding and create an international intellectual environment and competencies. However, by the domination of the English language and advanced communication technology, more uni-cultural orientation rather than intercultural understanding is in reality observed.
- Academic reasons related to teaching and research activities: The need of “developing international and intercultural dimensions in research, teaching and services extension of the academic horizon, institution building, profile and status, the improvement of the quality, and international academic standards (De Wit, 2010, p. 9).

Jane Knight (2008, pp. 17 – 23)) enumerate many rationales behind internationalization being classified into levels: the national level and the institutional level.

The national level rational include

- Human resources development: Brain power
- Strategic alliances development characterized by a shift “from alliances for cultural purposes to those for economic reasons” (p. 18).
- Income generation – commercial trade: more emphasis on cross-border and on-line delivery of education and “increased recruitment of fees-paying students are examples of a more commercial approach to internationalization” (p.19).
- Social/cultural development and mutual understanding: in spite of these mobile purposes, they do not carry, in many countries, “the same weight in comparison to the economic and political rationale” (p. 20); there is a shift from development aid to partnership exchange to commercial trade in education.

The institutional level rational include

- International profile and reputation: this interest in ‘branding’ is leading institutions to attract the brightest of scholars and staff and to “seek out accreditation or quality assurance services by national and international accrediting bodies” (p. 21).
- Quality enhancement/international standards.
- Student and staff development: internationalization dimensions “require that both students and academics have an increased understanding of and demonstrated abilities to work and live in a culturally diverse or different environment” (p.21).
- Income generation: internationalization activities are looked at “as a way of generating alternative sources of income” (p.22).
- Strategic alliances: increasing the number of bilateral and multilateral educational agreements and linkages, with development of networks.
- Research and knowledge production: the need of “international and interdisciplinary collaboration to solving many global problems such as those related to environmental and health challenges” (p. 23).

Economic motivation is often a key factor in academic internationalization, particularly in expanding access to international students. “Countries like the UK, Australia and Canada, have adjusted visa and immigration requirements to attract foreign students to their higher

education systems, motivated by substantial financial gain by enrolling large numbers of free-fee-paying international students” (Altbach et al., 2009, p. 28).

For example, the annual contribution in the USA of the international students to the US economy is estimated near \$15 billion (NAFSA, 2008, cited in Altbach et al.), and globally in the world, it is estimated around \$45 billion (Barrow, 2008, cited in Altbach et al, 2009, p. 28).

As described above, in addition to the economic reason, like income generation, higher education internationalization has an academic, political and cultural motivation. Many countries in Europe cooperate and frequently are in partnerships within the higher education sector in the developing world (in Africa, Middle East, and Latin America). The internationalization was also important on regional and international scales. The Bologna process and the European strategy in higher education adopted in Lisbon were examples of international engagement of 47 countries, in a voluntary process, in adopting the new European Higher Education Area (EHEA). This type of strategy became a reference to similar efforts in the world, in Latin America, in the African Union, in the Asia-Pacific region and in the Mediterranean region (Altbach et al., 2009).

2.4.3: Approaches to Internationalization

Different approaches to Internationalization are identified in the literature (De Wit, 2002, pp. 116 – 118; De Wit, 2010, pp. 10 – 11) such as:

- “Activity approach ... internationalization terms of categories or types of activity.”
- “Rational approaches ... internationalization in terms of purpose or intended outcomes.”
- “The competency approaches ... internationalization in terms of developing new skills, attitudes and knowledge in students, faculty and staff.”
- “The process approach ... internationalization as a process that integrates an international dimension or perspective into the major functions of the institutions.”

2.4.4: Globalization and Internationalization: Impacts on Society Institutions of Higher Education

As a result of Internationalization in higher education, Reinalda and Kulesza (2006) note a shift from public to private higher education institutions, and an increase in international trade in educational services. They considered that “these developments enhance the significance of the education market as an international institution, but also contribute to changing the structure of that market. In doing so, an increase in worldwide competition is being revealed” (p.99).

Knight (2008, pp.34 – 39) and De Wit (2010, p.10) note that the globalization impact on societies and economies have changed the landscape of international higher education, particularly in the

- The shift toward knowledge society and economy related to advanced progress in ICTS development
- Increase of competition for international students and academics, and the increase in mobility initiatives associated with brain drain/gain. Qualification recognition agreements and conventions have been established
- Emergence of new countries with big economies which have an important position in the higher education arena
- Wide post-secondary education demand, and the increased student access opportunities in academic, vocational and life-long learning types, combined with diversification in higher education programs, diplomas, qualification offered, provider sectors (public, private) and delivery types (distance/on line, cross-border...)
- Increase in the role of quality assurance and accreditation, with diversification in these types and agencies

“However, the changing landscape of internationalization is not developing in similar ways in higher education throughout the world – change in Europe is primarily from a more cooperative model to a more competitive model” (De Wit, 2010, p. 5)

“Internationalization strategies are filtered and contextualized by the specific internal context of the university, by the type of university, and how they are embedded nationally” (Frolich, 2008, p. 120).

Globalization and internationalization could present positive and negative impacts. For some, they offer new opportunities for higher education and research that are not limited by geographical borders; for others, they represent an infringement and even an attack on national culture and autonomy. Actually, these trends have two aspects: they offer opportunities and challenges and present risks. Remarkable effects, like mobility around the world of students, academics, programs and even institutions, have become an essential part of international academic cooperation agreements.

2.4.5: Higher Education Mobility in Internationalization and Globalization Contexts

Mobility is considered as one of the elements and instruments of internationalization. In Europe, as elsewhere, it is considered as part of the home degree, and that “there is an ongoing strong emphasis on the importance of mobility” as it has been declared in the communiqué of the conference of European ministers responsible for higher education on the Bologna process (Leuven, 28th & 29th of April, 2009, Point 18): “In 2020, at least 20% of those graduating in the European Higher Education Area should have had a study or training abroad” (De Wit, 2010, p. 10). At a global international mobility scale, several millions of students pursue studies abroad; the number was 2.800 million in the year 2007; and the estimated number is a rise to 7 million by 2020 (Altbach et al., 2009, pp. viii – ix).

The international students’ flow to certain countries reflects a national strategy; it also reflects the students’ personal decision to choose the country where they want to pursue their education.

Globally, the mobility phenomenon is strongly active:

- a) In a south to north direction—from Asia to North America, Europe, and Australia. Some countries have changed visa and immigration regulations to attract students and highly qualified individuals.

- b) Students' mobility within European Union—diverse programs have been established to encourage mobility, particularly, by establishing the European Higher Education Area and the adoption of the European Credits Transfer System (ECTS).

Higher education institutions have also developed many strategies to benefit from globalization and internationalization environments, such as:

- a) The introduction of an academic system of on-line education adapted to non-resident students.
- b) The proposition of teaching programs in the English language to attract students from various countries.
- c) The signing of academic cooperation agreements with universities abroad, leading to dual diplomas and to the conduction of common research projects.
- d) The establishment of campus branches abroad.

During the last decade, several institutions have been engaged in international activities and academic operations; Qatar, Singapore and the UAE are examples of countries which have adopted the internationalization policy into their national education. They encouraged prestigious universities from around the world to establish branches in their countries. One of these goals was permitting students from their countries or the region to access these universities, thus allowing these concerned countries to be considered as a higher education centers in the region.

2.4.6: Globalization and Internationalization: Challenges and Risks

Higher education internationalization in economic and academic globalization context requires the facing of institutional, managerial, academic, and financial challenges; some challenges and risks can be met.

2.4.6.1: The challenges

It is important to note the following major challenges in the globalization and internationalization phenomena:

- How to make the international opportunities fairly at the disposal of all? Students must benefit of diverse opportunities and advantages which, in a globalized higher education environment, does not amplify the asymmetry in the distribution of riches and privileges in the world.
- Internationalization requires access to financial and human resources that must be well used and managed. It is to be noted that when international opportunities are made available in poor countries (which are few in number) that lack the resources of private institutions, “serious disconnects between non-local- founder priorities and local need and interests” (Teferra, 2008 cited in Altbach et al., 2009, p. 31)
- Programs and higher education structure mobility present serious challenges. “New providers are crossing national borders with great ease” (Altbach et al., 2009, p. 31). In some cases, these crossings are propelled by the interests of the provider, and in other cases, providers are responding with all the support requested to the host countries’ invitations. The case of Qatar and Singapore are good examples – “These new cross border programs typically follow the structure of the providers’ home country and may or may not be compatible with the education systems, cultural norms, or labor market requirement of the host countries” (ibid).
- Due to the fast expansion of the higher education cross border providers, certain non-capacity implications occur that are required to “monitor the quality, ethics or conditions of the education being provided” (ibid, p. 32). The responsible authorities must establish and apply a qualification framework and a flexible standard guidelines, taking into consideration the local and national circumstances that are required to construct “effective systems of accountability, shared benchmarks, and standards for ethics and quality” (ibid, p. 29).

2.4.6.2: The risks

With the potential opportunities that could be met as a result of internationalization phenomenon, we should also take into consideration the concerns and risks that might result.

- The open-border policy may not be adequate or compatible with national needs and interests. This policy could cause damage, confusion and complexity on the local educational development. Deardoff and Yun (2009) state, “with globalization driving

the demand for global-ready graduates, it becomes crucial for administrators to assess these outcomes of internationalization to determine exactly what our students are learning through these efforts and how effective our programs are in achieving the stated learning outcomes” (p. 23).

- Inequality reinforcement by higher education globalization; Altbach (2004) studied this phenomenon, and stated that the “existing inequalities are reinforced while new barriers are erected” (p.7). He “aptly describes a world in which the influence of northern, and largely English-speaking paradigms for producing knowledge and setting scientific and scholarly agendas, dominate” (p.7).
- Having big financial resources, political, economic and social relationships, the elite universities in the wealthiest countries, hold the influence over the decision making process and over the development of international standards that concern teaching and learning approaches and models of managing higher education institutions. The other universities, particularly those in lesser developed countries, become influenced and could be in a disadvantage position. (Altbach, 2004, Altbach et al., 2009, p. 32).

It is clear that the context of globalization is resulting in inequality in higher education:

- There is inequality in opportunities in higher education systems between countries and within the same country.
 - There is a center and peripherals in the academic world. The prestigious universities are seen as the center since they have major research production due to important resources and talents. The other higher education institutions are distributed along the peripherals, near to and far from the center. A dynamic growing tension exists between the center and the peripheral institutions because of the ranking system of these academic institutions.
 - There is a privilege in the use of the English language in teaching and research, particularly in international ranking; it allows higher education institutions to benefit from financial, governmental, and private sources of research programs.
- The ranking continues to be widely used. Today, it has a strong influence on the decision makers, even though their methodology and criteria are deeply criticized.

- Some issues could be considered as key concerns and risks of internationalization and cross-border education, such as the:
 - Brain drain
 - Commercialization of higher education and the increase in low-quality outcomes.
 - Foreign degree mills and qualifications not recognized by domestic/ local employers or educational institutions.
 - National higher education policy objectives not taken into consideration.
- The concern of conducting an assessment using fixed standards and criteria without taking into consideration the various educational systems, the region and the different categories of the higher education institutions.
- International engagement could result in the detriment of cultural identity and national autonomy in regards to education. “Latin America, the Caribbean, and the Middle East have been identified as part of the world that are more sensitive to the possible loss of cultural identity through international engagement” (Knight, 2006, p. 66, cited by Altbach et al., 2009, p. 33). Hence, it is important that while doing the negotiation process for the trade liberation in higher education that the national higher education sector, such as academics, managers, stakeholders, and educators, be informed and vigilant about the “risks and benefits, and more importantly about the need for appropriate policies and regulations to guide and monitor current and future developments” ” (Knight, 2006, p. 65, cited by Altbach et al., 2009,, p. 35).

2.4.6.3: Other opinions on concerns and risks.

Others argue that:

- “Nontrade initiatives for international cooperation also present complex side effects, leaving smaller and/or poorer nations potentially more vulnerable in these arrangements” (Altbach et al., 2009, p. 35), “birth of a new class of deterritorialized transitional policy actors” (Rinne, 2008, p. 675) which “creates tension with the long-held paradigm in higher education. as an enterprise at the service of national interests” (Altbach et al., 2009, p. 35).

- Positive opportunities in internationalization of higher education are seen by Ninnes and Hellsten (2005 cited in De Wit, 2010, p. 10): “Under internationalization, the world is our oyster, or perhaps, our garden, in which we saw the seeds from the fruits of our academic labors.”
- Frolich and Veiga (2005), point and mark on the complex and multi-dimensional characteristics of the internationalization process. Following this process, “the fostering and impeding factors of internationalization activities developed at an institutional level are not only in the national and international contexts. There are influences deeply rooted in normative and cultural insights, such as history and culture; academic disciplines and subjects; HEIs profiles and individual initiatives; national policies; regulating frameworks; finance; European challenges and opportunities; and, globalization” (p.9).
- An interesting essay is written by Brandenburg and De Wit (2010, p. 16) where they observe that there is a tendency to see “internationalization as ‘good’ and globalization as ‘evil’. Internationalization is claimed to be the last stand for humanistic ideas against the world for pure economic benefits alleged by and represented by the term globalization. Later, Brandenburg and De Wit (2011) criticized the huge marketing that the internationalization phenomenon has received from many educational and business decision makers and worldwide organizations. They recommended to put an end to internationalization to open the way for the emergence of “the post-internationalization age” (p. 16); thus, the concept of internationalization has changed, moving from simple exchange of students or small ‘elite’ group, to the big business of recruitment and mass phenomenon.

Based on Brandenburg and De Wit (2011), a constructed antagonism is built between internationalization and globalization. Internationalization is defended as being a synonym to ‘doing good’; while globalization is considered as ‘symbol of predominance’ (p.16). In fact the higher education activities as a trade commodity in the globalization concept “are increasingly executed under the flag of Internationalization” (ibid). Moreover, the innovative developments of digital citizens have transformed the international student mobility, which is an essential element in the concept of internationalization, to at least a virtual one that would be perceived as a sign of internationalization devaluation (ibid). Both Brandenburg and De

Wit believe that “the future of higher education is a global one, and it is our job to help preparing the higher education world for this” (p.17).

At the end of this section, we note that within the globalization context, labor market should be open to the international scale with wide recognition of the outcomes of national education programs; however, this objective remains to be attained. Most graduates work in their own countries or those that are within the geographical region. Thus, national learning programs and contents need to take into consideration the relevant national or regional social, cultural and economic situations. Accordingly, many debatable speculations come to mind related to globalization and internationalization, such as:

- 1) Do internationalization and globalization lead to more understanding and appreciation of people’s life mode and cultural diversity, or are they a means or an agent of imposing life model and cultural homogeneity?
- 2) Can we limit or monitor the shift from the social and cultural purposes of education toward the economic and commercial interest in internationalization and globalization?
- 3) How can internationalization and globalization and the relevant agreements enhance the benefits of academic and professional mobility, and at the same time mitigate the unidirectional brain drain?
- 4) What are the implications of quality assurance of cross-border or franchise of delivering an education/training program?
- 5) Do national identity, regional integration and internationalization requirements be conciliated? Can equilibrium be established between the wide use of transnational education and that of national cultural, social and economic considerations?

2.5 Pedagogical and Academic Approaches:

2.5.1: Teaching and Learning Approaches

The changes in the university systems during the last decade had a significant impact on the teaching approaches and methodologies: “how and what the students learn”, and the evaluation manner of knowledge, skills, teaching and learning (Altbach et al., 2009, p.111). The access to higher education is more than just the physical entry of a student to the institution; the real progress of the learning process of the student is evaluated in relation to the satisfaction of all the stakeholders.

On the other hand, the massification growth of students having diversified academic backgrounds, create pressure on the higher education systems that obliges them to introduce new pedagogical approaches, new means, and new academic supports, such as the students’ engagement in classes at the university is strongly influenced by the courses’ content, the teaching and learning approaches, and the methodologies.

Although it is difficult to generalize, the mission of most higher education institutions is to offer professional programs more than before. The teaching of basic or fundamental disciplines (Physics, math...) is clearly being reduced. More attention must be given to students’ needs “to develop skills, knowledge and attitudes so as to operate effectively in more complex, fluid, and ambiguous environments” (ibid). Moreover, the students must be instructed and trained to engage themselves in continuous learning activities during all their active lives. The higher education institutions must also be prepared to respond to these needs.

Before the end of the 20th century, the academic reputation of most universities around the world was based on research activities, while teaching was delivered to very qualified and motivated students; bad results were attributed to deficits on the students’ part, rarely to poor teaching. Currently, in most universities, teaching is the responsibility of the academic concerned departments; instructors have the liberty and the initiative to choose the pedagogical approaches that are considered compatible. Moreover, the appointment and the promotion of the instructors are based on research more than on ‘teaching proficiency’.

‘Teaching excellence’ is often considered as an individual talent, and not a competency or skill that could be developed and fashioned by instruction and training – “the prevailing conception of teaching emphasized what teachers did, not what students learned” (ibid, p. 113).

Actually, quality assurance gives more attention to effective or good teaching. Initially, the definition of assessment meant “retrospective managerial assessment of the institutions’ activities that operated irrespective of teaching theory or research findings on what constituted good teaching” (ibid, p. 114; Liston, 1999). Then stakeholders force universities “to take leadership responsibility for teaching rather than leaving it to departments’ heads and individual professors” (Altbach et al., 2009, p. 115).

Today, the larger student population has diversified abilities and motivations; thus, higher education is more oriented to professional educations, particularly those based on ‘functional knowledge’.

Many pedagogical research groups (Boyer, 1990; Biggs, 1993; Marton et al, 1997; Prosser & Trigwell, 1999) studied ‘the student learning approaches’, and accordingly concluded that a teaching model that prioritizes learning outcomes and student-centered pedagogical approach is to be adopted: “good teaching, in other words, would focus less on what teachers do (declarative knowledge) and primarily on what students learn” (Altbach et al., 2009, p. 114).

The Bologna process presents examples of university system evolution and educational paradigm changes, with objectives to “bring compatibility and quality assurance across Europe’s many and varied higher education systems, while promoting transparency, mobility, employability, and student-central learning” (ibid, p. 112). Hence, enormous changes are introduced into the teaching and assessment approaches based on ‘clear understanding’ of meaningful higher education outcomes (ENQA⁵ Report, 2009; ESG⁶, 2014, ESG, 2015). The studies developed on the outcomes of teaching and learning have provided support and bases

⁵ ENQA (1998) The Council of Ministers of Education 98/561EC, available on www.enaa.net. On November, 2004, ENQA was changed from a network into an association (European Association for Quality Assurance in Higher Education)

⁶ ESG: European Standards and Guidelines for Quality Assurance in the Europeans higher Education Area

for higher education institutions to construct new teaching and learning resources and methodologies and new outcome standards which will assure high quality teaching and effective academic operation (Singh, 2011).

However, universities must, within the frame of their roles, act, operate and proceed to reach the higher education objectives to develop human resources in response to a growing global economy. Thus, studies are conducted to construct curriculum adequate for students' needs to be potentially prepared to work within knowledge- economy context; these needs are often ambiguous and ever evolving.

Some propositions have emerged about “interdisciplinary curriculum, focused on creativity, critical thinking, cultural awareness, problem solving and communication skills. The knowledge economy is more often requiring a work force of generalists who can adopt, know how to learn, and can manage and assimilate greatly expanded quantities of information” (Task Force on higher education Society, 2000, p. 83).

2.5.2: Different Models of Teaching and Learning Outcomes

Outcomes, as added value ‘product’, resulting from the teaching and the learning phases in higher education, are the most critical level in the institutions’ performance, teaching efficiency and quality assessment (Tam, 2014; Brawley et al., 2013). It is first critical for the institution itself, for all categories of individuals involved in the system, and for all social, economic and governmental network and stakeholders.

This accomplished added value is often evaluated by the students themselves against their expectations from higher education and issued diplomas; it is also assessed by the societies’ organizations and authorities in the public and the private sectors.

The evaluations are conducted on the bases of:

- Direct benefits such as job opportunities and commercialization of innovative ideas.
- Indirect benefits which concern the use of skills and knowledge acquired towards personal and societal objectives.

Teaching and learning outcomes are classified by educators into two models:

- a) Outcome-based education model
- b) Outcome-based approaches to student learning model.

The difference between these models was well described. Miller and Ewell (2005 cited in Altbach et al., 2009, p. 119) state that “the outcome-based education models refer to institutional or systemic outcomes defined for the needs of external audiences. Averaged student performances, for example, are designed to meet accreditation requirements and the requests of external stakeholders like employers and policy makers. But how to determine these performances?

The model of outcome-based approaches to student learning “especially concerns program and course outcomes and the enhancement of teaching and learning both in and, in some cases, outside the classroom” (National Committee of Inquiry into Higher education, 1997 cited in Altbach et al., 2009, p. 119). “The teachers’ fundamental task is to get students to engage in learning activities that are likely to result in achieving those outcomes” (Shuell, 1986, p. 429 cited in Altbach et al., 2009, p. 119).

Following this model, the teacher must play the role of a ‘catalyst’ and ‘organizer’ of knowledge, and must help students through active and critical discussions and exchange of ideas to attain the sought outcomes. This model is founded on two principles (Altbach et al., 2009):

- a) “The knowledge is constructed by students through their own learning activities” (p. 119).
- b) “Outcomes needed to be stated upfront and be aligned with both teaching methods and assessment strategies” (ibid).

Thus, teaching “shifts from ‘declarative knowledge’ to ‘functional knowledge’” (ibid, p. 120). It must be based on adequate course design, curriculum development, and classroom and out of classroom activities, all of which will produce stated student learning outcomes. Then, the teacher assesses students “in terms of “how well they attained the outcomes” (ibid, p. 120).

2.6 Teaching and Research Functions of Higher Education Institutions:

The prestige of higher education institution is often associated with the research outcomes produced by the academic staff. Thus, in many universities, the research function gets prioritized on the account of the teaching function. Today, this consideration is amplified and influenced by the ranking system which is mainly based on research activities and research production. The fact that public and private financial funds are strongly influenced by the university's ranking, places the teaching-oriented universities at a disadvantage.

However, several educators and teaching staff consider that “producing a skilled labor market force is more than ever a critically important function of higher education” (ibid, p. 116). Moreover, since the promotion of the academic staff is mainly based on a research criterion, as such, most instructors are indirectly forced to focus all their efforts on research activities rather than on the vital issues of teaching enhancement and classroom function improvement. But, in such a complex context of ‘competitive knowledge market’ of the teaching approach trends, universities must take care of the quality and relevance of their teaching activities. Thus, the teaching staff should also give more attention and effort to improve teaching, learning and assessment. The quality of teaching should be considered as an institutional responsibility, where policies and procedures are to be developed to enhance teaching, learning and assessment as well as the establishment of criteria to take into account the promotion of the staff. Establishing a teaching, learning, and development center within the higher education institutions could constitute a lever of these objectives (ibid).

2.6.1: Academic Profession, Qualification and Status

The Academic profession is a wide subject and is essential for the educative system. In this paragraph, we will limit the discussion to a brief consideration of the relationship between the academic profession environment and the quality of learning in particular and the institutional academic function in general.

A well-qualified academic staff is the first requirement to achieve success in higher education institutions. Impressive campus, well-equipped laboratories, innovative programs, structured

curriculum, software and advanced technology, do not produce noticeable results without profound professional professors, for “the people who make any academic institution successful” (ibid, p.89).

During the last decade, trends, economic circumstances and new situations such as “growing enrollment demand in higher education, constrained budgets, and greater accountability” have affected the academic profession environment and the working conditions, like academic status, teaching load, and salary. Moreover, this profession has been affected by massification phenomenon; in most higher education institutions, the workload of the academic staff is mainly in teaching activities, whereby not all teachers focus on research activities. Therefore, as part of accountability and assessment of the academic work, academic evaluation must be part of the quality assurance process.

For many teaching universities, the highest academic qualifications (PhD, Doctorate...) are not always a requirement. Though some instructors might have experience and competency that would compensate for the higher diploma title, still such instructors will be “paid less than their peers at the top of the system, teach more, and in general have less adequate working conditions... with vast differences among countries and according to discipline” (ibid, p. 90). Moreover, the need to respond to massification in many countries has caused a decline of average qualifications, at the degree level or in teaching and research experience. In addition, the significant difference in salaries among countries causes brain migration to the countries that pay more (ibid, p. xv and pp. 90 – 94).

Higher education institutions must pay more attention to employ better qualified instructors by developing policy, mechanism, and a process to enhance the latter competencies and skills, particularly in the teaching and learning activities (Ramsden, 2003 cited in Tran, 2015). The said institutions could, for example, establish a teaching and learning development center to

- Prepare the teaching staff to attain academic proficiency by developing their educative skills and improving their activity practice, for this would directly affect the quality of teaching and learning in the classroom.
- Provide required and additional resources for the teaching staff.

- Help the teaching staff to resort to the usage of technology to resolve some educational problems.

Good functioning higher education institutions require the engagement and cooperation of all academic and administrative staff. The instructors must effectively engage their time and competencies in university's activities, such as, teaching, research, academic responsibilities, and commitment to students. Effective engagement requires that part of the teaching staff have a full-time status. However, in many higher education institutions worldwide, such is not the case, especially in higher education branches off the main campus' location.

To summarize, the academic profession is 'under stress'; it suffers from many issues, such as:

- Deterioration of qualifications
- Inadequate compensation
- Decline in a real full-time professorate

These situations have a significant impact on the quality of higher education.

2.6.2: Research Environment

Research is recognized as part of the mission in modern universities and plays an important social and economic role. Starting from the fact that, in modern universities, the production of new knowledge through research is linked to teaching functions, many universities that desire to focus more heavily on research are in front of "significant variations and tensions relating to the balance of teaching and research responsibilities within the institutions" (Altbach et al., 2009, p. 151). To retain the important link between teaching and research functions, a solid association between these functions is performed through the development of research-based doctoral programs.

Today, modern universities have three missions: Public service, teaching, and research, knowing that some research programs may be considered as part of a public service; "The notion of a 'third stream' of activities, or 'third mission' of the university, is actually aligned with research capacity" (Laredo, 2007). These missions could co-exist in the same university with different tension levels.

In many developed countries, governments and industries allocate large funds for big research projects, hence encouraging universities to invest in advanced research domains. These projects contribute to the emergence of modern research universities.

A research university requires large investments to become operational (construction, equipment, technological infrastructure, and scientific documentation). The scientific production must be in innovative domains, which are very important to the national plan development as well as to the prestige of the university.

The knowledge economy direction resulting in spectacular growth of scientific and technological research direct universities to develop research in new fields, such as, biotechnology, nanotechnology, information and data science, which offer interesting industrial applications.

2.6.3: Funding and ranking of higher education institutions.

Accreditation, and international ranking are important factors in the research environment; they are major prerequisites to obtaining major grants or research projects. Ranking among universities is essentially based on research production, such as patents, publications in highly-ranked journals, and conferences. Due to this ranking system of higher education institutions, small-sized universities are obliged to choose whether to appear at the lower rank of the ranking table or leave the competition and restrict their activities to teaching. This situation could affect and compromise their accreditation and the academic profession of their academic staff.

Funding reform movements have started in many developed countries (Pritchard, 2006; European Report on Science and Technology Indicator⁷). “The correct trend is to allocate research funding to universities on a competitive basis to make more efficient use of research funds and target problem-oriented or industry-oriented research programs” (Altbach et al., 2009, p. 143). In this context, the research teams should collaborate with the private sector.

⁷ Towards a knowledge-based-economy (Studies) European Commission, Community Research

University – industry linkages through research projects “provide important career development options for researchers who are more frequently than ever moving back and forth between academia and industry” (ibid, p. 151). Moreover, the linkage ‘university – government – industry’ results in an organizational change within the university; for example, creation of offices and positions to, for example, encourage entrepreneurial thinking, develop start-up companies, and to commercialize the intellectual property of the university.

2.7 Diversity and Convergence in Higher Education Institutions:

Two trends come to the forefront when discussing institutional change in higher education, namely, diversification and convergence. An example of diversification is the case of higher education systems of North America. The case of the European higher education process (Bleiklie, 2004; Guri-Rosenblit and Sebkova, 2004; Usher, 2009) is an example of convergence in higher education institutions. In fact, higher education institutions are complex entities; they include, simultaneously, some dimensions of activities that might be the subject to convergence or diversification trends. In response to economic considerations and massification process which highlight the need of expanding educational and training opportunities, higher education institutions are pushed to become more diversified; however, political considerations and internationalization conditions are pushing these institutions towards more standardization and harmonization.

2.7.1: The Diversity Aspect

The aspect of diversity concept at institutional level related to quality assurance has been discussed by Léchleiter (2009) and Moutsios (2013). Diversity is considered as “a natural and important feature of universities; like quality itself” (Léchleiter, 2009, p.7). In higher education institutions, diversity means that each “institution has a unique set of values and identity (ibid, p. 60), and within the university, there is individuality of each academic

compound, staff or students; from disciplinary diversity, new trans-disciplinary mode of knowledge production can emerge (ibid, p. 59).

Some of the forces acting to increase diversification are:

- i) The shift of mission of higher education systems: Higher education institutions have to provide a diverse range of services and programs, with varying quality, purpose and resources (Guri-Rosenblit and Sebkova, 2004; Altbach 2008). Higher education required to smooth the “pathway to degrees from outside the formal higher education systems” such as “recognition of both formal and non-formal prior learning, bridge programs between occupation and degrees” (Usher, 2009, p. 19).
- ii) The change in the structure of labor and economy: Higher education institutions are required to meet varied economic expectations as to program delivery and training for work in the labor market (ibid).
- iii) The increase in the presence of private higher education institutions within the systems: Many of these institutions educate diverse type of students in different geographical areas, and teach specialized subjects. To be economically feasible, these institutions should be necessarily constructed on bases other than old models of traditional universities.

To face the complexity and diversity of these situations, the mission of many institutions, the sources, and the developed approaches have to become diversified and specialized.

2.7.2: The Convergence Aspect

Economic and political considerations often push toward convergence trend introduced by the harmonization and the standardization of governance and educational dimensions in higher education institutions. Among the forces that push for convergence are the following:

- i) In response to knowledge-based economy, higher education institutions are invited to change the ways in which they are managed and envisioned, especially in their roles of knowledge production (Usher, 2009, p.20). Thus, more higher education

institutions, in many developed countries try to emulate the model of the American Research University. Then, geographical agglomeration of talented, highly qualified scientists and venture capital become very important (ibid). These phenomena are dramatically influenced by ranking exercises of world universities (like Shanghai Academic Ranking) that reserve heavy marks to the production of knowledge (publications, citation counts, patents, awards, etc...). Academics are incentive to invest in research to gain or preserve academic reputation and the required norms of the academic profession.

- ii) Transnational agreements raised in world regions, especially in Europe – the Bologna Process— were a major force behind the harmonization process in many higher education institutions. “The move to a common degree structure and programs’ lengths has by design reduced the diversity of programs across the continent” (ibid, p. 21). Many efforts have been developed “to determine learning outcomes of higher education on a programmatic basis using a methodology that produces reference points for statements of learning outcomes, levels of learning, and desired competencies” (ibid).

Moutsios (2013) criticize the convergence/harmonization imposed by the Bologna process, in that it is “restructuring university along the same lines” (p.29). He considers that this reform process deeply affects the diversity of the higher education system, though this opinion is not shared by other academics (Amaral, 2006; Reichert, 2007; Froment, 2006). It is “undoing academic autonomy in all its three dimensions: the political (policy formulation and governance), the cognitive (Knowledge creation and organization) and the pedagogic (knowledge impartiality)” (Moutsios, 2013 p.30); among many facts, Moutsios pointed out the following:

- i) “All quality assurance process and agencies must abide by the standards and guidelines (ESG) for quality assurance in the European higher education, which sets the rules for internal and external evaluation of universities” (p. 34).
- ii) The academics become exposed to the market relation; they are not understood as being independent personalities, but as ‘brain power’ forced to “make their interests and knowledge available for purchase by any potential buyer” (p.36).

- iii) “Academics, in all countries, that have signed the Bologna process should be designing their courses at all levels by defining expected outcomes in accordance with the categories and language prescribed by the qualification frameworks”. There are a “pedagogic standardization”, a “tuning educational structure”, and a “tuning methodology’ (p.39).

In sum, there are a number of pressures that face higher education institutions, they are

- Diversification of study programs and degree types in response to societal demands
- Convergence process, promoting harmonization of pedagogical curriculum, and program outcomes, in response to internationalization requirement, especially that of student mobility.

Being under pressure from a variety of stakeholders and from global or supra-national sources, national higher education systems are forced to become multi-purposed educational systems.

The issues evoked above should form the basis of subjects for debates and discussions on the core role of the higher education systems “within a global-community, transcending the national borders, and embracing the concepts of sustain ability equity of right and access, advancement of education and research and much more” (Brandenburg and De Wit, 2011, p. 17); and, on the role of the universities that should prepare students to live and work in fast-evolving world, dominated by competitiveness (ibid).

2.8 Financing Higher Education – The Privatization Trend:

Higher education has been traditionally perceived as a public good and considered as an academic economic engine that contributes to the society’s progress, civilization of people, and to human capital enhancement. It was mainly a public aspect in regards to financing, status, rules, management, enrolment and orientations.

Two decades ago, some changes of views have occurred whereby higher education has been perceived as a private good, with wide individual benefits; consequently, institutions and

students must provide an important part of the higher education cost. Moreover, the higher education massification needs major financial resources, while, in most countries, this cost was traditionally part of the state's obligations. A debate has ensued as to whether financing should be a part of the parents' obligations to cover the higher education cost.

2.8.1: Debate on Financing Higher Education

The rapid growth of the higher education sector — from the elite to the masses and to universal systems in several countries — has generated financial pressure on governments where tax revenues cannot cover the cost of the required resources incurred due to this massification phenomenon. Public higher education institutions are being asked by their governments to be less dependent on public funding and to try to generate their own revenues from research, expertise and services contracts etc. to finance the operating expenses and at the same time to be competitive and efficient.

This challenge has resulted in a new restructuring of the social mission of the higher education system where new relationships, implications and obligations were established, and which required more responsibility and more contribution from the parents and students to the schooling cost. In fact, this was part of the widespread political trend towards the privatization of services, including the public higher education sector that was particularly legitimized by the 'private good' argument. This trend reflects different social philosophies and ideologies.

However, whatever the challenges of the economic and political circumstances and environment are, the cost must not constitute a barrier to the intellectually qualified students who might not have the private financial means to attain higher education.

Governments of many countries have encouraged the growth of the private higher education sector, where parents and students have become the highest contributors to the cost of higher education. But this increase in privatization or diversification aspects could have a significant impact on the initial nature of the institutions.

2.8.2: *The Private Sector in Higher Education*

The remarkable extent and the importance of the growth of the private higher education sector, have attracted the attention of the national and international higher education authorities and organizations (Altbach and Levy, 2005; Pachuashvili, 2008). Indeed, globally, more than one third of students enroll in private higher education institutions as stated by Gürüz (2008 cited in Altbach et al., 2009) in *Programs for Research in Private higher education Institutions (PROPHE)*.

The growth in the private higher education varies in regard to different regions as delineated herein:

- In countries in east and south Asia and in USA house the largest higher education sector (PROPHE, 2008). In some countries, enrolment in the private higher education sector reaches 70%, such as Philippine, South Korea, Japan, Indonesia, while Malaysia presents a lower percentage (50%); the USA holds the highest of private institutions as well as research institutions.
- In central and eastern Europe, the enrolment in the higher education private sector is near 20% (Slancheva and Levy, 2007), and more than 25% in Africa (Mabizela, 2007).
- In Western Europe, the higher education private sector remains as a marginal sector, except in some countries where the majority of these institutions are private, like the Netherlands. However, there exists a tendency of proliferation of private higher education institutions in some countries like Germany and Italy.
- In the Middle East and North Africa, an important growth in private higher education institutions exists, particularly with American and European styles often accompanied with agreements with EU and US universities. In Lebanon, the enrolment in the private higher education sector reaches 65%

The phenomenon of growth in the higher education private sector was considered as a result of the massification trend in higher education and to the limited public resources. But the private sector also has favored and facilitated this massification trend, even though certain private universities were selective in students' recruitment. On the other hand, this massification, and even the facilitations by the private sector, was considered as risk issues in

the detriment of the quality level of the delivered diploma and the quality of engagement of many of the private institutions. Hence, “Private higher education has had a significant impact on the discussion of quality, equity, new learning modes” (Altbach et al., 2009, p. 80).

2.8.3: Identity and Types of Private Higher Education Institutions

The identity and type of private higher education institution reflects the identity of its founder; for example: religion, NGO, social development association, civil company that adopts the mission of higher education dissemination and for-profit company. The institutions founded by religions, NGO or social development associations appear more as non-profit.

The private higher education institutions could be classified into three categories, namely elite institutions, semi-elite institutions, and non-elite institutions, although there is an overlap among some categories.

Considering the standards used to be classified under ‘elite category’, for example the World Banking, few private institutions outside the US could be classified as such; few European and Japanese private universities are classified as elite higher education institutions. However, the private higher education institutions are mainly present in the semi-elite category. They might be among the well-classified higher education institutions in their country; they usually attract the best-prepared students in said country (Levy, 1986). Generally, a semi-elite private higher education institutions uses selectivity in their admission criteria, and give priority to good practical teaching and applied research; “Most semi-elite institutions are explicitly and successfully job oriented” (Altbach et al., 2009, p. 84).

The largest increase is noticed in the non-elite private institutions which could be as a response to students’ high demands to join higher education institutions, which cannot be absorbed by the public or better private institutions; it could be pushed by for-profit aspect.

The growth of the for-profit institutions is notable, especially in the developing countries and in some developed ones, such as USA, UK, and Australia. Many institutions in this group are established by international companies; they operate across national boundaries and establish profitable cross-border partnership with a private local partner (Kinser and Levy, 2006).

Many engaged institutions from this group adopt business models and functions similar to those of the industrial enterprise. Their decision making authorities in their higher council consider teaching as a service, diplomas as products, teaching staff as employees, and students as customers

In many countries, the non-elite private institutions contribute to the proliferation of their higher education institutions, and hence a significant increase in students' enrolment. Many of these institutions have been denounced; "much of the denunciation is valid, but sometimes applicable to low level public institutions as well" (ibid, p. 85). However, there are some serious, responsible, job-minded and well-managed institutions under this category that have similar attributes as those that define the semi-elite category (Cao, 2007; Altbach et al., 2009, p. 85)

In conclusion, in spite of some critics who have debated over the impact of revenue-generating activities on the traditional roles of the higher education institutions in teaching and research, privatization has become an important option in the higher education sector. It constitutes a way to the aforementioned challenges and contributes to the diversification in higher education.

Within the context of this trend, quality has become a major preoccupation for the higher education authorities "to ensure that private higher education, and for-profit institutions, in particular, maintain appropriate standards and serve society..." (Altbach et al., 2009, p. 168).

2.9 Quality Assurance in Higher Education:

In the last decade, Quality Assurance in higher education became the focus of the policy calendar of most countries. In the context of the new trends and objectives of higher education, students are to be prepared for new competencies, furnished with a wide basic knowledge and diverse skills in order to enter into a complex world and interdependent disciplines and professions.

In these contexts, we can cite the following issues:

- The globalization trend, numerous regional policies and the growth of trans-border students' mobility, render the establishment of standards recognized by most nations of utmost urgency and necessity.
- The rapid growth of higher education systems and the appearance of new higher education providers (higher education is considered a service) pose new questions as to the quality and standards of education provision.

Higher education stakeholders (students, parents, employers) demand qualifications and institutions' certifications, though quality is recognized as a multi-dimensional concept, numerous countries have worked hard to establish a model (structure, pattern) to evaluate higher education institution. In the context of the quality assurance process, evaluators focus, in many cases, on outcomes' assessment as a part of the global quality evaluation of the institution. The Bologna process has reflected the progress on many related issues in higher education and quality assurance. A common structure of a diploma and a common frame of qualifications were created. In sum, quality assurance plans, programs, and projects are actually considered as a fundamental part of higher education. This subject will be discussed in details in the next section of this study (Chapters 4 &5).

2.10 Information and Communication Technology in Higher Education:

Numerous academics consider that information and communication technology (ICT) has an important impact on all academic and administrative aspects of the higher education institutions, such as teaching, management, library services, research production and student life (Guri- Rosembliit, 2009).

Different terminologies are used in ICT applications in education, such as e-learning, distance learning and 'dual' or 'mixed-mode' education. These terms are not the same, but are often used interchangeably in a non-appropriate manner. Some definitions are coined by experts

(Guri -Rosemblit, 2009, pp.2 – 9; Arafeh, 2004; Altbach et al., 2009, p. 125), and are presented herein:

- E-Learning refers to any type of learning using digital technologies to full substitution of the face-to-face meetings by online encounters.
- Distance learning refers to method of delivering education that does not require students to assemble in a particular location.
- Mixed-mode education (in conjunction of face-to-face and ICT instructional tools) is often adopted by many higher education institutions.

ICT constitutes a basic part of the institutional infrastructure in the higher education sector; their resources provide avenues for academic collaboration, joint research and professional networking. Though ICT resources and applications present benefits for higher education, they however present a complex set of costs (hardware, software, technical support, access to expensive online journals and database, and stored data...).

Many ICTs elements, resources, and applications deployed in higher education (database, remote access, library database, email, website, social networking tools, and wireless network) have altered the notion of time and place for work and study on campus (Altbach et al., 2009, pp. 126 – 128).

Various combinations of online and virtual resources have essentially contributed to the distance education expansion; free access to courses, curricula and pedagogical approaches are provided through open education resources (OER) (D'Antoni, 2008). Moreover, ICTs have boosted the potential of distance education to reach wide and new pools of students. Innovative pedagogical approach and content are also produced. Some mega-universities that exist have more than one million students enrolled. Quantitatively, this is a significant phenomenon (UNESCO, 2005). Guri-Roswnblit (2009) concludes that “even in face of incredibly powerful and innovative technologies, teachers in both developed and developing countries remain central to the learning process.”

The advantages, opportunities and benefits of distance learning provided by higher education are enormous; they

- Meet high demands for access to higher education.
- Satisfy the rising demands that growing traditional higher education system is not quick enough due to the economic state of many developing countries.
- Rapidly keep up with new knowledge development than that required by the traditional program and curricula changes; “the ephemeral nature of knowledge is today’s fast paced global information society means that many developments in key fields such as economics, finance, the sciences and technology – are extremely fast paced, while the life span of innovative products is quite short” (Altbach et al., 2009, p. 132).
- Respond to the need for continuous learning and ongoing skills upgrades “the challenge of providing lifelong learning opportunities for broad swathes of adult population via traditional delivery modes of delivering is daunting” (ibid, p. 133).
- Have the “Ability to accommodate the needs of a wide variety of learners” (ibid).
- “Provides great flexibility and versatility” (ibid).
- “Made learning possible virtually anytime and anywhere in the world” (ibid).

2.10.1: Distance Education: Challenges and Risks

A number of challenges and risks could be derived from distance learning:

- Challenge related to exacerbation of the gap between knowledge producing ‘center’ and knowledge consuming ‘peripheries’ (ibid, p. 128).
- Challenges related to quality assurance “as distance education markets expand and the importance and acceptance of the sector in higher education circles rises, the emergence of questionable, even fraudulent providers is cause for growing concern” (ibid, p. 133).
- Most countries have limited resources and regulatory backing to cope with the emerging issues related to distance education, track fraudulent entities and diploma

mills and take appropriate measures to curb unscrupulous practices and providers (Kimani, 2008 cited in Altbach et al., 2009).

There exists a bogus operation in distance education in countries like the United States, where robust quality assurance and accreditation traditions prevail.

- The liberalization of the global economy has made it possible for educational providers to operate across borders where
 - they are not answerable to the jurisdictions of national regulatory system of users.
 - they are not fully controlled in the countries they moved to or from those countries in which they used to operate and failed to meet the required policies and standards.
- Educational ‘products’ used in distance education curricula, programs, methodological approaches and content are often designed in standard formats, developed and marketed by providers from developed countries; these educational products do not often adequately address local needs, interests or values of large end-users of distance education in developing countries. (Altbach et al., 2009, p. 135).

No evidence and clean clear impacts related to the use and effectiveness of ICTs in teaching and learning. Indeed, the speed of innovations in ICTs, where new technology rapidly replaces old ones, renders study results of their effects on teaching and learning obsolete, though it is important for the teaching staff to receive technological support in their teaching activities. Furthermore, ICTs are clearly an important tool in research activities (Guin-Rosembli, 2009)

Although many academics consider that traditional universities become obsolete because of the important progress in ICTs and innovative approaches and methodologies induced by the new technology, we consider that the disappearance of traditional university shall not occur in the near future. These universities can use new technology as support to quality enhancement; they remain a need and an important part of the higher education system. From what was presented, and taking into consideration the global and wide spread context in the world, traditional campuses will exist with a degree of transformation; Information Communication Technologies (ICT) strongly support the traditional programs delivery

method. The traditional universities could also combine both ICTs and traditional programs delivery methods.

2.11 Digital Technology Revolution's Effects on Higher Education:

Technosciences, especially digital technologies, deeply change our modes of life; a flashing transition era announces a revolution in the individual, societal, pedagogical and managerial modes (Giorgini, 2014). Job description, societal relations and interactions, teaching and learning are being affected and will undergo deep re-configuration.

On an educational aspect, students contribute to the competency enrichment that is being transmitted. All actors are considered as knowledge sources in reciprocal mode, and the acquisition of competency conditions have changed by the use of high technologies. Hence, new methodologies and processes occur, such as reversed education (student studies at home the courses' content that is made available on line, and discusses and interacts with professors and other students during the lecture). The new technological revolutions have become epistemological revolutions, posing new questions about the status of knowledge per se (Vignon, 2014, p.13)

2.11.1: Source of Knowledge: Network Intelligence, Internet Mode

By a similar manner that is used in the information technology systems, cooperation and distributed mode represents network intelligence, where “global intelligence is not only located in the central server, but, global processing of stored data are distributed to the network. We are in a global convergence to the ‘Internet mode’” (ibid, p. 43). The Internet is an infinite source of knowledge, with bidirectional instantaneous, traceable linkage and capitalized information. The Internet mode has become a part of most of the human life activities; it is not only a media change, but a global paradigm change at all levels, be it cognitive, sociological, economic, technological, political,

This paradigm change poses some questions as to the existing model applied in the traditional higher education systems. Today, it seems that this model can no longer play a central role in the evolved societies. With the arrival of the Massive Open Online Courses (MOOC), formal knowledge acquisition can be acquired apart from teaching on campus at a predetermined time.

Nowadays, multi-sources can provide knowledge; this may considerably shift the primary core of the university added value that essentially came from teaching and research that is ‘co-localized’ in time and space. However, the university can play a new role in acquiring knowledge and education by transforming its educative approach to become an ‘eco-system of learners’. This can be accomplished by adopting an open-shared knowledge approach with multi-disciplinary projects. Such a move is apt to introduce real change into the physical and pedagogical organization of the university, including the instructors’ and researchers’ job descriptions.

2.11.2: Network Phenomenon and the Role of the University

Roche (2014) discussed the implications of the Internet technology on the role of the university in the context of the accelerated move of knowledge on the web and the students’ attitude towards the use of the network to access such knowledge. He considered that the Internet allows access to information about global competencies; however, such competencies are not acquired only by formal access but through actual application. In fact, knowledge cannot be measured by the content that is made available through the Internet, but by its effect on the individual’s knowledge of the subject in an applied context.

Because of its dynamic dimension, knowledge is created by teaching/learning action or by individual or collective elaboration at the moment of its construction. Thus, knowledge access via the Internet requires more effort at the methodological aspect. For universities, the challenges or issues are in adopting and then evaluating the teaching and learning as per this new context (ibid, pp. 240 - 241).

The MOOC Development, considered as an interesting innovation in the pedagogical sector was seen as a logical economic efficiency: in few years, only few MOOC would replace hundreds of instructors (Roche, 2014, p. 248). Moreover, it can be observed that the enterprise creates knowledge for practical finality, not for pure knowledge, and that the construction and/or the knowledge transmission are associated with the created product.

In these contexts, how should the university react, considering that the fundamental and real mission of the university is guiding the students to acquire competencies and to form and train citizens to have thought autonomy (critical mind). The role and status of instructors will shift to student accompanist and more didactical role (methodological questioning more than knowledge content) (Roche, 2014, pp. 252 - 255). Accordingly, four ideas are suggested:

- 1- In direct teaching or by MOOC, instructors intervene in an accompanying role (didactical role).
- 2- In networking and free dialogue between peers mode, instructors intervene as an organizer (mobilization of the function of the assimilation of knowledge and collective intelligence gained through interactive debates).
- 3- Instructor tends to stimulate the students' reflexivity attitudes (on hard points); he pushes the student to focus on conceptualization and method analysis (didactical role).
- 4- In Internet use, instructors must help students to discern the quality and pertinence of the available information: Internet can create a real confusion between 'non-reflective' opinion that expresses our feeling and 'reflexive thought' that eventually opposes our hopes.

Considering the importance of coherence between the mission of a university and diverse emerging possibilities of competency and knowledge access, the university's role of the learning function remains as the major role. If it focusses on the method aspect, on reasoning and on developing new manners to communicate with all actors, then, the university should develop in collaboration with other actors' innovative methodology and process without altering its principles and fundamental role.

2.11.3: Learning Time in Education

“In two clicks, users have access to knowledge”. In this Internet era educators from all education levels, including higher education are questioning about the immediate and instantaneous mode (Pasquier, 2014, p. 279). Today, numerous students say that it is more important to know where to find information when they need to than to know the information itself. In the history of humanity, educators have never been confronted with such a real comparable challenge ... the art of living in an over-saturated information world must also be taught and learned (Bauman, 2006 cited in Giorgini, 2014).

The status of knowledge is at the edge; knowledge is durable and constitutes a capital to whoever possesses knowledge that is not considered volatile, ephemeral or linked to instantaneous use. The question of rapidity in learning and knowledge acquisition is connected to the question of apprenticeship and learning, hence, to the time for knowledge construction, including research activities. “All these intellectual activities and processes are constructed in successive layers over time” (Gorz, 2003). In this pedagogical challenge and over abundant information context, the role and mission of the instructors must be examined and re-considered; they are to help the students conduct methodical research of information, discern real from false information, and to arrange, structure and construct their thoughts around and identify existing singularity in the barrage of information that they are exposed to (Pasquier, 2014, p. 284).

Pasquier considered that “immediately” is a means to forget, for cultivating memory needs time; enough time must be given to educate and to assimilate the content. Accordingly, a question asserts itself, ‘How to learn with new technological tools?’ Following Piaget (1970), the individual himself/herself construct and accumulate knowledge as he/she interacts with others. As such, learning is not reduced to processing of information, but is a complex individual collective act. Today, technologies push graduates to work in different disciplines and professional environments; therefor, instructors at the university should work in groups that require time and space to exchange ideas, and discuss learning conditions and research development.

In this new knowledge-network, educators must prove themselves to possess high moral quality, and be well equipped to transmit intellectual structures that accentuate the high importance of the context of the abundant available information so as to avoid confusion of interpretation of said information.

2.11.4: Educational Issues and Recommendations of Digital Revolution's Effects

At the end of this section, in a societal, technological and pedagogical transition context, some issues and recommendations are presented herein:

- Education is not a simple transmission of information; it should allow the learner to understand the natural and social phenomena, and become a cultured learner. (Francesch, 2011 cited in Pasquier, 2014). Moreover, education is a qualitative process; learning affects our minds and actors' manners. It must be reflexive, durable and makes sense. (ibid).
- The mode of knowledge production and transmission must be reexamined and re-thought of; new structures of learning methods could be adopted, such as
 - The instructor must, in addition to imparting of theoretical and practical knowledge, to play an accompaniment catalyst role to guide students to acquire and implement the said knowledge.
 - Student must be considered as a co-instructor when interacting with peers and teachers, and be given the opportunity to co-elaborate on his thoughts and knowledge.
- Pedagogical learning and innovative centers should be established and activated; the centers' purpose could be to
 - Understand more the young reality (life and attitudes).
 - Organize pedagogical meetings and workshops with all interested actors and participants, instructors, educators and professionals to discuss new problematics that instructors confront; and, to exchange pedagogical experiences of new technologies and the means to integrate them into the learning process; and, to redirect the students' attitude towards their university's studies.

- Propose or adopt new pedagogical learning paradigms, allowing for better learning time, management and knowledge acquisition.
- Prepare and start a pedagogical training program to engage instructors in adopted pedagogical paradigms; and, to train new instructors that are generally appointed on the base of their academic competencies, and not on the basis of pedagogical ones, in specific disciplines.

Finally, the technological, societal, economic and pedagogical evolutions can deeply affect the meaning and essence of learning conditions, approaches and methodology. They can also affect the role and mission of the university. Then, quality assurance and accreditation concepts and standards in higher education can be also affected.

2.12 Summary:

Higher education is ever evolving concurrently with economic developments so as to meet the challenges posed by the advancement and progress of science and technology. Consequently, higher education institutions have a vital role in meeting these challenges towards economic progress; knowledge economy; development of societies; the resolution of life's and environmental problems; and, the enhancement of the social mobility phenomena.

Accordingly, this chapter addressed various basic factors such as the availability and accessibility for a wide population of young persons with the ability to pursue higher education at national and international levels; the effect of the student's social background on the choice of study opportunities; the emergence of privatization trends in higher education; types and diversification in higher education private institutions; the existence of a correlation between higher education cost and the quality of education; the growing types of private institutions, the quality of the provided higher education, and the various diplomas issued; the cultural, scientific, social and economic effects of universities; the challenges and risks that appear with the usage of Information and Communications Technology (ICT), and its role in the progress of the learning, knowledge and pedagogical means; especially within the context of the opportunities, benefits, challenges and risks of distance education; the emergence of the

internationalization of the academic profession as a trend, and its consequences be it positive or negative; the trend of diversification in the student population, and hence the growing number of international and part-time students pursuing higher education. This chapter also addresses proposition of new approaches in teaching and learning in response to new students' inspirations, as well as the teaching and research functions of higher education institutions.

This chapter describes the trends, the central reason and the contextual factors which, in the last decades, have strongly influenced the higher education evolution and which are expected to continue to do so in the near future, since commercialization, cross-border delivery of higher education due to the increase in the competitiveness among the higher education institutions have directly challenged the value traditionally attached to cooperation and exchange among the said institutions. This state has been amassed by globalization and internationalization trends that intensified the competitiveness within the higher education sector and has led to the increase in the level of competition between students to secure places in specialties of high demand that requires high selectivity; and, competition between universities to attract the best qualified students and be concurrently classified as prestigious institutions that are ranked in international classifications, and profit from governmental and private sector funds.

The technological, social, economic and pedagogical evolution can deeply affect the meaning and essence of learning conditions, approaches and methodology. They can also affect the role and mission of the university. Then, quality assurance and accreditation concepts and standards in higher education can be also affected.

Furthermore, the phenomena and trends discussed in this chapter touch on the concept of Quality Assurance in higher education. It is worth noting that quality assurance plans, programs, and projects are actually considered as a fundamental part of higher education, and that it is necessary to integrate all national, regional and international efforts, and to coordinate quality assurance activities of numerous organizations to ensure transparency, academic mobility requirement, and learning outcomes that increase potential employability. Hence, with the notable expansion of higher education institutions in the world, establishing quality assurance mechanisms at national and international levels becomes of utmost urgency and imperative.

CHAPTER THREE

Chapter 3 Higher Education in Lebanon

3.1 Introduction:

The structure of the higher education in Lebanon includes both the private and the public sectors. The Lebanese University (LU) is the main institution in the public sector.⁸ To date, 48 private higher education institutions represent the private sector. The student enrolment in the private sector is about 63% of the total student enrollment in higher education institutions in Lebanon (CRDP, 2013; GDHE, 2015). Most of these institutions follow different models or systems: American, European, Egyptian and Lebanese (adopted from the French system). The tuition fee, in some private institutions, is considerably high; and, requires high academic scores on their entrance exams. Some others, with low tuition fees, don't demand serious academic requirements, while still others have affordable fees, and assure acceptable levels in quality requirements (GDHE, 2016).

On the other hand, founding entities or incorporeal authorities of higher education institutions have various statuses: religious institutions, civil companies and social associations whose mission and objectives should be to disseminate higher education. All these entities declare high quality of the learning outcome as their major objective. But, in reality, quality standards, pedagogical approach and educational objectives, could be very different. The Lebanese constitution guarantees and protects the freedom and independence of education in Lebanon (Lebanese Constitution –Article 10); however, this is not respected in the practice of the public authorities in Lebanon. The Lebanese higher education law dictates that the licensing of new institutions or the issuing of decrees for new majors or diploma levels must be issued by the Council of Ministers, where the decision is influenced by several political considerations or confessionalism. In many cases, numerous years have been wasted while waiting to obtain these licenses or decrees from the said Council.

⁸ The military college and the National Higher Institute of Music (conservatory) are also considered as public higher education institutions. However, both of these institutions fall under the authority of the Ministry of Defense and the Ministry of Culture respectively; whereas the LU falls under the tutelage of the Ministry of Education and Higher Education.

Moreover, it has been very difficult to change the higher education regulations in both the public and private sectors to incorporate the new trends, challenges and approaches in higher education. In fact, the law that governs the Lebanese University (public sector) dates back more than 45 years. For 20 years several new texts have been proposed, but without any success of change. In the private sector, it took 10 years to pass the new law of 285/2014 that replaced the old law which remained enforced for around 53 years.

However, higher education issues in Lebanon cannot be reduced to only legal regulatory texts or economic or social parameters; there are additional parameters that influence the proliferation of higher education institutions, and multi-higher education systems which derive from religious, political or financial influences.

Hence, to understand the structure of the higher education in Lebanon, it is imperative to study the different stages and contexts in the establishment of a higher education institutions and the framework in which these regulatory texts were structured in order to organize the licensing and the control of the public and private higher education sectors. In the last two decades, higher education in Lebanon saw a considerable growth in the number of these institutions and student enrolment; this has led to the appearance of the massification phenomenon. However, this does not necessary reflect internal qualitative equity nor does it confirm external efficacy (Abourrjeili, 2009, p. 8). In fact, this phenomenon reflected many aspects of the Lebanese higher education contexts, be it socio-economic, socio-cultural, or socio-political aspects. This data is presented, analyzed and discussed in this chapter.

3.2 The Evolution of Higher Education in Lebanon:

3.2.1: Evolution Status

The history of the higher education evolution in Lebanon can be considered through four stages (Bashour, 1997, pp. 15, 16).

- 1- First stage: The period of 1850 – 1950; it corresponds to the period of the establishment of the first group of higher education institutions in Lebanon. It was characterized by the domination of “foreign private higher education institutions and the absence of specific higher education regulations.”
- 2- Second stage: The period of 1950 – 1975; this period corresponds to the establishment of the first National University: The Lebanese University which was established in 1951 and expanded in 1959 to include five faculties and schools. Then it was organized by a law, N° 75, on December 26, 1967. In 1960, the Beirut Arab University (BAU), a private higher education institution, was established. This establishment pushed the government to institute a law for higher education that governs this sector. This law was put in effect as of December 26, 1961⁹. During this period, four types of higher education systems existed in Lebanon, namely:

In the private sector.

- The American System: such as the American University of Beirut (AUB), and the Beirut University College (BUC).
- The French System: such as Universite Saint Joseph (USJ), Universite Saint Esprit Kaslik (USEK), Institute Superior de Droit, Sagesse, and the “Académie Libanaise des Beaux Arts” (ALBA).
- The Egyptian System: Beirut Arab University (BAU)

In the public sector.

- The Lebanese System: The Lebanese University (LU), which holds great similarity to the French system.

⁹ Law published in Official Journal on December 27, 1961, N° 55, p. 1450

- 3- Third stage: The period of 1975 – 1995; in 1995, the Lebanese Civil War began. It had disastrous effects on both the private and public higher education institutions. The Lebanese University was dispersed over all the Lebanese territory: 47 branches of faculties and institutions were created. Some of the private higher education institutions also opened branches in various Lebanese regions. Some political parties involved in the war bluntly influenced the functioning of the higher education institutions, such as in students' enrollment and in academic and administrative staff appointments....

In spite of these situations, new faculties were created in the Lebanese University, such as the Faculty of Engineering, Faculty of Medicine, Faculty of Public Health, Faculty of Pharmacy, and the Faculty of Agriculture. Also, new higher education institutions were established during 1990 – 1995, after the end of the long civil war.

The reconstruction of the country began and included the development of the educational public sector. New secondary and technical schools were founded in all regions of Lebanon, and a new campus of the Lebanese University was constructed.

- 4- Fourth stage: The period of 1995 – 2015; this period corresponds to the wide expansion of higher education in Lebanon. The number of the higher education institutions increased considerably and the students' enrolment increased by 300%. During this period, new regulatory texts were adopted. Nevertheless, in this period, most decisions taken for licensing of private higher education institutions or for maintaining several branches of the Lebanese University were not based on effective national needs; in reality, they were mostly linked to religious and regional considerations and political interests; most founding entities or incorporeal authorities are linked to religious authorities or to politicians: In 2015, about 50% of these founding entities of private higher education institutions are religious organizations.

3.2.2: Observation and Analysis

In the aforementioned four stages, institution creations, licensing and regulatory texts adopted by the Lebanese authorities were influenced by religious and political considerations as has been stated.

In the first stage (1850 – 1950), religious (protestant, catholic) and political (USA, France) considerations were the major parameters on which AUB, USJ and other private higher education institutions were established.

In the second stage (1950 – 1975), new parameters were considered; they affected the licensing of new private higher education institutions, such as, cultural (Haigazian University {HU}), or political (Beirut Arab University {BAU}). National and sociological pressures were also applied to develop public higher education. In the period of 1970 – 1975, long strikes and large demonstrations of students and teachers of the public educational sectors led to the development of the Lebanese University and the creation of new faculties. During this period, the higher education institutions in Lebanon were considered among the best in the region.

In the third stage (1975 – 1995), new private higher education institutions (3 universities, and 7 colleges, 5 of which offer religious programs) were licensed but most of them were not effectively operational. Only the Lebanese University was spreading over different Lebanese regions during this period as well as the creation of new faculties within this university. During this period, the student enrolment at the Lebanese University doubled in number while it did not exceed the 20% in the private sector, in spite of the scholarships offered by the private foundations for students who wish to enroll in local or foreign universities: more than 30000 scholarships were offered by the Hariri Foundation during the period 1980 – 1990. Moreover, the difference in the enrolment between the public and the private sectors was affected by the following factors:

- i- The deterioration of the economic level of the middle class.
- ii- The creation of new specialties in the Lebanese University.
- iii- The establishment of branches of the Lebanese University in most of the Lebanese regions.

- iv- The deterioration of the national security due to the civil war that prevented student mobility and strongly reduced the enrolment of foreign students in the Lebanese private sector. Nevertheless, in this period, most decisions taken for licensing of private higher education institutions or for maintaining several branches of the Lebanese University were not based on effective national needs. But, in reality, they were mostly linked to religious and regional considerations and political interests: most founding entities or incorporeal authorities are linked to religious authorities or to politicians.

Historical data about the progress of higher education institutions in Lebanon are summarized in Tables 3.1 to 3.4 and Figures 3.1 and 3.2.

Table 3.1The number of the Lebanese higher education institutions since 1961.

Year of passing law or decrees	Number of Higher Education Institutions						Owner Founders			
	Public Sector University	Public Sector College	Private Sector University	Private Sector College	College Religious Program	Total #	Lebanese Government	Religious Organizations	NGO	Civil Corporate
1961	1	—	4	5	2	12	1	10	1	—
1966	1	—	4	5	2	12	1	10	1	—
1986	1	—	4	8	7	15	1	18	1	—
1987	1	—	5	8	7	20	1	19	1	—
1988¹	1	—	6	7	7	20	1	20	0	—
1990	1	—	7	7	7	21	1	20	1	—
1995	1	1 ²	6	7	7	20	2	20	0	—
1996	1	1	11	8	6	25	2	22	3	0
1999	1	1	14	14	7	35	2	25	8	2
2000	1	1	16	20	5	41	2	23	9	9
2001	1	1	18	19	5	42	2	24	9	9
2006	1	1	20	17	5	42	2	24	9	9
2007	1	1	26	11	5	42	2	24	9	9
2008	1	1	28	8	5	41	2	24	7	10
2009	1	1	33	7	4	44	2	25	7	12
2011	1	2 ³	35	8	4	47	3	26	9	12
2012	1	2	36	8	4	48	3	26	10	12
2015	1	2	36	8	4	48	3	26	10	12

¹ALBA Institute included in Balamand University; ²the Music Conservatory as higher education institution under the tutorial of the Ministry of Culture; ³ the Military College as higher education institution under the Ministry of Defense

Source: AICGHE 2016, MEHE 2008, Al Amine 2001, UNDP 2001

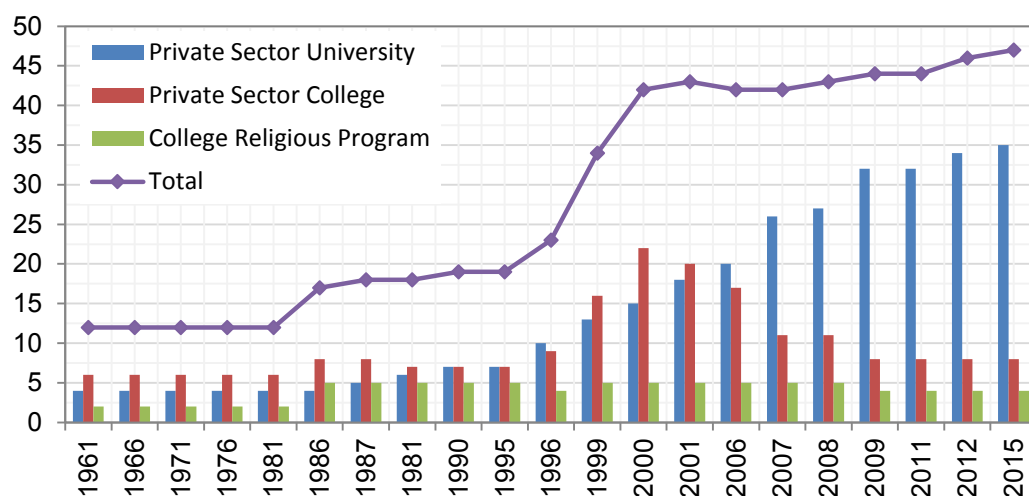


Figure 3.1 The increase in the number of private university institutions in Lebanon since 1961

Table 3.2 Lebanese University – Student number evolution since 1954

Year	Number of students	% of total students From H.E. number	Male %	Female %	Foreign students %	Sources
1954	266	—	—	—	—	Bashour (1997); Al Amine (1994, p. 189)
1963	3700	—	—	—	—	Bashour (1997)
1964	6092	—	—	—	—	Al Amine (1994, p. 189)
1970	12348	29%	—	—	—	
1972	12465	29%	—	—	—	Kabbani (1993)
1973	14002	27.6%	74%	26%	11.9	Bashour (1997, pp. 45, 90, 91)
1974	14826	—	—	—	—	Bashour 1997, p. 30 LU Catalog (1974)
1975	15722	29.8%	69%	71%	—	Bashour (1997, p. 45) Freiha & Murr (2009)
1980	41684	49%	—	—	—	Bashour (1997, p. 45) Freiha & Murr (2009)
1981	33937	43%	—	—	—	Bashour (1997, p. 45) Freiha & Murr (2009)
1982	29048	41.3%	—	—	7%	Bashour (1997, p. 45) Freiha & Murr (2009)
1983	27147	37.2%	53%	42%	5%	Bashour (1997, pp. 90-91)
1984	24560	—	—	—	—	Bashour (1997, p 48)
1986	32433	40.3%	42.9%	50.1%	5.5%	Freiha & Murr (2009, p. 89)
1993	39936	45%	49.8%	50.2%	6.8%	Bashour (1997, pp. 90-91)
1994	35473	—	—	—	—	Bashour (1997, p.48)
1997	49755	56.6%	45.5%	54.5%	11.4%	Statistics, CRDP (1997)
2001	71050	59.5%	38.8%	61.2%	7.7%	Statistics, CRDP (2001)
2003	65530	53.1%	32.9%	67.1%	5.1%	Statistics, CRDP (2003)
2006	70627	48%	34.8%	65.2%	3.3%	Statistics, CRDP (2006)
2007	72961	45.5%	33.2%	66.8%	4.4%	Statistics, CRDP (2007)
2011	72507	37.7%	36%	64%	11.2%	Statistics, CRDP (2011)
2013	71440	37.2%	34.1%	65.9%	7.9%	Statistics, CRDP (2013)
2015	69994	36.7%	46.3%	53.1%	6.8%	GDHE (2016)

Table 3.3 Private university institutions – Student number evolution since 1970

Year	Number of students	% of total students from H.E. number	Male %	Female %	Foreign students %	References
1970	30113	71%	—	—	52%	Kabbani (1993)
1972	30518	71%	—	—	—	Kabbani (1993)
1973	36801	72.4%	—	—	54.4%	
1975	40871	72.2%	74.5%	25.5%	48%	
1980	43403	—	—	—	—	
1981	45136	57%	—	—	—	
1982	41266	58.7%	—	—	—	
1983	45905	62.8%	68.6%	31.4%	61.2%	Bashour (1997)
1986	47977	59.7%	69.1%	30.9%	62.9%	
1993	48753	55%	61.1%	38.9%	48.1%	Bashour (1997)
1997	38202	43.4%	56.5%	43.5%	26.1%	Statistics, CRDP (2013)
2001	48437	40.5%	57.8%	42.2%	17.7%	Statistics CRDP (2013)
2003	57861	46.9%	—	—	—	Statistics, CRDP (2013)
2006	76334	52%	56.5%	43.5%	17.7%	Statistics, CRDP (2013)
2007	87403	54.5%	56.1%	43.9%	20.7%	Statistics, CRDP (2013)
2011	119631	62.3%	47.7%	45.3%	19.9%	Statistics, CRDP (2013)
2013	120348	62.8%	52.5%	47.5%	14.8%	Statistics, CRDP (2013)
2015	120530	63.3%	50.8%	49.2%	14.6%	GDHE (2016)

Table 3.4 Higher Education in Lebanon – Student Number

Year	Number of students	Public sector	Private sector	Male%	Female%	Foreign students	Reference
1970	42461	29%	71%	—	—	52%	Kabbani (1993)
1972	42983	29%	71%	—	—	—	Kabbani (1993)
1973	50803	27.6%	72.4%	—	—	54.4%	Bashour (1997)
1975	56593	27.8%	72.2%	73%	27%	40%	Freiha & Murr (2009)
1980	84037	49%	51%	—	—	—	Freiha & Murr (2009)
1981	79073	43%	57%	60%	40%	—	
1982	70314	41.3%	58.7%	—	—	—	
1983	73052	37.2%	62.8%	62.7%	32.3%	40.4%	Bashour (1997)
1986	80410	40.9%	59.7%	61.3%	38.7%	39.7%	Freiha & Murr (2009)
1993	88689	45%	55%	56%	44%	29.5%	Bashour (1997)
1997	87957	56.6%	43.4%	50.3%	43.7%	17.8%	Statistics, CRDP (2013)
2001	119487	59.5%	40.5%	46.5%	53.5%	11.7%	Statistics, CRDP (2013)
2003	123371	53.1%	46.9%	44.2%	55.8%	9%	Statistics, CRDP (2013)
2005	141479	49.5%	50.5%	44.2%	55.8%	9%	Statistics, CRDP (2013)
2006	146961	48%	52%	46.1%	53.9%	10.8%	Statistics, CRDP (2013)
2007	160364	45.5%	54.5%	45.7%	54.3%	13.3%	Statistics, CRDP (2013)
2011	192138	37.7%	62.3%	47.6%	52.4%	16.6%	Statistics, CRDP (2013)
2013	191788	37.2%	62.8%	45.7%	54.3%	12.1%	Statistics, CRDP (2013)
2015	190524	36.7%	63.3%	49.3%	50.7%	11.8%	GDHE (2016)

Figure 3.1 shows two incrementing stages between 1986 and 1996, and between 1996 and 2003. Moreover, in the period of 2003 and 2009, numerous institutions that had a college status gained the status that of university. Furthermore, for several reasons, mainly political

and religious, the Lebanese Government continued to issue new licenses to private higher education institutions, whose number reached 48 in 2015.

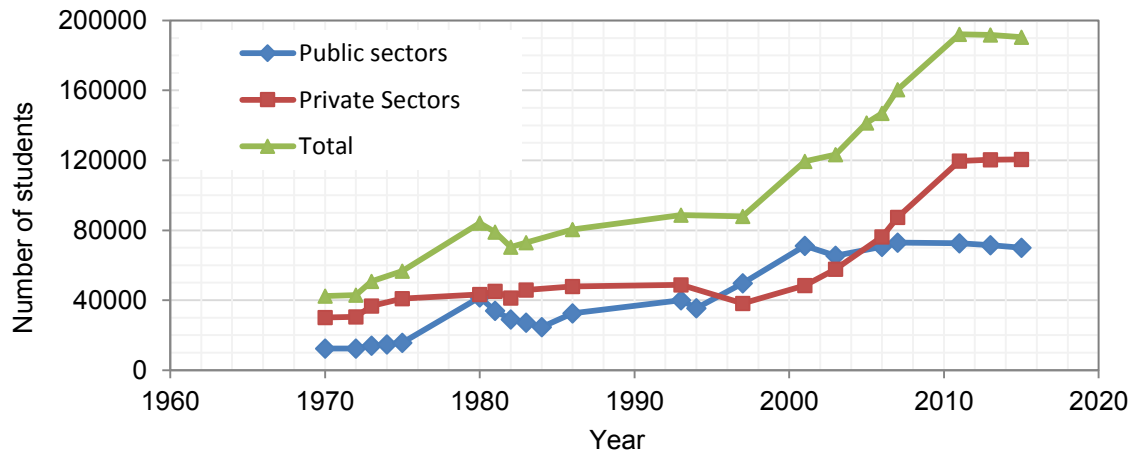


Figure 3.2 Student enrolment in Public and private higher education institutions in Lebanon

During the aforementioned stages, the laws and regulations implemented by the Ministry of Education and Higher Education in Lebanon lacked the required human resources needed to evaluate and control the existing higher education institutions. This situation created a real issue in the Lebanese higher education system¹⁰.

The change in student enrolment at the Lebanese University and the private higher education sector since 1970, as shown in Figure 2, presented over a four-decade period the following variable indications:

- 1- As of the year 2000, substantial growth of student enrolment in private higher education sector is noticed, in spite of the strong decrease in foreign student enrolment in this sector. In fact, and as seen in Figure 3.1, the increase in the number of the private higher education institutions has contributed significantly to the student enrolment evolution.
- 2- It is also noticed that there has been a substantial growth in the female gender enrolment ratio which became equal to that of the male gender.
- 3- Growth of about 400% in student enrolment.

¹⁰ Interview with the General Director of Higher Education – 2016

- 4- Big change in gender enrolment¹¹ ; the percentages of male and female students' enrolment respectively reached in 1981, 60 % males and 40% females; however, the numbers changed over the years to show 46% males and 54% females in 2013¹². This change in gender enrolment is more noticeable in the Lebanese University (34% males and 66% females in 2013).
- 5- Noticeable variables in the enrolment percentages at the Lebanese University towards the total higher education enrolment in Lebanon. This percentage was about 28% in 1973, increased to about 60% in 2001, and gradually decreased to reach 37% in 2013 and in 2015. However, this decrease does not reflect a decrease in the number of students enrolled in the Lebanese University; this is due to the fact that the enrolment at the private institutions increased substantially while the number of students at the Lebanese University remained the same

As a result of what have been stated thus far, the author stipulates that these trends and variations indicate the following:

- a. The Lebanese University has opened opportunities to middle- and low-income populations to pursue tertiary level studies; thus, higher education massification trends started in Lebanon with noticeable growth in education levels of Lebanese girls in most fields of specializations. Nevertheless, economic difficulties resulting from political and military conflicts affected the enrolment of the males in higher education whereby numerous young males stopped their pursuit of their higher education in search of work opportunities, especially outside Lebanon.
- b. In the recent period, the decrease in enrolment percentages at the Lebanese University towards total higher education enrolment seems due to several parameters such as
 - Limitations in capacity of the Lebanese University.
 - Creation of new affordable private higher education institutions in all the regions in Lebanon.

¹¹ This trend is also observed in the higher education private sector, as it will be discussed in the next section.

¹² The difference between the percentage of male and female students' enrollment has noticeably decreased in 2015 as depicted in Tables 1, 2, & 3.

- Some of these new low-cost private higher education institutions attracted students for they didn't require strong academic admission conditions/standards.
- Creation of numerous new majors in the private sector.

3.3 Higher Education Regulations in Lebanon:

3.3.1: Public Higher Education Sector

The Lebanese University (LU) is the only public university institution in Lebanon which was established in 1951 (Article 1, Decree# 6267, Oct. 20, 1951). The main reason for this was to supply the demand of the urgent need for new secondary school instructors, since around the same period of the establishment numerous public schools were being established all over the Lebanese regions; this led to the urgent need for new school teachers in various Lebanese regions as well as for qualified government employees (Bashour, 1997, p. 28).

Since its establishment, the Lebanese University has struggled to confirm its presence and role throughout its developing years. According to its founders, the need for the Lebanese University was not to compete with existing private higher education institutions, but to bridge the existing gap in response to population's demand and pressure (Ibid). This explains the fact that in the academic years 1963 – 1964, the student enrolment in the Faculty of Law represented about 66% of the total number of students' enrolment at the Lebanese University (Bashour, 1997), especially when the Arabic language became the main language of instruction in the field of Law. Moreover, a new legislative disposition was passed; it restricted the delivery of a Bachelor Degree in Law to the Lebanese University. However, private higher education institutions, who offered law programs and degrees, continued to give many of the law courses under the supervision of the Lebanese University (Decree#2642, Sep.21, 1965).

Between 1963 and 1974, students and staff went on a strike that forced the Lebanese government to decide on the construction of the Lebanese University campus, and the establishment of new faculties and institutes, such as:

- Faculty of Business and Economics
- Faculty of Engineering (started in 1980) faculty of Agriculture (opened in 1987)
- Institute of Fine Arts
- Institute of Media

Also, between the years 1967 and 1981, the laws and decrees that govern the Lebanese University were passed (Khodr, 2001). In 1975, the Lebanese Civil War erupted; it had damaging impacts on the Lebanese university as well as on the private higher education institutions. From 1977 to 2009, various amendments of the law that organized and governed the Lebanese University were passed (1977, 1983, 2009). Organizing decrees were also passed: in concern of the doctoral programs (1983, 2009); Lebanese University Council (1991); new teaching system that follows the new European credit system and the L.M.D. diploma scale (2005); and, semester style study system (2009).

The laws and decrees mentioned in this chapter represent the main regulatory texts for the Lebanese University; other regulatory texts were also passed, including the Lebanese University Council decisions. Appendix A lists the main regulations that concern the organization and functioning of the Lebanese University. We can observe that the higher education public sector had effectively had an organizational regulation since 1967 (Law# 75/67). After this date, the Lebanese University knew growth at the different levels (# of students, staff, faculty, branches and new majors). Moreover, new higher education modes and criteria occurred; thus, several administrative and regulatory texts became inadequate or obsolete. University personnel suffering from these situations, proposed at several times, new regulatory texts. Unfortunately, none of them was passed, but only some potential regulatory texted; the main old texts remained unchanged.

These situations reflect political interests and conflicts that face any new regulation which might result in giving the Lebanese University the independence in decision making. Politicians use the Lebanese University as an opportunity and as a means to attract more partisans. The Lebanese University is also a victim of dominance under the pretext of guarding

the rights of the religious denominations, but which are, in reality, directly linked to political considerations.

3.3.2: Private Higher Education Sector

Prior to 1961, a period which signify the date of the passing of the law that regulated and organized the private higher education sector, the government had very limited role in the development and management of this sector. The private higher education institutions practiced educational activities without effective regulations or control from the government. Programs and curriculum changes were made and approved by the private institutions' academic authorities. These universities were linked to or inspired by overseas institutions, mainly from the USA or France.

We can say that education and learning freedom were protected, in principle, by the Lebanese constitution (Article 10); this state was characterized by lack of control, and extended till December 12, 1961, when a law was passed to govern the private higher education sector. This was considered as a critical event in the private higher education history in Lebanon. As of that date, and according to Article 17 of this law, 11 private higher education institutions were considered as legally established and licensed (4 universities, 5 colleges, and 2 religious colleges that only had religious programs)¹³ (Aouit, 1997, p. 110).

For more than 25 years, the number of higher education institutions remained 11. However, new faculties and schools were credited within the four existing universities. Furthermore, according to this law, numerous regulatory texts were set to be stipulated and passed by decrees; however, only some of these texts were adopted and passed.

More than 30 years from the passing of the law in 1961, on December 28, 1967, the High Council of Universities was created by Law# 83; this council had a consulting role, but was never activated and did not play any noticeable role as to the issues pertaining to the higher education in Lebanon.

¹³ The 'Académie Libanaise des Beaux Arts' is not included because it was considered as a licensed higher education by Decree# 2205/K on November 3, 1944.

In 1996, two decrees were published: Decree# 9274/96 & Decree# 8864/96; their main concern was the requirement needed to establish a private higher education institution in Lebanon (9274), and to establish an institute of technology (8864). Other regulatory texts were also passed, but their concerns were mainly the enrolment requirements and conditions in the higher education institutions and the “equivalence committee”.

Recently, a new law that organizes and governs the private higher education has been passed (285/April, 2014). The Lebanese Government has also submitted to the Lebanese Parliament a bill (law project) concerning the establishment of a Lebanese agency for quality assurance and accreditation; a motion that is still under discussion.

Appendix B lists the old regulatory texts (laws, decisions, & ministerial decisions) relative to the private higher education sector in Lebanon. In the following section, some observations and remarks are presented in a rational and critical manner in regards to:

- 1961 higher education law and the 9274/96 regulatory decree
- The latest higher education regulatory law 285/2014
- A bill relative to the creation of Quality Assurance and Accreditation National Agency.

In 1961, the first higher education law that governs the Lebanese higher education private sector was passed, and was later amended by law N° 36 in 1963. Although this law has become obsolete, yet most of the private higher education institutions have been licensed based on this law. Following are some observations and comments pertaining to said law:

- i- A private higher education institution must fall under the responsibility of an incorporeal entity, under the supervision of the public authorities (Article 3). Such a Lebanese entity should have as one of its objectives the dissemination of higher education (Article 7). In numerous cases, advantages were taken of this ambiguous text, allowing religious associations or missionaries to get licensed to establish higher education institutions.
- ii- A university is administered by a president assisted by a council of administrators constituted only of deans of the faculties (Article 5). Thus, the president of a private university has the absolute authority as stipulated by the text of this law. In

fact, the university governance regulation of the private university should include the competencies the university's high authority are to possess. Also, the role of the academic and the administrative staff is completely absent.

- iii- The requirements cited in Article 6, relative to the president, deans of faculties or teaching staff are not rational: Anybody who has a bachelor degree with five years of teaching experience could be appointed as a dean of a faculty
- iv- If the incorporeal board (body or commission) requests a license to establish a higher education institution or a new faculty or program in an existing higher education institution, and doesn't get a response from the public authorities within six months, then the law dictates that the request is considered rejected (Article 12). Is this text rational or can be considered just? This text is in contradiction with Article 9 which stipulates that the higher education council must examine the file, and if rejected, the rejection must be justified (Articles 5,6,8,9,11,12,21,23,26,29,32,34,36,37,44,45,50, 51, 53, 54, 57, 66&71).
- v- The text of this 1961 law doesn't include the requirements of the quality of learning or any related activities; the only existing text is found in Article 12, which states that private higher education institutions are subject to MEHE control, if the learning infringe the 'common order' and 'good manners'. Under such uncontrolled context, the private higher education sector had practiced educational activities before 1996. After that date, Decree# 9274/96 was passed, which completed and rectified a lot of contradictions in the text of the said law. However, it included many criteria and conditions that could not be academically justified or rectified and analyzed from a practical point of view; for example, the area required m²/student, ratio of students to instructors, ratio of students to full-time instructors, etc.

Law #285/2014 was passed on April 30, 2014, under the title "General Disposition in Higher Education & the Organization of The Private Higher Education Sector". Considering the fact that higher education in Lebanon had spread fast and many new types of higher education and approaches appeared, passing a new law to organize the private higher education sector became necessary. Law 285 included many organizational issues with new propositions and reforms. It bridged several holes that existed in the previous 1961 law. Moreover, the said law

stipulated the publication of 12 organizational decrees and 16 organizational ministerial decisions. Unfortunately, it has been few years since the passing of the new law, and none of the decrees or decisions has been passed or published.

3.3.3: Observations on Law 285/2014

- The text of the new law should have not included detailed processes or procedures criteria that should be included in more flexible regulatory texts, such as, decrees and ministerial decisions. Generally, a text of a law should generally include rules, directives and organization frames of higher education in Lebanon and not many small details as cited in numerous articles within this law (Articles 1, 5, 6, 14, 15, 17, 23, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 59, 67, 68, &69).
- The text of this law expanded beyond the higher education institutions to include technical institutions (few hundred public & private technical or vocational institutions). However, the latter remain to date under the authority of the General Directorate of Vocational Education and not under the higher education authorities as directed by the new law (Articles 5&75).
- Many places for members in the higher education council, technical committee and the equivalence committee are reserved to a limited number of private universities (Articles 14, 15, 21 & 29). There is no rational or coherent criteria in Articles 14 & 15; in fact, for an institution to be considered eligible to be a candidate for membership on the Higher Education Council, the institution must
 - Have exceeded teaching practices for 50 years for a certain category and a minimum of 15 years for others.
 - Have exceeded continuous teaching practice for 15 years for all categories.
 - Have graduated 7 promotions at the Bachelor level (this requires 9 scholastic years) and 3 promotions at the Master's level.

Where is the rational linkage between these numbers or criteria?

- The text of this law includes many ambiguous expressions that need clarification to avoid discretionary interpretations (Articles 44, 50, 51, 60, & 65).

- Some texts of this law (Articles 36 & 37) stipulate the creation of a Lebanese quality assurance agency to determine the national required criteria of higher education quality assurance. These texts indicated that private higher education institutions must subject themselves to Lebanese accreditations; however, after four years, texts concerning the creation of a Lebanese quality agency have not been applied yet.
- Conclusive infractions criteria and levels were considered, particularly in required instructor/student and area/student ratios. Such criteria should be more flexible depending on several parameters, such as specialization fields.
- Financial penalty dispositions were considered. This concept is not compatible with higher education missions. Academic infractions or low level quality of learning outcomes, directly affect the student's interest. Corrective processes and approaches should be considered and evolved.

3.4 The Organization of the Education System in Lebanon:

3.4.1: Lebanese Education Administration

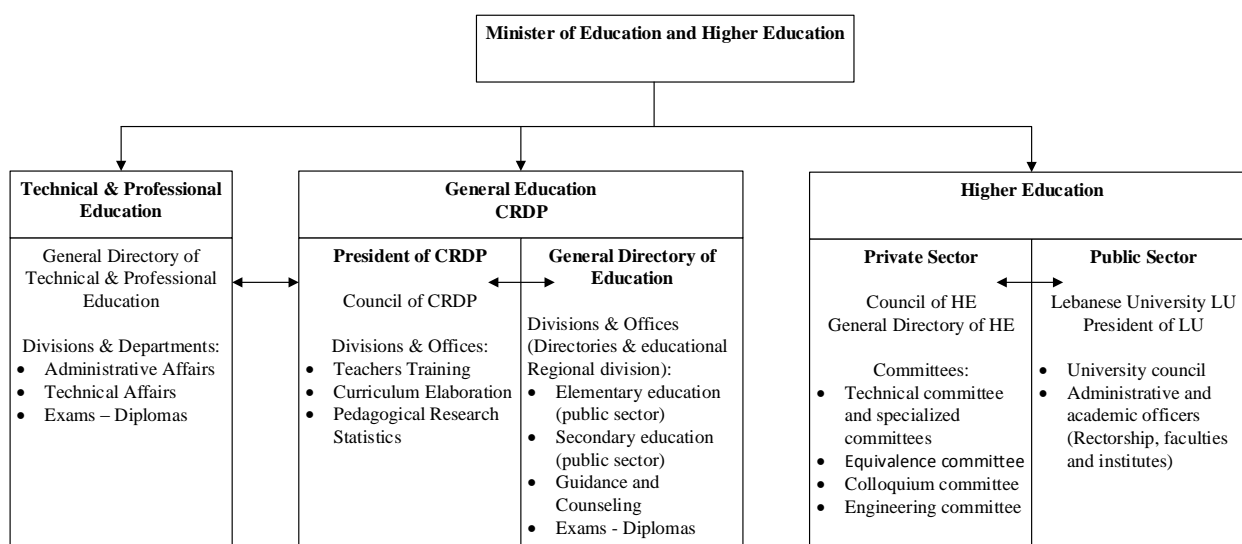
The different administrative departments that govern the Lebanese education sector are presented in Chart 3.1; we denote the following:

- a. Political considerations bluntly intervene in the educational affairs such as administrative and academic nomination and appointment, position changes and school establishment...
- b. The pedagogical and administrative systems do not include a quality assurance department; however, there is an independent educational inspection unit that reports directly to the Prime Minister's Office but doesn't report to the Minister of Education and Higher Education. it inspects the administrative affairs of both the General and Technical Education and has a very limited role in pedagogical affairs. Moreover, the

Directory of Guidance and Counseling that should monitor and assist the teaching staff is not in charge of implementing a quality assurance process in the Lebanese education system.¹⁴

- c. The roles of regional divisions are limited to administrative affairs with no effective cooperation between the different departments in charge of education¹⁵.

Chart 3.1 The different administrative departments that govern the Lebanese education sector



- d. The higher education governance structure lacks quality assurance authorities, systems, processes and criteria. The role of the Higher Education Council and the technical committee is limited to the reviewing of higher education institutions' files. They study and audit the higher education institutions' regulation applications, which include some criteria that are considered in relation to quality requirements, such as physical teaching conditions, for example, buildings, ratio instructors/students... (Law 1961; Decree 9274/1996; Decree 8864/1996)

¹⁴ Private discussions with NEHMEH.G. Ex. General Director of the Education – Ministry of Education and Higher Education - Lebanon

¹⁵ Private discussions with NEHMEH.G. Ex. General Director of the Education – Ministry of Education and Higher Education - Lebanon

Actually, a new bill concerning the establishment of a Lebanese quality assurance agency is currently being debated in the Lebanese Parliament.¹⁶

3.5 Learning Sequence Flowchart in the Private and Public Sectors:

3.5.1: General Education

The General Education levels in Lebanon consist of three elementary learning cycles (3 years each) and one secondary learning cycle (3 years). The first year of the secondary cycle is common to all students; the second is divided into two tracks: scientific and humanities. The third year is divided into four tracks, namely, general Sciences, Life Sciences, Sociology and Economy, and Humanities¹⁷; see Table 3.5

Table 3.5 Learning sequence flowchart of General Education

Education Levels	Elementary Level									Secondary Level		
Cycles	Cycle 1(3years)			Cycle 2 (3years)			One cycle (3years)			One Cycle (3 years)		
Normal to Average Age	6 - 9			9 – 12			12 - 15			15 - 18		
Classes	G ₁	G ₂	G ₃	G ₄	G ₅	G ₆	G ₇	G ₈	G ₉	S ₁	S ₂	S ₃
Tracks	Common			Common			Common			Common	Scientific	General Sciences
												Life Sciences
											Humanities	Sociology & Economy
												Humanities

¹⁶ Meeting with General Director of Higher Education, 2016

¹⁷ See Bulletin published by CRDP on years 2000 to 2013

3.5.2: Technical and Professional Education

Technical and professional education includes two intermediate cycles (2 years each) and one secondary learning cycle (3 years). In the first cycle the student earns the Certificat d'Aptitude Professionnelle (CAP) and the Brevet Professionnelle (BP) Certificate at the end of the second elementary education cycle. To be able to join the BP class, a student should hold the CAP Certificate, or should have completed, at least, the first year from the general intermediate education.

The secondary cycle in both the Professional and Technical Education has more than 40 different specializations, consisting of the following two tracks:

- Professional track which prepares the students to professional baccalaureate diploma
- Technical / Vocational track that prepares the students to technical baccalaureate diploma

The educational level required to study in this cycle is the Brevet Diploma in the General Education or the Brevet Professional Diploma. Special dispositions exist (remedial courses) for students not holding the Brevet diploma.

3.5.3: Higher Education Organization

Prior to 2014, the Lebanese legislation didn't require a determined organizational administrative or academic chart in the private higher education sector. In the public sector, the Lebanese University was organized by Law 75/67 and its amendments; it adopted, as of 2005, the European system of study in the three levels: BA/BS, MA/MS, and PhD, known as the 3, 5, 8 systems^{18,19}, and which mostly follow the European credit transfer system (ECTS). Most private higher education institutions adopted the American or European credit systems in the Bachelor, Master and Doctorate degrees.

¹⁸ Decree # 14840, June 28, 2005; Adoption of New Study Systems at the Lebanese University

¹⁹ Decree # 2225, June 11, 2009; Bases of Semestral Study System in the Lebanese University

As of 2014, Law 285 has dictated and defined the higher education mode of study, diplomas, credit hours, and types of higher education institutions. Moreover, technical higher education studies are considered as higher education studies and are limited to two years after the Baccalaureate whereby the students earn a Diploma de Technicien Spécialisé (DTS) ²⁰. Transfer of credits to higher education is permitted under certain conditions.

Law 285/2014 considers the following three types of higher education institutions:

- 1- A university that includes at least 3 faculties
- 2- A university college specialized in one or two fields. It can be either academic or technological; in the later type, programs are limited to Bachelor or Master's levels only.
- 3- A higher technical institute which has programs in applied technical field and is limited to two academic years of study, and bestows specialized technical diploma (DTS). However this type of institutions remains under the authority of the General Directory of the Vocational Education

3.5.4: Data on the Education System in Lebanon

Considering that regulated links exist between different education levels and cycles, data pertaining to the Lebanese higher education system should be correlated with data on prior education levels in General and/or Technical Education types. It is important to note that the Syrian conflict induced displacement of more than 1.3 million Syrian refugees to Lebanon. This rapid increase in population (about 30%) added a heavy educative, social, and economic burden on the Lebanese authorities. This excess in the population is considered temporary; no accurate data is available after 2013. The fragmented data and statistics published by some organizations remain questionable. Thus, in the following sections the available data on higher education institutions, published by CRDP, for the year 2012/2013, is considered the latest available data that could be considered as representing 'normal' structure of the Lebanese

²⁰ Prior to 2014, there existed TS Diploma (Technicien Supérieur) that requires three years after the Baccalaureate Diploma, and the LT Diploma (License Technique) that requires four years after the Baccalaureate Diploma

education system. However, the researcher was able, through the General Directory of Higher Education, to obtain some data on higher education institutions for the scholastic year of 2014/2015.

3.5.5: Enrolment in the Elementary, Intermediate, and Secondary Schools in Lebanon – 2013

The Lebanese regulations don't impose compulsory children education beyond the 2nd cycle of the Elementary Education Level (12 yrs.). However, data given in Table 3.6 shows that about 25% of the Lebanese population are engaged in the Elementary, Intermediate, and Secondary Education Levels, covering the age group between 3 and 18²¹.

Table 3.6 Enrolment in Elementary, Intermediate, and Secondary Levels – Lebanon, 2013

Level	Public Sector		Private Sector		Total	
	Female %		Female %		Female %	
KG enrolment ratio of sector %	38924 22.6%	48.4	133480 77.4%	48.2	172404 100%	48.3
Elementary 1st & 2nd cycle Ratio of sector %	132780 28.2%	49.4	338846 71.8%	48.1	471626 100%	48.5
Intermediate Level General Education Ratio of sector %	71903 34.6%	57.1	135986 65.4%	50.2	207889 100%	52.6
Secondary Level General Education Ratio of sector %	55638 45%	61.6	68138 55%	51.7	123776 100%	56.1
Total General Education Ratio of sector %	299245 30.7%	53.3	676450 69.3%	48.7	975695 100%	50.1
Intermediate Level Technical Education Ratio of sector %	5523 49.3%	28.6	5680 50.7%	31.2	11203 100%	30
Secondary Level Technical & Professional Education Ratio of sector %	21231 45.7%	42.4	25255 54.3%	41.7	46486 100%	42
Total Technical & Professional Education Ratio of sector %	26754 46.4%	39.5	30995 53.6%	39.8	57689 100%	39.7
Total Ratio of sector %	325999 31.5%	53.1	707385 68.5%	48.3	1037384 100%	49.8

²¹ The number of enrolled students in the elementary, secondary, and tertiary education levels should not be compared against each other in the same year or two successive years because they don't reflect the same and continued student flux; in addition, stable population region in education is not established.

Considering also the data relative to higher education that will be presented in the next sections, we denote the following:

- a) Education is highly required and needed in Lebanon; many categories of population are implicated in the education sectors (academic, technical and administrative staff, students and many economic factions), making education a big and important sector.
- b) Significant female gender ratio is noted; it represents more than 50% of student enrollment, and more than 75% of teaching staff (CRDP, 2013). The noticeable enrollment increase of female ratio in General Secondary Education Level seems due to the observed fact that many of the Lebanese male youth at this level of education seek appointment in jobs that require only intermediate education diploma or having attended professional and technical schools or professional sessions.
- c) Private sector dominates both General Education (69.3%) and Technical and Professional education (55.1%).
- d) General Education dominates all secondary levels; Technical and Professional Education does not exceed 27.1% of the total enrolment in this level, although transfer from General Education to Professional or Technical Education is authorized.
- e) The ratio of study delay is high, especially in public sector (CRDP, 2013) as shown in Table 3.7. This may be due to the pedagogical issues that arise from the Lebanese education system efficiency in implementing the education cycle preceding the higher education level.

Table 3.7 Ratio of study delay in education cycles that precede higher education level.

Cycle/Level	Study delay ratio	
	Public sector	National ratio
Elementary Level (Cycle 1 and 2)	38.3%	19.4%
Intermediate Level (Cycle 3)	55.1%	31.9%
Secondary Level (General Education)	40.1%	27.5%

3.6 Graduates in Elementary, Intermediate, and Secondary Levels – Lebanon, 2013:

3.6.1: General and Technical Education

As mentioned before, official diplomas are granted as follows:

- 1- At the end of the intermediate level, two types of diplomas are granted:
 - “Brevet” in General Education (Intermediate Level Diploma)
 - “Brevet Professionnelle” (BP) in Professional Education

- 2- At the end of the 3rd year of the secondary education cycle, the following three diplomas are granted:
 - “Baccalaureate” (Secondary Diploma) diploma in General Education (4 tracks)
 - “Baccalaureate Technique” (BT) in Technical Education (31 tracks)
 - “Baccalaureate Professional” in Professional Education (9 tracks)

These official diplomas are granted to students on the base of the exams’ results that are organized by the Minister of Education and Higher Education. The choice of the track is supposed to be based on four major fields (or group of specialization) in higher education according to the specification listed in Table 3.8.

Table 3.8 The tracks in General Secondary Education based on four major fields or field of specialization in higher education

Baccalaureate Track	Major in Higher Education
General Science (SG)	Fundamental Sciences; Applied Sciences; Engineering; ...
Life Sciences (SV)	Medical and Health Sciences; Pharmacy; Biology; Biomedical; Biochemistry; Environment; Agriculture; ...
Sociology and Economy (SE)	Business, Economy, Marketing, Finance, Law, Political Sciences, Sociology, education, Journalism, ...
Literature and Humanities (LH)	Literature, Arts, Communications, Languages, Journalism, Media...

However, in reality, no regulatory text is passed that determines and clearly stipulates the higher education field that could be pursued by the graduate in each baccalaureate track, that is, the correlation of field of specialization to degree attained according to Table 3.8 is often

not practiced. Moreover, some basic baccalaureate tracks offer multiple opportunities in the pursuance of higher education or in labor market when seeking a job in the public sector. For example, a graduate of SV Baccalaureate track could pursue higher education studies in Biology, Biochemistry, Environmental, Medical or Health Science fields, as well as in Engineering, Applied Sciences or Business fields. Track diversification should be revised, though such programs and curriculums may perhaps have been justified in the 90s, about 25 years ago when they were first adopted. Furthermore, these tracks have been put into practice in the Lebanese schools, yet they have not been reviewed or developed but have been misused and veered from the basically set objectives.

It is worth noting that the old traditional methodology and approach of instruction that are dependent on ‘rote memory’ are still in practice; the interactive approach that requires qualified and trained teaching staff to enhance interaction between instructor and student was not applied. In this approach, subjects and problems concern life and practical issues that push or stimulate students to discover resolutions and find plausible answers through critical thinking, inductive reasoning and brainstorming in a collective interactive environment.

The data pertaining to the graduate in General and Technical Education is given in Table 3.9.

Table 3.9 Graduates: General and technical education in Lebanon – 2013

Diploma	Number of candidates		Number of graduates		Result %
Intermediate Level General Education (Brevet)	60705	94.5%	44291	94.1%	78
Intermediate Level * Professional Education (Brevet Professional –BP)	3523	5.5%	2800	5.9%	79.5
Total Brevet	64228	100%	47091	100%	73.3
Secondary Level General Education (Baccalaureate)	Total Bacc. Candidates		Total Bacc. Graduates		77.9
	41138	73.8%	32046	83.4%	
	100%		100%		
Bacc. General Science (SG)	5956	14.5%	4960	15.5%	83.3
Bacc. Life Science (SV)	14884	36.2%	11907	37.1%	80
Bacc. Sociology & Economy (SE)	17861	43.4%	13334	41.6%	74.7
Bacc. Literature & Humanities	1437	5.9%	1845	5.8%	75.7

Secondary Level Professional & Technical (Baccalaureate- BP & BT)	14597	26.2%	6392	16.6%	43.8
Total Secondary Level	55735	100%	38438	100%	69

* In elementary (intermediate) professional education level, there exists also the CAP (Certificat d'Aptitude Professionnelle (CAP) certificate that precedes the Brevet professionnel. It concerns a few artisan or handicraft activities, and a very limited number of apprentices (281 candidates, and 260 graduates in 2013)

The data delineated in this table has led the researcher to the following observations and analysis:

- a) The graduate data reflect the student enrolment data given in Table 3.6 in that
 - General Education dominates the student enrolment and graduation number (around 83% of graduates in the Secondary Level are in General Education)
 - The ratio of the students that passed is noticeably low in Technical Baccalaureate (BT) (43.8%) as compared to the ratio of students who passed in General Education (average about 78%).
- b) The dominant baccalaureate tracks in enrolment and in graduates are respectively as follows:
 - Sociology and Economy tracks: student enrolment 43.4% , and 41.6% of the total number of graduates in all tracks
 - Life Sciences track: Student enrolment 36.2%, and 37.1% of the total number of graduates in all tracks under this category.
- c) The domination of General Education especially in the secondary educational cycle could be due to the following factors:
 - The Lebanese social attitude that pushes the student to study to reach high university degrees. It is worth noting that Professional and Technical Education is considered as a track that is followed by those who are not able to succeed in the General Education in the belief that the curriculum content of the former is not enough to habilitate students to pursue studies in a university.
 - The low number of students who pass in Technical Baccalaureate is in direct correlation to the low entrance requirements to the said technical schools, knowing

that the high percentage of these enrolled students are academically under qualified.

- The higher percentage of students' enrolment and graduates of Sociology and Economy Baccalaureate track is in direct relation to the low score required by the school and the belief that this track is academically easier than the scientific ones. Furthermore, the schools' consideration of the expenses incurred could play a role in student-track orientation and enrolment in that the student's choice of track could be not based on clear data about labor market opportunities or on self-convictions.
- In many cases, the number of students in the secondary schools is a major parameter in opening a specific track. In Lebanon, which has a limited financial and human resources, considering the limited number of students in the Secondary Level (average 157 student by school and 50 students in the 3rd year of the secondary school)²² does not permit multi choice in pursuance of baccalaureate tracks. Numerous secondary education schools are founded on the basis of political interests or regional or religious considerations, and not on the basis of real demographic needs. The spread of the human and financial potentials in such secondary schools is not rational since it reduces the opportunities of pedagogical choices and the application of approaches. In such conditions and school environments the student's choices of tracks to pursue are limited for, as stated before, the offered tracks do not necessary reflect the academic potential of the students or the students' decision or interests.

Based on the researcher's experience in secondary and university institutions, it is suggested that the secondary cycle encompasses only two tracks, namely, scientific and humanities. The secondary taught courses should include the required basic academic content and skills needed to pursue specialized courses at the university level. Thus, material, finance and human resources potentials could be optimized and based on pedagogical approaches. Moreover, curriculum engineering should be based on interactive pedagogical approaches that are against

²² These averages are calculated by considering the number of secondary schools to be equal to 786, and the number of students in general secondary education level to be equal to 123776, and the number in the 3rd year of said level to be 39611 (CRDP, 2013).

rote memorization and the need to stuff information so as to pass a course without resorting to challenging the students' cognitive competency and creativity; aspects that characterize the traditional teaching methods. In fact, resolving these problems with the implementation of interactive analytical and methodical approach is pedagogically more efficient.

3.7 Higher Education – Lebanon, 2013:

3.7.1: Student Enrolment

The recent available data published by the Lebanese authorities concerning the scholastic year 2012/2013 (Table 3.10) shows the number of students enrolled in both public and private sectors in academic institutions (universities and colleges) and technical institutions. It is worth noting that post-secondary Technical Education is considered as higher education study according to Law#285, Article 6, 2014; whereas the data on post-secondary level are presented separately from the data on higher education in 2013, and does not include Technical Education.

Table 3.10 Student enrolment in higher education (academic and technical institutions) – Lebanon 2013

Institutions	Public Sector %		Gender % (Female)	Private Sector %		Gender % (Female)	Total %		Gender % (Female)
Academic Institutions (universities, colleges)	71440 37.2%	86.4	65.9	120348 62.8%	96.8	47.5	191788 100%	92.6	54.3
Technical institutions	11266 74%	13.6	56.4	3959 26%	3.2	8.8	15225 100%	7.4	44
Total	82706 40%	100	64.6	124307 60%	100	46.4	207013 100%	60	53.5

In this section the data on academic learning is discussed, and student enrollment data in private and public sectors within field of specializations is compared as seen in Table 3.11 and Figures 3.3, to 3.5. Female gender ratio is also presented in Table 3.11.

Table 3.11 Comparative data on student enrolment in university institutions (public and private sectors) within field of specializations – Lebanon, 2013*

Field of Specialization	Total LU & Private Sector			LU			Private Sector		
	Student Number	%	Female Gender %	Student Number	%	Female Gender %	Student Number	%	Female Gender %
Business, Economic	53291 100%	28	49.1	8118 16%	11.4	66.5	45173 84%	37.5	46
Law, Political Sciences	15171 100%	7.9	47.5	10610 69.8%	14.9	41.9	4561 30.2%	3.8	43.9
Humanities, Sociology	26304 100%	13.7	76.4	22143 84%	31	77.5	4155 16%	3.5	70.3
Arts	10214 100%	5.3	67.4	1894 14.6%	2.6	71.8	8320 85.4%	6.9	66.4
Journalism, Media	4395 100%	2.3	73.9	1713 39%	2.4	86.1	2682 61%	2.2	66.1
Tourism	1289 100%	0.7	56.1	460 35.7%	0.6	69.8	829 64.3%	0.7	48.5
Education	4706 100%	2.4	84.9	1575 32.4%	2.2	88.2	3181 67.6%	2.6	82
Sciences, Applied Sciences	27457 100%	14.3	49.5	144289 52%	20	63.5	13168 48%	10.9	34.3
Engineering, Technology	23424 100%	12.2	26.1	5431 23.2%	7.6	35.7	17993 76.8%	14.9	23.2
Agriculture, Environment	1414 100%	0.7	58.1	835 59.1%	1.2	15.7	579 40.9%	0.5	59.6
Medicine	3926 100%	2	47.5	947 24.1%	1.3	51.4	2979 75.9%	2.5	46.2
Dentist	1211 100%	0.6	58.5	379 31.3%	0.9	65	832 68.7%	0.7	55.8
Pharmacy	2970 100%	1.5	74.2	341 11.5%	0.5	81	2629 85.5%	2.2	73.3
Paramedical, Public Health	9763 100%	5.1	80.3	2705 27.7%	3.8	85	7058 72.3%	5.9	78.4
Religious Studies	6209 100%	3.2	44.5	—	—	—	6209 100%	5.2	44.5
	191788 100%	100	54.3	71440 37.2%	100	100	120348 62.8%	100	47.5

* Conservatory (Music College) and Military College are not included in this table

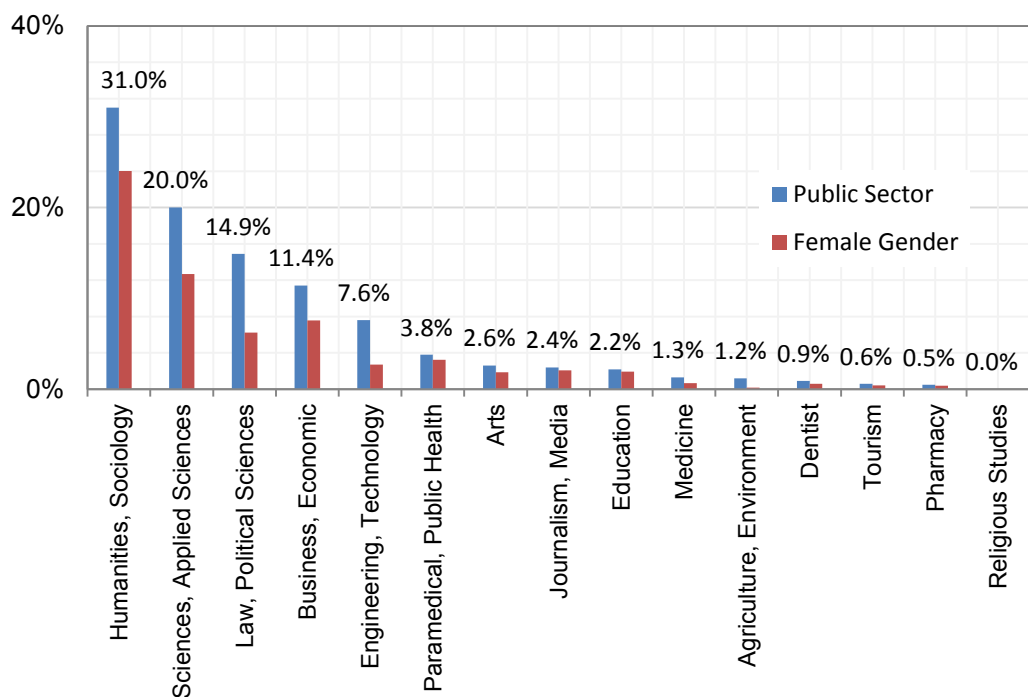


Figure 3.3 Percentage of student enrollment within field of specialization LU-2013

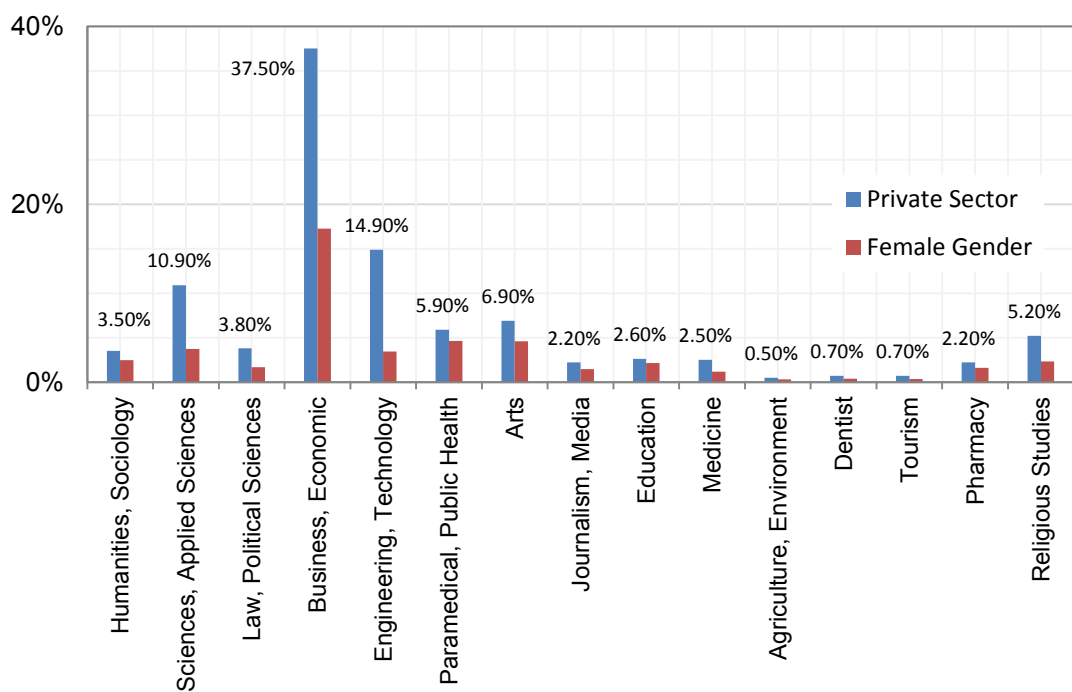


Figure 3.4 Percentage of student enrollment in the field of learning in private university institutions

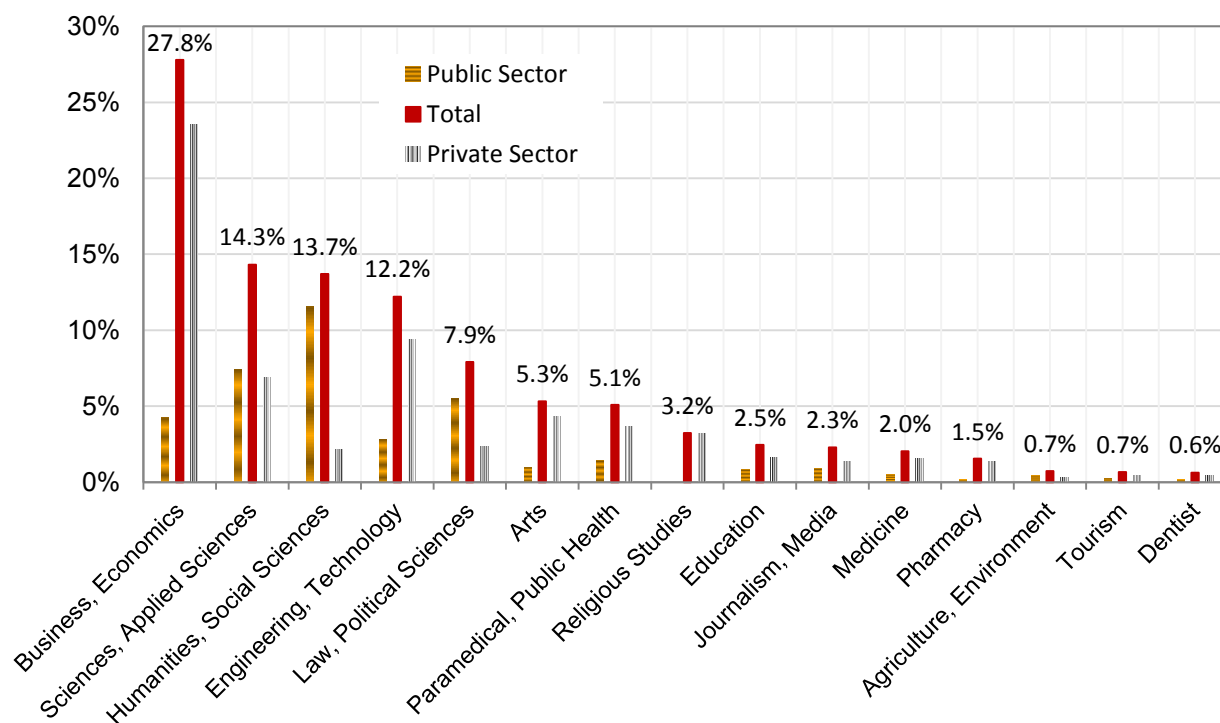


Figure 3.5 Percentage of student enrollment within field of specialization

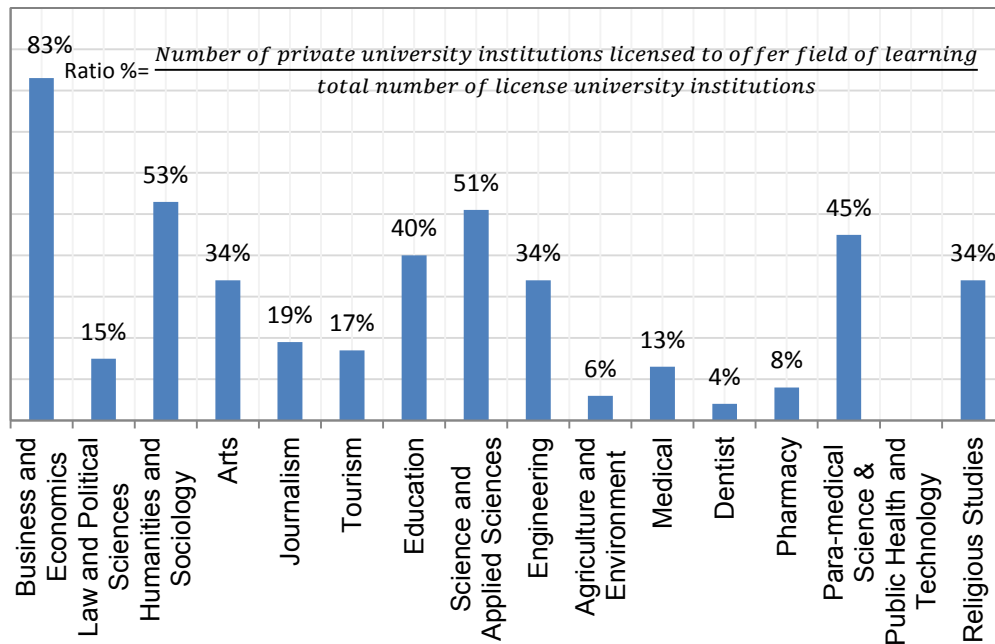


Figure 3.6 Licensed field of learning in private university institutions

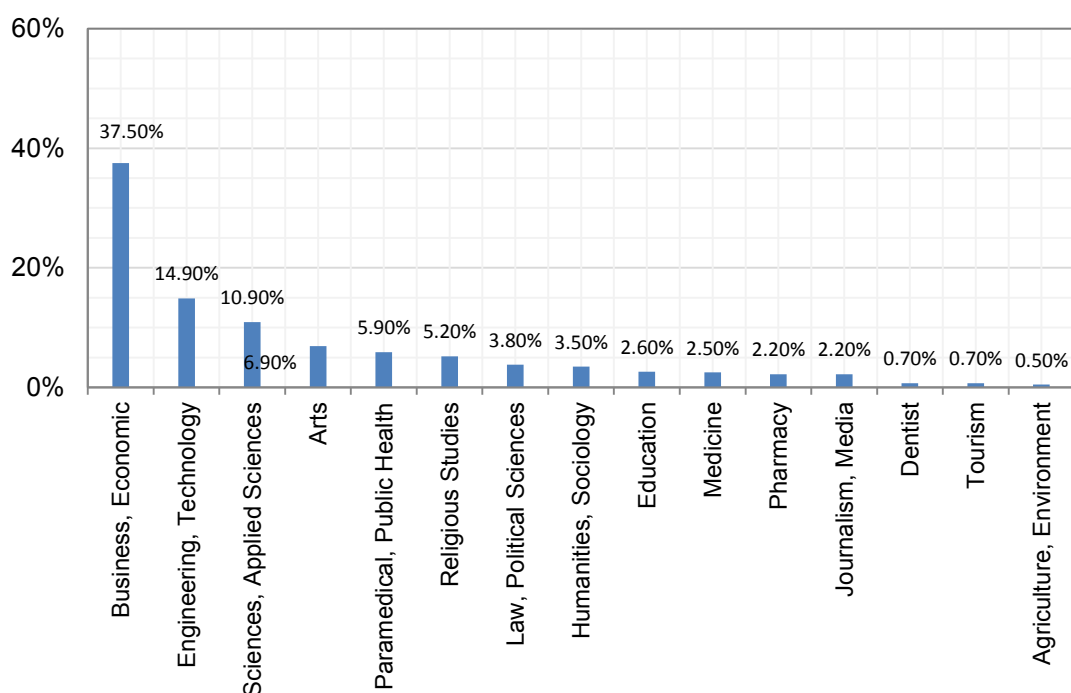


Figure 3.7 Percentage of student enrollment in the field of learning in private university institutions

Student enrolment ratio within fields of specialization in private sector is compared to the number of higher institutions that are authorized to offer these specializations as seen in Table 3.12.

Table 3.12 Field of learning in private higher education institutions

Field of Specialization	Number of Private Higher Education Institutions (N _I)	% of Licensed Private Higher Education Institutions (N _T)
Business and Economy	39	83%
Law and Political Sciences	71	15%
Humanities and Sociology	25	53%
Arts	16	34%
Journalism	19	19%
Tourism	8	17%
Education	19	40%
Science and Applied Sciences	24	51%
Engineering	16	34%
Agriculture and Environment	3	6%
Medical	6	13%
Dentist	2	4%
Pharmacy	4	8%

Para-medical Science & Public Health and Technology	21	45%
Religious Studies	16	34%

N_I: The total number of private higher education institutions = 47

N_T: The number of private higher education institutions licensed in field of specialization

Moreover, in Figure 3.8, the student enrolment in higher education institutions are presented in descending order, noting that the names of the institutions are not given.

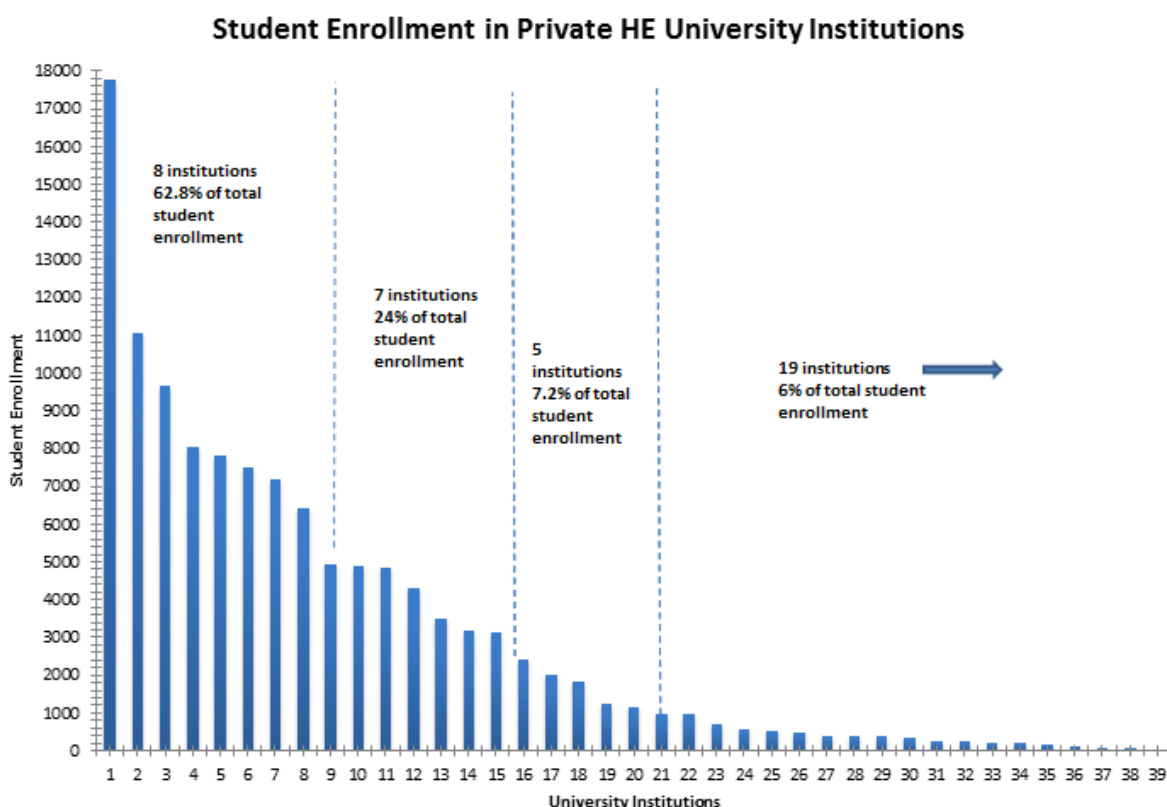


Figure 3.8 Student enrollment in private higher education university

Accordingly, the following can be deduced from the given data:

- 1- Total student enrolment in higher education (207013), including those in technical higher education, represents about 17% of total enrolment, with high domination of academic education in public sector (86.4%) as well as in the private sector (96.8%); however, as a whole, the private sector dominates in higher education by 60% .

- 2- Female gender ratio is high in public sector (academic and technical education), and low in technical private sector.
- 3- Overall, female gender is dominant in many fields of specialization particularly in the Lebanese University (LU); this ratio exceeds 70% in Humanities and Sociology, Journalism, Media and Pharmacy. It exceeds 80% in Education, Paramedical and Public Health Studies.
- 4- Overall, student enrolment in the private sector is higher than those of the Lebanese University. In most fields of specialization, student enrolment ratio is higher in private sector; it exceeds 70% in Paramedical, Health, Medicine and Engineering studies, and 80% in Business, Economy, Arts and Pharmacy.
- 5- In the private sector, student enrolment ratio is high in Business and Economy field; this sector receives 84% of the total student number enrolled in this field, while this ratio is high in Humanities and Sociology fields at the Lebanese University: it receives 84% of the total student numbers enrolled in this field. Moreover, the data indicates noticeable high ratio in Sciences and Applied Sciences fields in the Lebanese University (20%), in Engineering and Technology fields in the private sector (about 15%). Apart from the Business and Economy field, these ratios do not correspond to student enrolment ratio, especially in Humanities and Sociology (3.5%) and Education (2.2%). The asymmetry issue in student enrolment in fields of specialization seems to be due to the fact that parents (or students) do not want to pay expensive fees to study what is considered a major that has low job opportunities or be enrolled in low income specialties.
- 6- Most private higher education institutions are authorized to teach numerous programs: 83% of these institutions offer Business and Economy major; 53% offer Humanities and Sociology Program; 51% offer Sciences and Applied Sciences Program; 45% offer Paramedical and Health Science Programs; and, 40% offer a program in Education.
- 7- About 30% of the private higher education institutions receive about 80% of the total student enrolment, and about 50% of the institutions receive about 6% of total student enrolment in private sector, with average student number lower than 400 students. These indications and the data given in Table 3.1 (more than 50% of the higher

education institutions are established by religious organizations) lead one to ask about the role and influence of political interests and religious considerations in the licensing of higher education institutions; a deed which most often could not be justified in terms of demographic or national needs.

3.7.2: Graduates in Higher Education

The number of those who graduate from higher education institutions is given in Table 3.13, which also includes the female gender ratios; this reflects the number of student enrolment in public and private sectors. The female graduates in the Lebanese University is noticeably high (71%) in comparison with the private sector (51.5%). The total number of graduates (35061) in both academic and technical institutions represents about 17% of the number of the total student enrolment in higher education institutions.

Table 3.13 Graduates in Higher Education – Lebanon, 2013 (CRDP 2013)

Institutions	Public Sector	Gender % (Female)	Private Sector	Gender % (Female)	Total		Gender % (Female)
University Institutions	LU	71	21709 67.7%	51.1	32070 100%	91.5%	57.6
	10361 32.3%						
Technical Institutions	*	*	*	*	2991 **	8.5%	*
Total	—	—	—	—	35061	100%	*

* Statistical data not available

** The candidate number was 6012 (graduate ratio: 43.3%)

3.7.3: Analysis of Education Data in Lebanon – (2001 – 2013)²³

In the scholastic year of 1997/1998, new organization of the educational system and new curriculums were introduced; Chart 3.1 delineates the adopted learning levels. These new modifications were applied as of the first academic year of each cycle in the Elementary and

²³ The sources of data are the CRDP Statistical Bulletins of 2001, 2003, 2006, 2007, 2011, &2013, and the Exam Service Office – General Directory of Education, MEHE

Secondary Levels. The first group to graduate after the introduction of these modifications, in Brevet and Baccalaureate levels, was in 2001. Accordingly, any rational analysis of data on education should be as of said year. However, the Center of Pedagogical Development and Research (Centre de Recherche et de Developpement Pedagogique – CRDP), which is responsible of education data and statistics has not yet published statistics on education data in Lebanon after the year 2013.

Moreover, a current research on the education status in Lebanon would not be complete if the Syrian conflict and the number of Syrian refugees to Lebanon are not taken into consideration. The Syrian conflict has resulted in massive people displacement. Though no accurate estimate of displaced people, yet the Ministry of Social Affairs puts the number around 1.3 million; and, that more than 100000 Syrian children have enrolled in the Lebanese education institutions, especially in the public sector.

The number of enrolled students in the Lebanese educational system rose from 1060041 in 2001 to 1244518 in 2013, including the number of children enrolled at the KG level; a growth that reflects the increase in the educational opportunities and number of the inhabitants. There are many reasons behind the growth of population in Lebanon; one of them is the natural growth ratio of population; another reason is the regional conflicts that have resulted in massive entrance to Lebanon of displaced people; however, another cause affects the population growth, such as the existing economic situation that has led to the Lebanese youth to migrate, resulting in brain drainage syndrome.

In this study, the undertaken deductive analysis is done on an approximate population of 4 million in the year 2000 according to the CDR report of 2005, with an annual population growth ratio of about 0.9% (estimated to have risen to 1% in the CDR report of 2005, and to 0.86 according to the World Factbook, 2015). Also the approximate age group ratios of the population that is under study is deduced and calculated from the pyramid of the Lebanese population's age as established in 1996 and 2007 (See Appendix C) (Nouridine, 2010, p. 709).

Accordingly, and as a result of the afore-stated data and considerations, the researcher deduced and calculated for several education levels, population number of corresponding age groups and Gross Enrollment Ratio GER (%) (See Appendix D), taking into consideration

that some demographic variations could affect the population age ratio and annual population growth ratio. The number and the values deduced or calculated should be considered as approximation; however, they give many indications as to the state of higher education in Lebanon, in the last decade.

$$\text{GER \%} = \frac{\text{Absolute student enrolment number in education level}}{\text{Population number of corresponding age group}}$$

The obtained data are presented in Tables 3.14 and 3.15 and depicted in Figures 3.9 to 3.12

Table 3.14 The estimated population in 2000 is 4,000,000

Year	2001	2003	2006	2007	2011	2013
Population (million)	4.04	4.11	4.22	4.26	4.41	4.49
Growth ratio 0.9%						
Enrolment in KG (3 years)	155357	152194	148348	150872	154168	172404
Enrolment in cycles 1 and 2 (Elementary Level)	453986	449311	447593	450522	456985	471626
Population age group 6 – 12 years	464600 11.5%	464430 11.3%	464200 11%	468600 11%	476280 10.9%	480430 10.7
GER %	98	97	96	95	96	98
Enrolment in Intermediate Level	185662	201390	202960	202269	216634	219092
Population age group 13 – 15 years (6%)	242400	246600	253200	255600	264600	269400
GER %	77	82	80	79	82	81
Enrolment in Secondary Cycle	131018	148821	162611	166090	177819	170262
Population age group 16 – 18 years (6.5%)	262600	267150	274300	276900	286650	291850
GER %⁽¹⁾	50	56	59	60	62	58

Table 3.15 The estimated population in 2000 is 4,000,000

Year		2001	2003	2006	2007	2011	2013
Population (million)⁽²⁾		4.04	4.11	4.22	4.26	4.45	4.49
Population growth ratio 0.9%							
Enrolment in Higher Education Level ⁽³⁾	University Institutions	119487	123371	146961	160364	192138	191788
	Technical Institutions	14531	20679	26162	26691	24713	19346
	Total	134018	14405	173123	187055	216851	211134
	Population age group 19 – 24 years ⁽⁴⁾	484800 12%	493200 12%	497960 11.8%	502680 11.8%	507150 11.5%	516350 11.5%
	GER %	28	29	35	37	43	41
Graduates in Higher Education	University Institutions	14742	18940	25607	26879	29804	32070
	Technical Institutions (TS, LT, LET)	1672	2807	4855	5289	4203	2991
	Total	16414	21747	30462	32168	34007	35061
Graduates in Secondary Level	General Education	21582	26798	31056	32213	32211	32046
	Technical Education	5949	6107	8844	8540	5499	6392
	Total	27571	32885	39400	40753	37927	38438

⁽¹⁾ The GER values in this Table of the Secondary and the Higher Education Levels are lower than those given by the UNESCO Institute for Statistic Glossary at <http://www.uis.unesco.org/glossary/>. The difference could be due to the number of the real resident population and the percentage of the population age group (16 – 18) and (19 – 24) being taken into consideration.

⁽²⁾ The real number of resident population in 2013 could be higher than 4.49 million. Following the World Fact Book 2015, (CIA.gov/library/publication/the-world-factbook/years/lc.html). The population number in Lebanon is 6.2 million, which may include about 1.5 million of displaced Syrians.

⁽³⁾ These data concern population that pursues studies in higher education institutions in Lebanon. Numerous Lebanese students pursue studies in abroad university institutions

⁽⁴⁾ Calculated population ratio in age group 19 – 24 in Lebanon is approximately similar to the average ratio in the Arab countries (10.8%), deduced from data given by UNESCO Regional Report on Higher Education in the Arab States (1098 – 2008), 2010, pp. 11 – 13

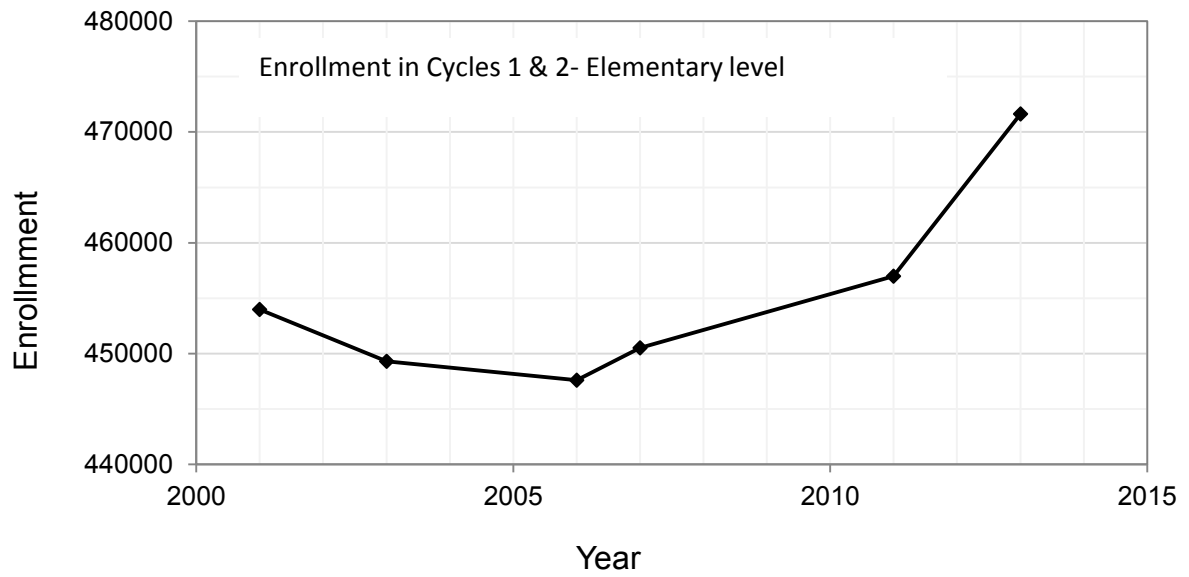


Figure 3.9 Students' enrolment curve in the Elementary Level

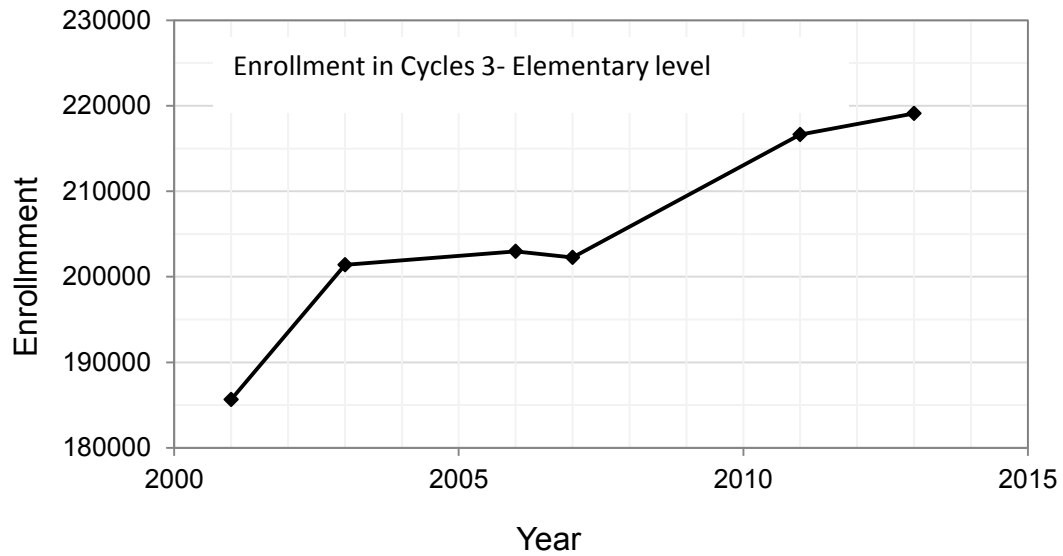


Figure 3.10 Students' enrolment curve in the Secondary Level

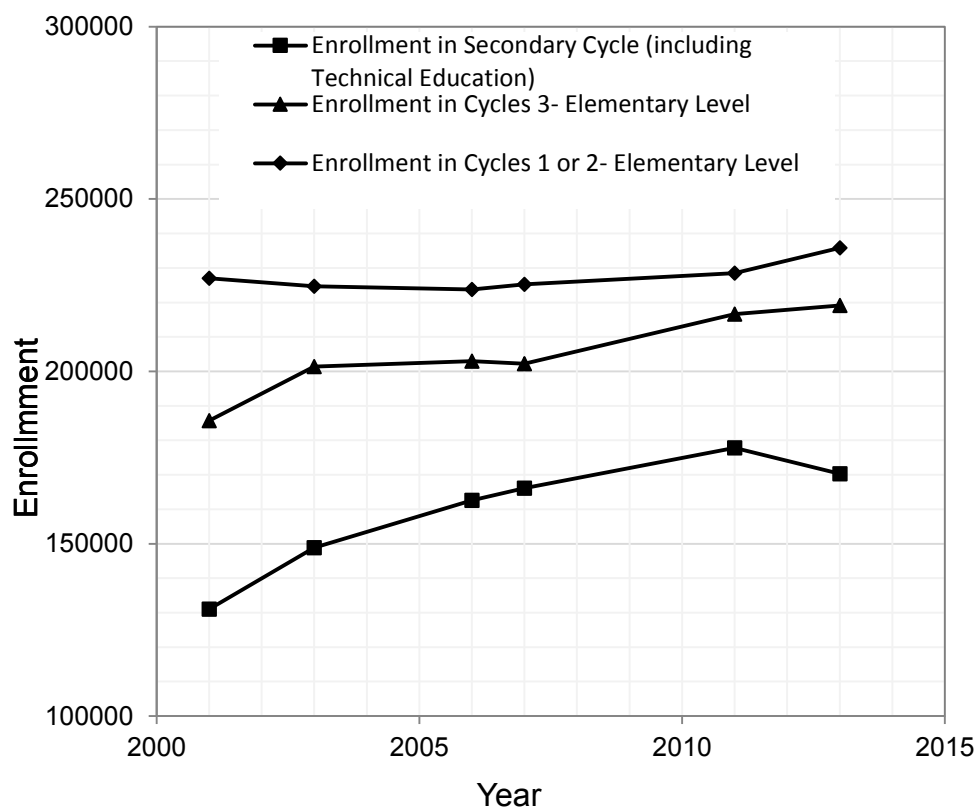


Figure 3.11 Enrollment in Elementary and Secondary Levels

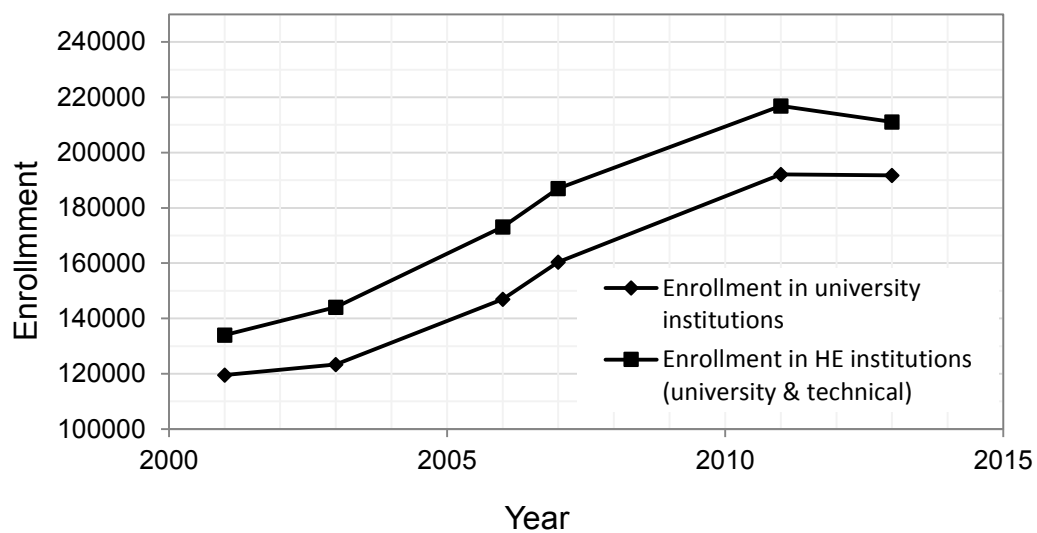


Figure 3.12 Enrollment in the Higher Education Level

According to the presented tables and figures, the population growth ratio (estimated to be 0.9%) affects the students' enrolment number. In order to present comparative data, this parameter could be eliminated by considering student enrolment and the number of graduates per 100000 inhabitants; a practice often followed in studies pertaining to the educational sector (UNESCO Regional Report 2010).

The deduced data is given in Table 3.16 and presented in Figures 3.13, 3.14 and 3.15; in this table and figures the average values of student enrolment and concerned education levels are also shown. Although arithmetic average numbers could not be taken as representative data for they don't shed light on specific information such as fairness and improvement, yet they give an overall indication of evolution trends in education levels and cycles by comparing average number of student enrolment in each level to student enrolment and graduate numbers at the end of an academic year of each level. This comparison could provide indications as to study delay (enrolment age delay), fairness and learning efficiency in each level of the education system. Moreover, student enrolled groups who have passed from one level to another could be followed by taking into account the number of academic study years required in each level.

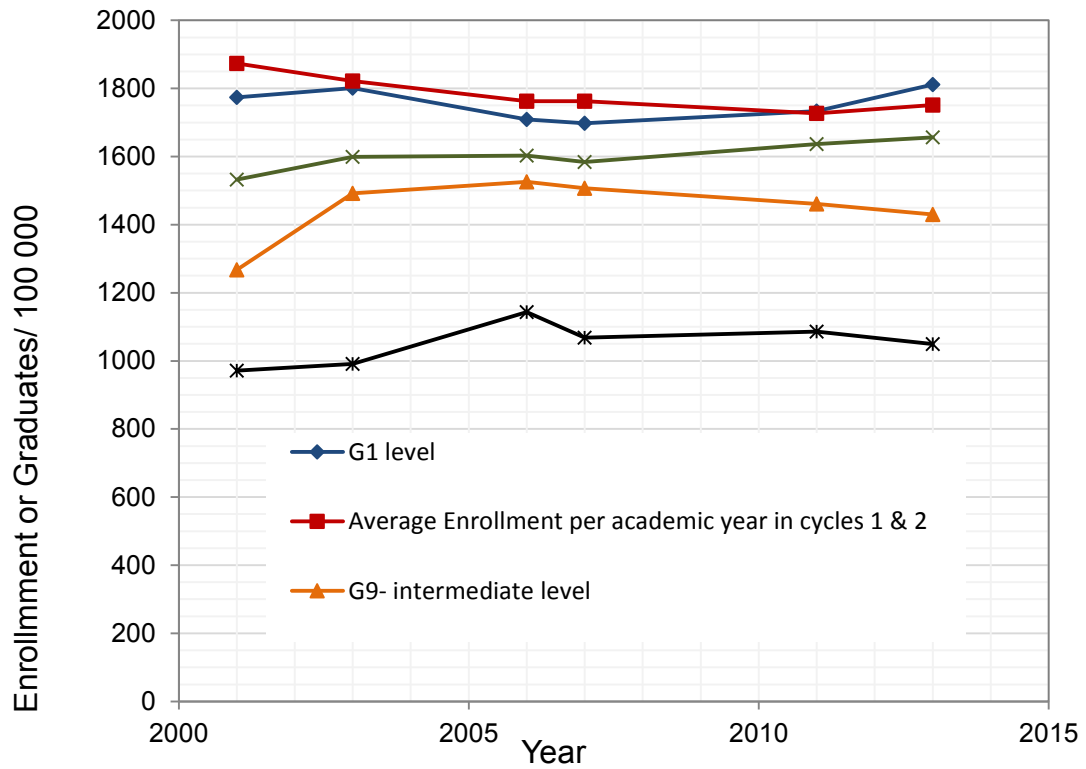


Figure 3.13 Enrollment and graduates (Brevet) at Elementary and Intermediate Levels/ 100 000 Inhabitants

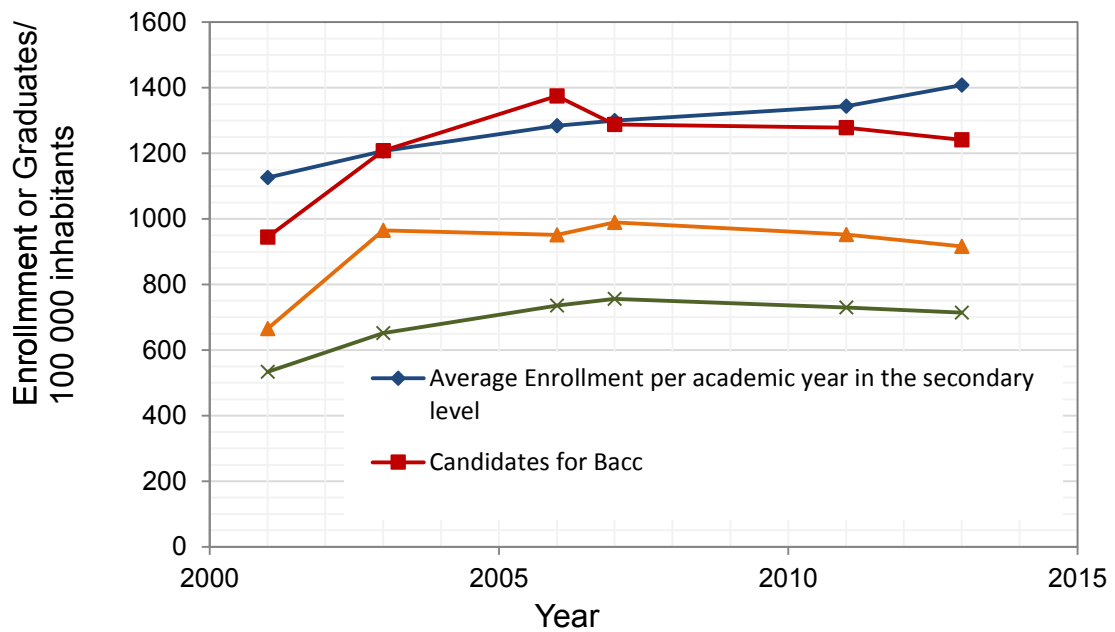


Figure 3.14 Enrollment and graduates (Bacc) at the Secondary Level / 100 000 Inhabitants

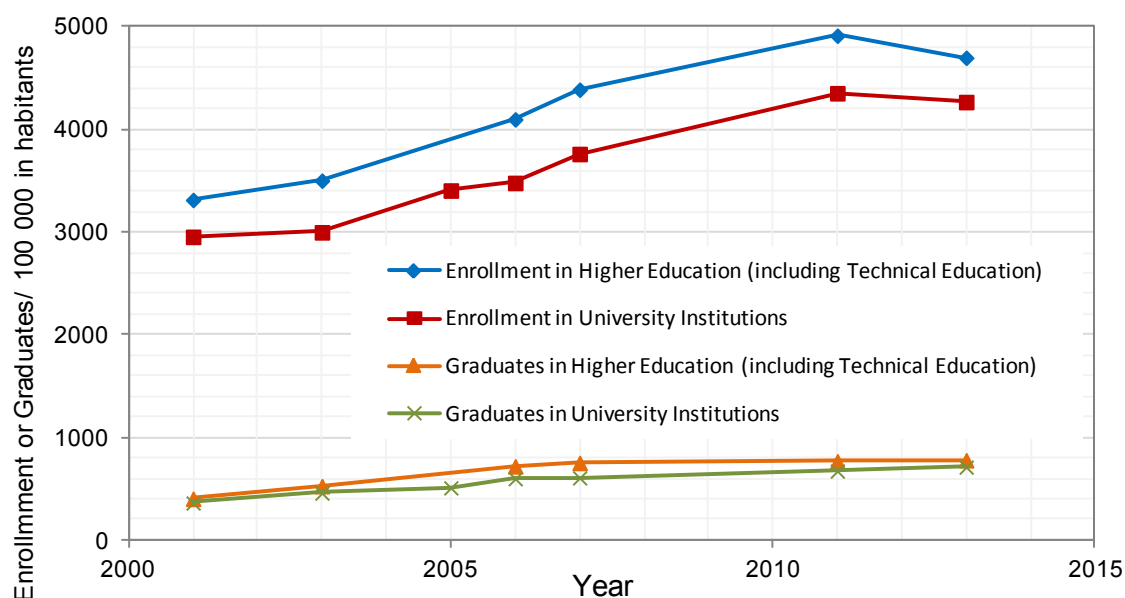


Figure 3.15 Enrollment and graduates at the Higher Education Level/100 000 inhabitants

Table 3.16 Enrolment per 100000 inhabitants in the Lebanese higher education system

Year			2001	2003	2006	2007	2011	2013
Population (million)			4.04	4.11	4.22	4.26	4.41	4.49
Estimated annual population growth 0.9%								
Elementary and Intermediate Levels	Enrolment in G ₁ per 100000 inhabitants		1774	1801	1709	1698	1733	1811
	Enrolment/100000 inhabitants in Cycle 1 and 2		11237	10932	10606	10976	10362	10504
	Average annual enrolment per 100000 inhabitants		1873	1822	1763	1763	1727	1751
	Enrolment/100000 inhabitants in Intermediate Level / 100000 inhabitants in G ₇		4596	4900	4809	4748	4912	4880
			1858	1898	1751	1745	1783	1733
	Average annual enrolment per 100000 inhabitants		1532	1599	1603	1584	1637	1656
	Output in Intermediate Level per 100000 Inhabitants, including "Brevet Professional"* ²⁴	Candidates "Brevet"	1267	1492	1526	1507	1461	1430
		Graduates "Brevet"	971	991	1143	1068	1086	1049

²⁴ The candidates and the graduates in "Brevet Professional" represent less than 5% of the output of the intermediate education level

Secondary Level	Enrolment in 100000 inhabitants		3378	3621	3853	3899	4032	3797
	Average annual enrolment per 100000 inhabitants		1126	1207	1284	1300	1344	1408
	Output Secondary Level (General Education)	Candidates	665	965	951	989	952	916
		Graduates	534	652	736	756	730	714
	Output Secondary Level (Technical education)	Candidates	279	243	424	299	326	325
		Graduates	148	149	210	201	130	142
	Total output Secondary Level	Candidates	944	1208	1375	1288	1278	1241
		Graduates	682	801	946	957	860	856
Higher Education Including technical institutions	Enrolment per 100000 inhabitants (N_T)		3317	3505	4102	4391	4917	4702
	Graduates per 100000 inhabitants (N_G)		406	529	722	755	771	781
	Ratio graduate/enrolment		12.2%	15.1%	17.6%	17.2%	15.7%	16.6%

However, the ratio of graduates in higher education N_G against the number of students enrolled in higher education N_T is about 17% in 2013. This indicates that many students have a delay year in age group corresponding to the considered level; and, the real duration that many students stay in higher education institutions is about 6 years. This is a normal duration for some specialties such as medicine and engineering, but as aforementioned, the number of students enrolled in these fields constitutes a low percentage as compared to those enrolled in 3-year Bachelor Degree track. The high student enrollment number in higher education resulting from annual ‘accumulation’ of students’ number (about 9%) that stay more than the normal duration is specified in the academic programs. The above mentioned delay could be due to the Lebanese economic situation that pushes many students to work in order to cover the tuition fees. These students register for a number of credits per semester: less than the

usual load per semester needed to obtain the degree in set duration. The high enrollment number in the higher education could also be due to failing, especially in the first academic year. This is an important phenomenon in some faculties of the Lebanese University that do not require an entrance exam. This overall presented data indicates, especially in the Lebanese University, deficiency in the educative system, and leads to the following observations and indications:

- In 2013, about 1.37 million^{25,26}, apprentices and staff were affiliated with the Lebanese education system. Moreover, numerous Lebanese people were connected or had economic interest in the education sector. Thus, more than 30% of the population in Lebanon is engaged or implicated in this sector, implying that more attention is to be given to this vital sector.
- The female gender is well presented in the education sector; overall, more than 50%. This presentation reaches 68% in some specializations or sectors, and 70% of the teaching and administrative staff. In addition, the education sectors in all its levels advanced a lot, giving the females an increased opportunity to be employed in highly responsible jobs.
- The private sector dominates by 67% of the Lebanese education system (about 68% in the levels prior to higher education, and about 63% at the university level), but remains low in the technical higher education (about 26%). This trend is characteristic of the Lebanese free economic principle and the Lebanese open social system; in addition to the financial reason in that governmental financial resources cannot alone cover all needed funds to meet education massification. The private sector had and should have a big part of contribution.
- Gross enrollment ratio (GER) in the Lebanese education system is compatible with that of the developed countries in the region; it reaches 100% in Cycle 1 and 2 of the Elementary Level that corresponds to the age group of the

²⁵ About 12% of the enrolled students were not Lebanese

²⁶ The number 1.37 million is taken from the CRDP statistics of 2013: 1237812 enrolled students + 133584 teachers and administrative staff + estimated 10% added as technicians, services and people in economic interested sectors.

compulsory learning period. However, GER decreases noticeably in the 3rd Cycle of the Elementary Education Level (Intermediate Education Level) to become about 80%. This ratio continues in the Secondary Education Level by around 70%; and, in the Higher Education Level by around 40%. The average decreasing flux at the end of each level is presented in Figure 3.17. From 2001 to 2013, student enrollment evolution remained higher than the population growth ratio (11%) in the Intermediate Education Level (3rd Cycle of the Elementary Level) (18%); in the Secondary Level (30%); and, in the Higher Education Levels (58%). Thus, a clear increase in education opportunities is observed, especially in higher education; the GER in the Lebanese education system is among the highest ratios in the region (UNESCO Regional Report, 2010, p. 14).

- Student enrollment evolutions in both Lebanese University and the private university institutions, from 1993 till 2013 reflect the important growth in the Lebanese University even to around 2001 and then approximately stabilizing in 2003. While student enrollment in private university institutions have continued to grow since 2001, even to 2011 (see Table 3.3 and Figure 3.2); the enrolment per 100000 inhabitants is given in Table 3.17 and are shown in Figure 3.16. It is noted that more than 50% of the LU students are enrolled in regional branches (out of Beirut – Mont. Liban), which indicates a positive contribution of the Lebanese University in region's development, especially for those who are considered of poor social level and suffer from economic difficulties. The number of graduates in the private universities continued to increase, while it remained nearly the same at the Lebanese University for the period between 2009 and 2013 (Table 3.18, Figure 3.17). However, the fluctuation in the graduation ratio does not reflect evident correlation with student enrollment evolutions (Table 3.18, Figure 3.18).

Table 3.17 Enrolment in University Institutions

Year		1993	1997	2001	2003	2005	2006	2007	2011	2013
Estimated population (million)		3.76	3.89	4.04	4.11	4.15	4.22	4.26	4.41	4.49
Annual population growth ratio 0.9%										
LU	Total enrolment	39936	49755	71050	65530	70065	70627	72961	72507	71440
	Enrolment per 100000 inhabitants	1062	1279	1759	1594	1688	1674	1713	1644	1591
Private Sector	Number of institutions	19	23	43	43	42	42	42	44	46
	Total enrolment number	48753	38202	48437	57861	71414	76334	87403	119631	120348
	Enrolment /100000 inhabitants	1297	982	1199	1408	1721	1809	2052	2713	2680
Total	Total enrolment number	88689	87957	119487	123371	141479	146961	160364	192138	191788
	Enrolment /100000 inhabitants	2359	2261	2958	3002	3409	3483	3765	4357	4271

Table 3.18 Student enrolment and graduates' number in University Institutions/100000 inhabitants

Year		2001	2003	2005	2006	2007	2011	2013
LU	Enrolment	1759	1594	1688	1674	1713	1644	1591
	Graduate	155	204	144	250	234	230	231
	%	8.8%	12.8%	12.8%	15%	13.7%	14%	14.5%
Private Sector	Enrolment	1199	1408	1721	1809	2052	2713	2680
	Graduate	210	256	305	356	401	446	483
	%	17.5%	18.2%	17.7%	19.7%	19.4%	16.5%	18%
Total	Enrolment	2958	3002	3409	3483	3765	4357	4271
	Graduate	365	461	449	607	631	676	714
	%	12.3%	15.4%	15.3%	17.4%	16.8%	15.5%	16.7%

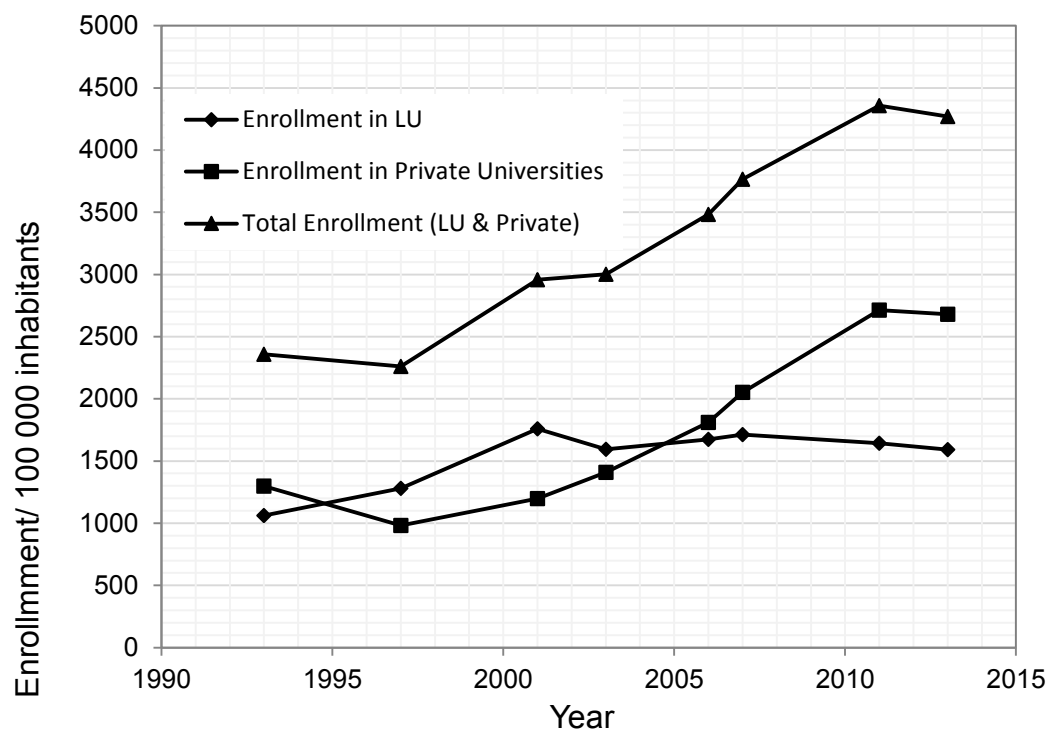


Figure 3.16 Enrollment in university institutions/100 000 inhabitants

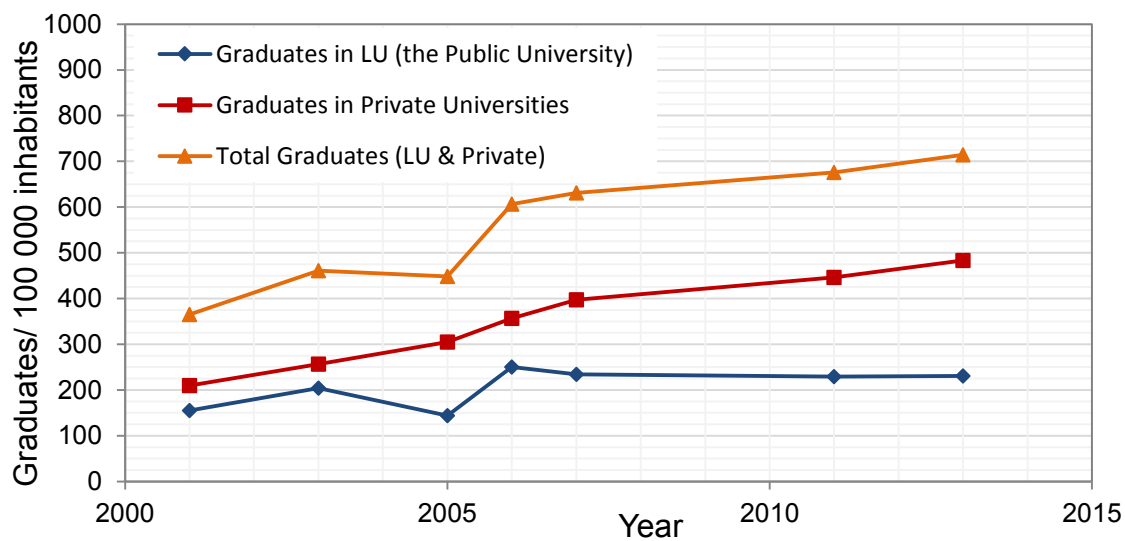


Figure 3.17 Graduates in university institutions/ 100 000 inhabitants

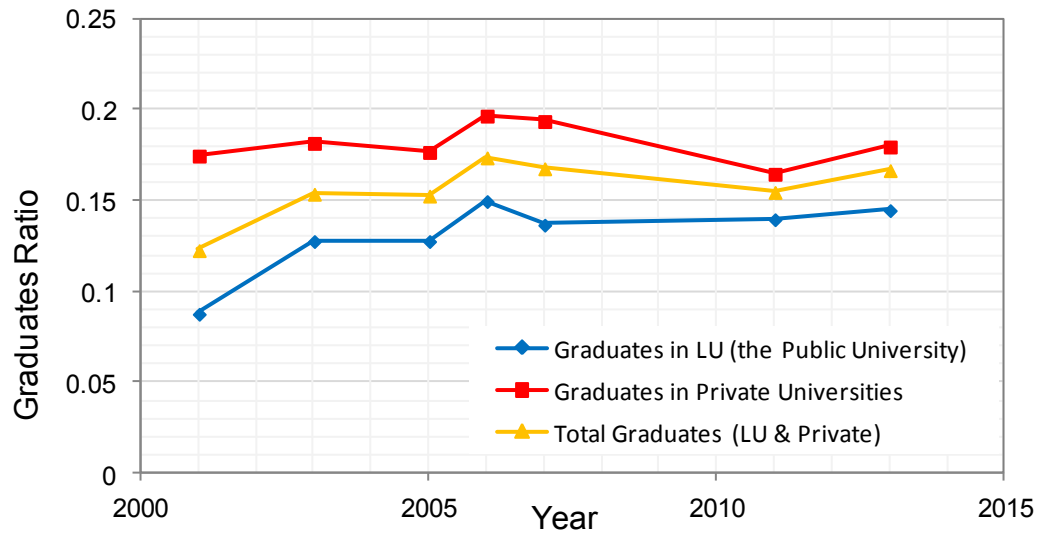
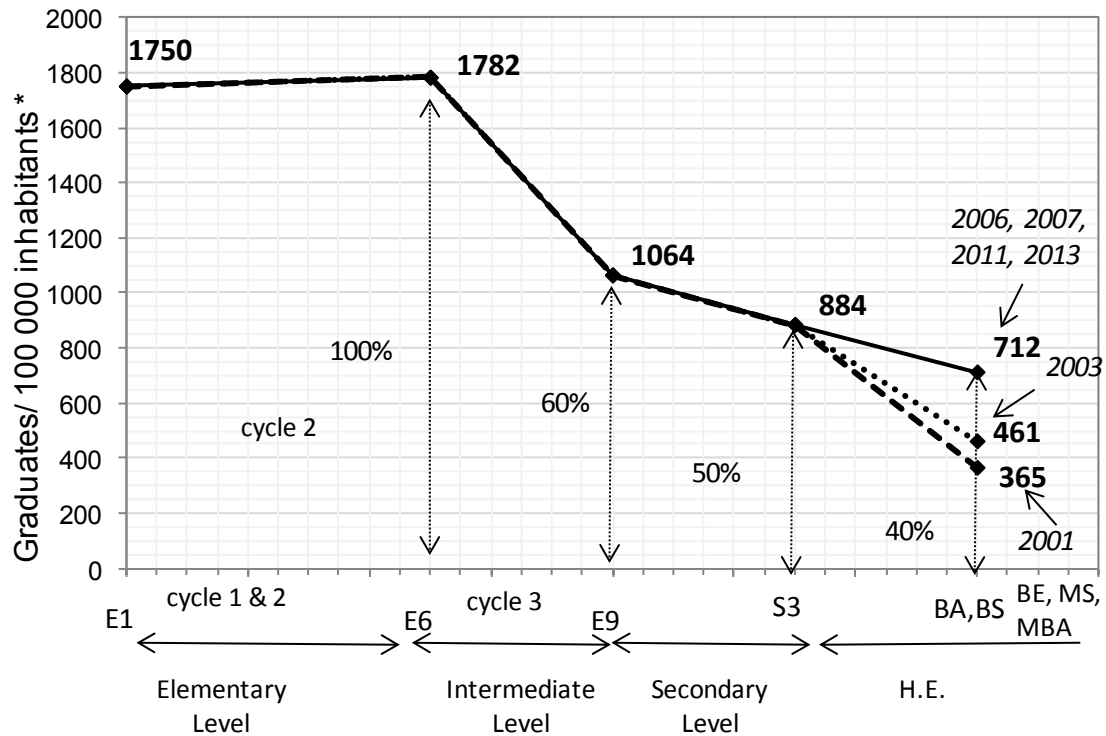


Figure 3.18 Graduate ratio in university institutions

The average decreasing flux at the end of the Elementary, Intermediate, Secondary, and Higher Education Levels presented in Figure 3.19, indicates substantial drain at the Intermediate and Secondary Levels. However, ample opportunities are available to access Higher Education Level, especially as of the year 2000 whereby most secondary level graduates (about 80%) have (after 3- 5years) obtained higher education titles. Globally, about 60%, 50%, and 40% of the input flux at Elementary Level have obtained first education title (Brevet), Secondary Education title (Baccalaureate), and Higher Education title, respectively. Thus, these indications require more attention to evolve so as to reduce ‘evasion’ at the Intermediate and Secondary Levels. Figure 3.19 depicts the average graduate number at the different levels between 2001 and 2013.



*Average graduate number between 2001 and 2013

Figure 3.19 The average decreasing flux at the end of the Elementary, Intermediate, Secondary and Higher Education levels

These trends could be explained as the following:

- Important increase in the number of the private university institutions in the period between 1995 and 2000²⁷ (See Figure 3.1). These institutions have also established branches all over the Lebanese territory. Direct chronological correlation does not immediately appear because of the inertia phenomenon in higher education (delay in enrollment and graduation evolution).
- At the end of the Lebanese war, the Lebanese Government established a reconstruction plan with international support, whereby the education sector

²⁷ In the period of 2000 – 2010, the number of new private university institutions was limited, but many existent institutions were transferred from university college status to that of full university.

received more attention than before, thus resulting in the development and growth of higher education.²⁸

- Average value of graduate ratio indicates prolongation of study duration. Considering that most students are enrolled at the Bachelor level, these ratios which are the lowest in the Lebanese University (Table 3.18, Figure 3.18), indicate that the average duration that a student stays at a university is more than 5 years, if not 6 years. This could be due to the students' socio-economic situations and/ or wrong pedagogical approach. Moreover, graduate ratio fluctuation could be direct reflection of the conflicts and the instability of the Lebanese situation.
- Study delay and resultant fairness increase GER ratio, which includes the number of students enrolled in the corresponding education level, could be higher than the number of the population age group of the corresponding education level, knowing that GER value in higher education level is sequentially affected by the GER value of the 3rd Cycle of the Elementary Level and in the Secondary Level.
- Higher education opportunities are available in Lebanon for most Baccalaureate graduates. The issues lie in the efficiency and quality of the existent education potential of the levels prior to those of higher education levels. However, in this context, it is worth noting that some higher education institutions have shown rapid increase in student enrollment numbers (Figure 3.7). This phenomenon should not be always considered as positive evolution opportunities because these institutions may not have imposed serious academic entrance requirements and have low-credit fees; facts that do not assure quality of higher education learning.
- There are leakage from the education system, of apprentices at the end of the 2nd Cycle of the Elementary Education Level, which corresponds to the limit of the compulsory- schooling age (the leakage varies between 5 and 15%). The leakage ratio is noticeably smaller between Elementary and Secondary Education Levels; it is very limited between General Secondary Education and Higher Education Levels, but is an important/ noticeable occurrence at the end of Technical Secondary Education during which the ratio of failing students is high due to

²⁸ Numerous schools in general and technical educations were founded; new campuses of the Lebanese University were constructed or rehabilitated; and, new majors were introduced

simple or lack of entrance requirement. In the frame of higher education, leakage ratio is very limited, in spite of the important study delay of numerous students. Although there are qualification stratification in the labor market that covers several education levels, yet it is not acceptable that children between the ages 12 and 15 leave the education system. More effort must be exerted to maintain all children and the youth (up to age 18) enrolled in education institutions; be it academic or professional systems.

- It is safe to conclude that the secondary and higher education systems are in “saturation” state. The expected growth in absolute number of student enrollment will be the corresponding population growth ratio, which annually does not exceed 1%. As noted from above, most graduates of the secondary level are enrolled in higher education institutions. The issue of the Lebanese higher education has passed the assurance of higher education to assurance of learning quality improvement and the quality assurance of the graduates of both the Secondary and Higher Education Levels. Moreover, the control of learning quality and the attainment of the higher education diplomas require the creation of accreditation and quality assurance organizations and legal entities, and the establishment of national quality assurance and accreditation criteria and processes.

3.8 Main Aspects and Indications of Higher Education System in Lebanon:

Much of the information and data in this section is taken from Abourrjeili (2009). Lebanon knew in the last decades higher education massifications as seen in the

- Important evolution of the Lebanese University due to horizontal expansion, for example the opening of branches across the Lebanese territory; and, vertical expansion, for example the opening of new faculties and colleges.
- Increase in the student enrollment in private university institutions, resulting in
 - The opening of branches in different regions, new faculties and new majors

- The establishment of several new university institutions; overall, this indicates noticeable progress in higher education democratization, but this does not necessarily reflect internal qualitative equity nor does it confirm external efficiency.
- The Lebanese University has not yet attained a level that would guarantee the optimal pedagogical and physical conditions (Abourrjeili, 2009, p.220) most probably because political interference is curbing such advancement; and so far no solution has been found yet.
- The traditional private higher education institutions are categorized under the following labels:
 - Laïc / cultural label (AUB, LAU)
 - Arab Egyptian or Muslim label (BAU, Ouzaï College)
 - Christian/Catholic label (USJ, USEK, NDU, Sagesse...)
 - Christian/Orthodox label (Balamand University)
 - Christian/Protestant label (Haigazian University – Armenian)
- Most new university institutions (more than 20) have Laïc label and the language of instruction is English. They adopt flexible teaching schedule and moderate tuition; factors that have facilitated access to higher education to new public of middle revenue income, modest social origin, to the youths or adults who are already in the labor market.
- Female gender represents the highest ratios in student enrollment (average about 54% in Lebanon, and 66% in the Lebanese University in 2013)²⁹. This ratio was 27% in 1975 and did not exceed 40% in the 80s. The female graduate ratio follows also this trend, indicating positive evolution of female gender towards having equal opportunities to attain higher education.
- The low average graduate ratio in higher education institutions, especially in the Lebanese University is mainly due to low pedagogical and functional performance of the higher education systems and structures; for example, lack of continued student follow up that has resulted in student-retention duration more than what is

²⁹ The data of 2015 is taken from the General Directory of Higher Education shows a difference in the education between female and male enrollment ratio in the Lebanese University.

expected in the pedagogical program. This phenomenon is amplified at the Lebanese University and many private universities that adopt open entrance policy to some faculties or specializations, while serious exams are required to be admitted to other faculties.

- No recent studies on external efficiency of the Lebanese higher education systems are performed. However, the latest studies of 2001 – 2004 show that about 43% of non-employed graduates, find first job on average after a year; about 33% of the graduates declare their intention of finding opportunities outside Lebanon (or to emigrate). This indicates an economical regression and serious brain drainage (ibid, p223).
- Coordination between university institutions is very weak, if not absent, especially concerning programs, curriculums, and diploma referential or concerning specializations referential that lead to professional opportunities. Unfortunately, there is competition, even rivalry which has sometimes reached unethical aspects.
- Army conflicts and the incapacity of the Lebanese politicians to establish a rational national ‘consensus’ induced complex situations that have halted economic redress, leading to serious implications on the Lebanese labor market. In this weak macro-economic context, Lebanese work force has increased, resulting in a high ratio of active population concurrently with the noticeable enhancement in the education level; consequently, an increase in the unemployment ratio and the emigration trend, in spite of noticeable increase in job offers that require higher education qualifications (more than 21% as cited by Abourrjeili (p. 229).
- In the absence of natural resources, the Lebanese population leans on human resources capital as one of the major economic stakes. This highly contributes to the expenses of education as that of the developed countries; this reached 12% of PIB in 2001 (FEMIS³⁰, 2005). Are the expenses or ‘investments’ efficiently contribute to effective individual life improvement of the Lebanese youth? This

³⁰ FEMIS 2005, is a report cited in Abourrjeili, 2009, p. 230, *Enseignement Supérieur et Marché du Travail dans le Monde Arabe – LE Liban – 2009*; Institute Français du Proche Orient.

issue raises the need to analyze the effective insertion of higher education graduate into the labor market.

3.9 Analysis of Main Indications and Aspects of Higher Education Systems in Lebanon:

In the following analysis, we are apprised of an interesting feature of main aspects of higher education in Lebanon as presented by Abourrjeili (2009), and resorting to the researcher's experience of education systems and the social attitude of the Lebanese population, and the economic situation in Lebanon, many of the Lebanese situations in this field are explained. This section focuses on the relation of higher education to labor market employment within educational, socio-economic approaches.

3.9.1: Interaction of Higher Education with the Labor Market

Few local studies were conducted as to shed light on the linkage between higher education and labor market (LAES, 1997, 1998, 1999, 2003; USJ, 2001, ONE, 2000). Professional situations were studied in correlation with some variables such as the quality of learning, institution's origin, socio-economic origin, dynamic of learning and economic systems and professional conditions. These studies deduced the following:

- There exists a strong correlation between socio-economic origin, university choice and quality of the professional conditions.
- There exists a serious unbalance between the offer and demand volume
- There is a learning gap among the Lebanese university graduates that is in direct relation to the lack of competency levels in some fields.
- There exist an adaptation crisis between higher education and economic technological mutations.

- There is a limited interaction between the economic and higher education institutions.

3.9.1.1: Socio-educational and administrative factors.

The analysis of administrative and pedagogical factors of the higher education in Lebanon reveals some variables in the nature and the quality of learning as stated herein:

- Diversity of the adopted models of reference: American, French, Arab/Egyptian, governmental (public) ... Despite apparent convergence in their educational objectives of the models of reference adopted by higher education institutions, there are basic differences in the administrative hierarchy, prerogatives, authority fields, admission requirements, programs, diplomas, evaluation systems, learning approaches, teaching methodologies, and language of instruction. In the last decade, some private universities, where French is the language of instruction, adopted LMD system that should induce flexibility in the learning program and assure equivalence; however, the basic philosophy of the credit system was not really integrated into their systems. To surpass these diversities, and in order to harmonize the understanding of the credit system, whose adoption became compulsory by all higher education institutions (Article 8 – Law 285/2014), a legislative text was put whereby several expressions, such as, credit, course, program, curriculum and diploma levels were defined (Article 1 – Law 285/2014).
- University reputations, pedagogical and material conditions:
 - i- In Lebanon, population attitude towards modeling and personal choices is strongly affected by relational networking and group effect; thus, social reputation of the university (excellency, teaching system, ...) plays a primordial role in higher education orientation of most Lebanese youth, noting that information is connected or transmitted by a “social medium” (milieu social): “students that privilege this factor, consider learning quality in this university will be necessary, distinguished for learning offered by other university institutions” (Abourjeili, 2009, p. 235).
 - ii- Pedagogical conditions in the Lebanese University and private universities are not commonly ensured; likewise among the private universities. It is

noted that in spite of the standard of qualification that the staff of the Lebanese University should possess, blatant political interference is noted in administrative and academic affairs, for example, in the appointment of academic and administrative staff, as well as in geographical implementation

- iii- The Lebanese University also suffers from several gaps in the methodology and pedagogical approaches (lack in active methods, fault in communication techniques and competencies), availability of pedagogical support and resources, continued update of programs and curriculums, and continued student follow up.
- iv- Students enrolled in the Lebanese University pay a mere minimal as tuition (about \$165 per academic year), for it is totally financed by public funds; budget restriction is always practiced by the Lebanese Government, noting that salaries and fixed charges represent more than 90% of the total Lebanese University budget. Thus, the amount allocated to research and equipment is very small. These faults influence the quality of developed knowledge and competencies of students and consequently their competitiveness in the labor market.
- v- Many private universities give more attention to pedagogical quality and staff evaluation by academic and administrative authorities and students. Moreover, private universities benefit from the autonomy over their budget, finance and expenses, and enjoy more autonomy in appointing the administrative and academic staff, without giving any consideration to political interference. Hence, they could allocate adequate resources to develop pedagogical and academic policies.

3.9.1.2: Socio-economic factors.

The socio-economic status of the students plays an important role in their choice of university; this choice continues to mark the students' way and path in life; their job opportunities; and, professional conditions offered to them (position, salary, professional development...). These factors are primordial to the choice of high-tuition/expensive university, for many parents and

students believe that it is as if paying for the quality (la qualité se paie). In these universities, there are selection procedures that are indirectly based on financial inequality, which is linked to socio-economic status or situations. It should be noted that the tuition fees in this private university category vary between \$700 to \$1000 per credit (AUB, LAU) and \$500 (USJ; \$300ECTS credit) per credit.

New university institutions have followed a policy that proposes higher education at a 'competitive' cost; thus, they have opened higher education to part of the population category that would have chosen the Lebanese University for financial considerations. This policy is considered as an asset (trump card) for these university institutions; however, some private institutions practice commercial approach without assuring acceptable learning quality.

In actual economic situations, most Lebanese populations cannot rent dorms in Beirut, so the existence of a university branch in other regions have become one of socio-economic factors that plays a significant role in the student's choice of a university or higher education specialization. However, some difficulties could be encountered in opening of a regional branch, particularly recruiting qualified teaching staff; a fact that is apt to affect the learning quality at these branches.

3.9.2: Interaction between Higher Education and Employment

Political and economic situations in Lebanon have certainly negatively affected the balance between offer and demand in the labor market, but there are other variables that also intervene in the graduates' attempts to secure employment, depending on the 'production forces', and pedagogical and administration of the systems of the higher education organizations. These systems are compact with gaps that hinder them from meeting the labor market needs. The following remarks and issues are noted:

- i- Domination of formalist tendencies rather than production tendencies in engineering and management courses. In many cases, learning in most Lebanese higher education is not focused on professional qualifications. Much effort must be applied to make higher education courses more practice oriented than

magisterial predominance. This orientation requires material and human resources mobilizations. It also requires the elaboration of partnership between ‘work establishment’ and higher education institutions. Gaps in such partnership induce lack of required learning preparation and pragmatic professional competencies.

- ii- The Lebanese university institutions mostly offer initial higher education. Their engagement in continuing professional learning is very limited, making the university not apt to meet the requirements and needs of the labor market. This activity should consolidate persistent learning-employment interaction, support the insertion of graduates in the labor market.
- iii- Certain enterprises reserve privileged collaborations in terms of training or job opportunities with restricted university group. This favoritism could be based on socio-cultural considerations (social status, language of instruction, culture, and religious affiliations). These attitudes perturb national institutional collaborations and limit employment opportunities of the graduates from no prestigious universities. It should be noted however that an enterprise also has a duty toward economic development and professional insertion of the youth; they should not have redemptive attitude toward academic institutions, but should coordinate with them, especially in Lebanon where corporates dimension, however small, does not permit the establishment of professional self- training centers.
- iv- Nowadays, the fact that the Lebanese job market cannot absorb the current number of university graduates has driven most of the universities to involve students and graduates in startup projects and entrepreneurship incubators that are sometimes financed by the private or public sectors.

In these contexts, some academicians ask: is a university a job manufacturer? Should the academic world remain a free intellectual space without compulsory learning adaptation to labor market requirements, or blatantly allow the interference of this labor market in internal affairs of the university? In the researcher’s point of, higher education institutions complement the labor market institutions, and that rational dialog and convergence is to be conducted between the academic and professional institutions in order to facilitate the employment of the graduates in global economic situations characterized by impressive technological transitions.

3.10 Summary of Main Issues and Higher Education Improvements:

As a summation of all the given data presented in this chapter, the following issues come to the forefront:

- The qualitative promotion of higher education system in Lebanon is a slow process due to socio-economic status, socio-political, socio-cultural and the religious structures.
- Although the Lebanese University (Hadeth campus), has introduced important advancement in the content of material given, and in spite of the limited efforts to implant quality process, it is not without administrative and pedagogical problems that are closely interrelated with the socio-political structure or status.
- Although competition and sometimes rivalry exist among private university institutions, they enjoy a form of administrative and financial autonomy. Most institutions search to implant into their structure quality process and aim at international accreditation. Some private institutions give priority to quantitative development in terms of student enrollment and specialization diversification; while pedagogical and academic quality improvement are considered as second priority.
- Pedagogical reform was introduced in the Lebanese University by adopting the LMD system; however, the reform remains at structure level, and has not reached the credit-system concept and philosophy, particularly in introducing the required balance between presented magisterial teaching and students' personal activities and research, and between students' efforts and competency evolutions.
- Pedagogical reform was introduced in many private universities by adopting LMD system or the American credit system, and by elaborating new learning frames in collaboration with few economic sectors. Moreover, administrative and information system units were implemented in order to follow up on students' situations and graduates' employment.

- If the actual context of the levels prior to that of higher education is taken into consideration, the higher education enrollment would reach saturation threshold. Improvements should be introduced to deal with this issue, such as
 - Solving the problem of fairness and study delay in the Elementary/Intermediate and Secondary Education Levels.
 - Reviewing specialty spectrum in higher education institutions in order to create new majors according to new economic sectors and technology evolutions' needs.
 - Introducing quality assurance process in all education levels³¹ including learning and teaching procedures to ensure excellency that accompanied with competency referential elaborations that ask for collaboration between the education and the economic sectors.
- The Lebanese are known for their ever present desire to attain the highest diplomas; hence, the reality that study duration prolongation or emigration cannot be belittle and should not be considered as a solution of low absorption capacity of the labor market in front of the high demand of the Lebanese youth. Social and national concentrations is to be accomplished in order to build coherence between economic and social policies relative to higher education and to graduate employment.
- Performed reforms at high levels are limited: organizational policy of higher education is really absent in spite of some legislative texts that were passed in 1996 and 2014³².

Finally, public authorities must play an active role and be more than a 'catalyst'. They should participate in the elaboration of global national consensual higher education policy, including

- Quality control and quality assurance process and organizational unites and devices charged with the establishment of national quality standards and criteria, and then audit their implementations.

³¹ A legislative text bill on this issue was proposed by the Lebanese Government whereby it asked for the establishment of a Lebanese quality assurance agency.

³² Decree # 9274/96 and the Law 285/2014; this is discussed in Section 3.3.2. of this chapter.

- Strategy of reinforcement and enhancement of higher education – economic – professional interactions
- Strategy of harmony between higher education institutions and the institutions and public sector.
- Strategy of real autonomy, rigorous professionalism and assigning responsibilities in the public higher education sector, without any political interference.

In this context, work groups, including offices, researchers, academicians and professionals, must strive together to present rational diagnostics and apt prognosis.

CHAPTER FOUR

Chapter 4 : Quality and Quality Assurance in Education and Higher Education Institutions

4.1 Introduction:

In recent decades, learners' access to higher education, in most countries, has increased and diversified (Drisko, 2014). New educational initiatives, novel degree programs and many new ways to extend teaching and learning have become involved in higher education systems worldwide; the latter shifted, in many countries, from elite model to mass systems; and, the participation ratio in some countries reached universal access levels (Trow, 2007; OECD, 2014-a). However, this substantial increase in higher education participation must be rationally planned and controlled (Teixeira, 2009). Within this context, the socio-economic and educative missions of higher education institutions have been exposed to high pressure; quality assurance within the education system became crucial. In fact "quality provision in mass or universal higher education systems needs different approaches and different tools from the former elite system" (Krcal et al., 2014, p. 19). Hence, various approaches are applied and diverse mechanisms are developed to monitor and enhance quality and quality assurance in higher education institutions. The objective of these approaches is dependent on the country's particularities, such as socio-economic context, needs and expectations; hence, the diversification of approaches, from those that maintain quality at a certain threshold level to those that enhance quality so as to keep "higher education systems competitive and reactive to changes in the external environment" (Ibid, p.19. Moreover, as the demand of autonomy by the university community (particularly in public sector) increases, the demand for accountability from the funder (governmental or private) increases (Liston, 1999, p. 1; Salmi & Saroyan, 2007).

Higher education is a "key-agenda issue" in both developed and developing countries; in fact, within knowledge economy contexts, the presence of educated, qualified and skilled workforce has become a major concern as to economic development, technological improvement and national competitiveness (Krcal et al., 2014; D'Andrea & Gosling, 2016, p.

12). To meet these objectives, well-performing higher education systems are required (Reinalda and Kulesza, 2006, p. 100).

The changes experienced by the higher education systems, including teaching delivery modes and institutions' structures and types, reinforced by changes in the pattern of the labor market and required job qualifications, have made quality to become a crucial issue that encompasses debate on what “the complex and multi-faceted concept of quality means in the contemporary context and provides an overview of the various quality monitoring processes and approaches to quality assurance” (OECD, 2014-a, p. 9).

Accordingly, this chapter deals with the quality debates as to ‘What is quality?’ , and addresses conceptual, definition and purposes issues while considering the many requirements in the developing quality systems and quality practices that “shift in emphasis from formal meaning to situational meanings” (Newton, 2006, p. 14). Thus, we provide an overview of the existing meanings of the quality concept in higher education, its derivative terms and concepts, and features and dimensions. We also present and discuss some tools for measuring and assessing quality.

4.2 The Concepts in Education:

In this section, some concepts that impact the educational field are highlighted especially those related to the educational services (teaching and learning), their effects on the concerned stakeholders and their place and characteristics, among other consumable services.

In the last decades, new concepts appeared as a result of several social and economic thoughts; some of these concepts deal with learning availability, education for all, and quality of learning (quality assurance in learning).

Initially, these concepts were established, discussed and implemented in the educational system of advanced industrial countries (Liston, 1999; Asif & Raouf, 2013). The understanding of these concepts started changing gradually into standards and criteria used to

evaluate and categorize countries as to whether they were following/implementing these educational standards. The developing countries were obliged to implement ready and existing models of educational systems used in industrial countries. No one can theoretically object to the interest in these concepts and their effects on educational development and progress. But, for true success in educational advancement in the developing countries, these concepts should be flexible and adaptable to the reality of the concerned countries to avoid falling into false measures.

In the following section, we will focus on the concept of quality and present some expressed definitions of this term.

4.2.1: The Quality: Conceptual and Definitional Issues

The term ‘Quality’ is frequently used in the literature or educational projects. The use of this term is sometimes justified or even stimulated by a work related functioning academic field or social interest related to modernization process. The quality concept is also used in various domains, such as, administrative, economic, social and educational. It has become a “dynamic concept that has constantly to adapt to a world whose societies are undergoing profound social and economic transformation...” (Uvalić – Trumbić, 2007, p.59). Quality that is “understood as a concept” (Liston, 1999, p.8) “may vary among people and nations” (Ibid, p. xiv), and “its definition varies contextually” (Ibid, p. 8). Quality is not new in education; “it has always been part of the academic tradition” (Vroeijenstijn, 1995 cited in Newton, 2006); however, “defining quality, illustrating the confusion” (Newton, 2006, p. 14), and “defining exactly what quality looks like is especially problematic in the midst of significant expansion and internationalization” of educational services (Altbach et al., 2009, p. 52).

Focusing on the education sector, how quality should be defined was the subject of debate of the ministers’ of education at UNESCO round table (2003); they agreed that quality in education must “focus on education for human right” (Uvalić – Trumbić, 2007, p. 59). But the basic question was: What is quality?; the “definitions are frequently a ‘tautology’ or describe a situation related to some specific cultures” (Van Ginkel and Rodrigues Dias, 2007, p. 41). As such, it can be surmised that no unique definition of quality exists, but there are a

lot of ‘subjectivism’ and general meanings that could be given to quality as expressed by the Minister of Education of Colombia during a symposium on quality in Latin America; this definition states that “quality is a diffuse term, as beauty or goodness, which is conducive to multiplying definitions, and which is felt or perceived in absolutely different ways by different groups or individuals. Factors derived from the needs of each group and from its expectations regarding the role of education contribute to this perception” (Del Zambrano, D.E, 1985, as cited in Van Ginkel and Rodrigues Dias, 2007, p. 41).

In the Webster’s International Dictionary, a general definition is also given; it states that quality is “the degree of conformance to a standard”; accordingly, “Conformity with standards appears to be an instrument for identifying quality” (Van Ginkel and Rodrigues Dias, 2007, p. 41). But, the authors ask: “What are the standards? What are their foundations? Who defines them? Where do they come from?” (Ibid).

In Literature we find different comments on the quality concept and its definitions (Newton, 2006, p. 6). In 1999, McConville wrote “there is no definition of quality... you know it when you find it” (pp. 2-4). Tam (2001) argues that quality is a highly contested concept and has multiple meanings; it is difficult to define and must be contextualized (EUA, 2006). Norabian and Abdi (2007, p. 3) consider quality as “a multi-dimensional and often a subjective concept.” In fact, “the term quality can be understood differently by different stakeholders.”

Other essays on quality definition were presented by Liston (1999, pp. 11 – 21); the definitions were rather derived from corporate conception and terminologies. First, he asks “Is quality a state of mind? Perhaps an attitude prompted by name or brand?” (Ibid, p. 1). Then, he stated that “quality is related to a body of knowledge about products, services, and customer or client satisfaction. The term is not synonym for excellence or goodness... quality has many meanings” (Ibid, p. 11). There are many definitions of quality that have been proposed by eminent experts in management; for example,

- “Fitness for use” (Juran et al., 1999, cited in Asif and Raouf, 2013)
- “Conformance to requirements” (Grosby, 1979, cited in Asif and Raouf, 2013)
- “What your customer perceives it to be, i.e. consistently meeting customers’ needs and expectations and developing the full potential of resources used in the process” (Feigenbaum, 1995, cited in Liston, 1999, p. 11).

Liston (1999) asks: How can we summarize the definitions of quality “to describe the key elements in approaching quality” (p. 11). He concluded that a quality approach focusses on

- “ Identifying and satisfying client needs (outcome, result aspect);
- Developing and tapping the full potential of staff; and,
- Improving key processes” (p. 11)

Although, in many definitions of quality, production corporates or service organizations and educational institutions are considered to have presented common functioning aspects; however, we must insist that educational services are directed to people with specific aspects that are different than those required in the production of goods. Accordingly, specific quality aspects and supplementary qualifications are required, particularly when considering human, social and cultural dimensions. Moreover, specific terms, concepts and definitions associated with the quality concept have emerged; these will be further detailed in the next section.

4.2.2: Joint Terms of Quality Concept

If quality implies occupying a certain redefined level on a differential scale as values and statements, other concepts emerge, indicating different levels of quality. Using such concepts indicate the complete or partial absence of quality, such as poor, pass, acceptable, or to appreciate its level of existence such as good or excellent.

In this context, the acceptable concept, which could be considered as a reference of the normative level of quality, takes a diverse significance:

- a) The term acceptable is what we commonly find in the majority of entities, and attaining it does not signify an added value. It constitutes the boundaries that separate the ‘good’ level from that of the ‘pass’.
- b) The levels of pass and acceptable corresponds to the minimum requirements to move towards better quality, such as knowledge, experience, aptitude and competence... These requirements always change with cultural and technological evolution.

It must be noted that getting used to good standards may reform the acceptable concept to include what attracts our attention. This indirectly will contribute to the elevation of the base line of the prospect, and the evolvement of the specifications of quality and the standards.

- c) The term ‘excellent’ is often used to indicate the presence of high quality level. However, it is not simple to develop quantitative criteria for the term ‘excellent’, especially when this concept intersects with the concept of ‘rarity’, and ‘selectivity’, which may almost reach the level of exclusivity but not competition. Many institutions of higher education have the tendency to consider large application demand accompanied by limited number of acceptance as an added value to this institution.

4.2.3: Analysis of Quality Concepts in Quality Practice Contexts

In this section, some questions have led to several analyses on the problematic perception of quality concept; the questions are about quality as a concept, as well as the fundamental, characteristics and applications of quality per se (Wehbé, 2003). The following questions arise:

- Is quality an existing state recognized by its specifications, or is it a distinguished level recognized by its standards?
- Is quality a symbolic judgment, final act or continuous active process and improvement?
- Do we speak about quality when we try to pass all concerned entities (graduates, products, systems, institutions...) through a unique model or standard?
- Is it enough to establish a specific environment that houses the production or service to reach an intended quality?

Two principle observations emerge when discussing quality.

- a) It is a must when discussing quality to predict the final outcome of the required ‘product’.

- b) It is also a must when discussing quality to set the criteria that will evaluate the final product.

Accordingly, more questions arise:

- 1- If quality means reaching determined specifications, who determines the required intended levels?
- 2- Should we consider when evaluating quality levels the added improvement to a service or product in comparison to its pre-existing state? The understanding and the application of quality as absolute or relative (comparative) is a main problematic issue.
- 3- Do we measure, in the educational services, the quality of service in a certain country in comparison with the highest levels of standards specified under ideal conditions, or should we investigate the current services within the context of the situation and capability of the certain country and the efforts put to develop and spread these educational services? Hence, is it a reasonable/ unbiased decision to compare the service or product outcome within different countries?
- 4- Is it possible, in the educational service, to achieve quality without considering the level of the individual/student as a special case?

Hence, the following points pertaining to the analysis of quality concept are considered:

- 1- Quality is a level of value given by the stakeholder, user, or consumer for a specific service or product. It is an evaluative judgment which could be tangible or symbolic. This will indicate the degree of completion of the pre-established criteria. The result of the test in reference to these criteria reflects the strong (virtue) and weak (failure) points.
- 2- Quality is not unique or a static state declared when detected, but is valued on gradual scale levels. These levels change with the changes in criteria and the modification of the outlook.
- 3- There is a big difference between the pre-described quality (ready to use) promoted with certain regulations and the quality specifications that the 'consumer' expects to find.

- 4- The absolute criteria applicable to all circumstances and in all countries are restrictive; it however should be relative criteria that adapt to the country's situation. It is not reasonable that international agencies and organizations adopt a unique model of quality that does not take into account the difference which exists between different countries. These countries should develop studies for national criteria and take measures to oppose the imposing of a unique model on all countries.
- 5- Acquiring quality label in educational institutions should not be reduced to the implementation of measures and physical conditions, such as reduction in student to teacher ratio, hiring of professors or instructors with highest attainable degrees, spacious and comfortable classrooms, green areas and enclosed campus, but the result of the implementation of integral quality system and quality culture (see Section 4.4).
- 6- Equal opportunity of education does not mean allowing all levels of students to be admitted to all majors since it may lead to bad quality of learning.

Therefore, early orientation, guidance and 'selectivity' can be considered as basis for quality learning and proper equal opportunities for students.

In trying to achieve 'Formal Justice', neglecting to apply flexibility in the education system, without considering the level of the individual as a special case, might lead to several fake levels of quality graduates.

4.3 Quality in Higher Education:

4.3.1: Quality Concept and Definition in Higher Education

Quality in higher education has been the subject of debate and a disputed concept (UNESCO, Module I, 2007). There are many reasons for the difficulties encountered in the understanding of the quality concept in higher education. The reasons can be summarized as follows:

- a. No fully consensus on the major objectives of higher education and/or on which objective to be practiced in higher education institutions; objectives such as production of qualified manpower, training for a career in research, efficient management of teaching provision, and the matter of extending life's chances (Ibid, p. 17)
- b. Difficulties in apprehending the clear interaction and interrelation between the inputs, the learning process and the learning outcomes in higher education due to the complex process of interaction and interrelation among the higher education stakeholders (academic staff, administrative staff, students, labor market institutions...).

Harvey and Green (1993) developed a multi definition of quality in higher education, and have classified and categorized it; some identified aspects are:

- 1- "Excellence or Exceptional": This notion of excellence or exceptional is "associated with distinctiveness or standards" (Newton, 2006, p. 15). It is when "quality means a level of excellence that cannot be attained by most" (Krcal et al., 2014, p. 20). The traditional academic view adopted the definition of quality as 'excellence', whose goal was to be the best (Nobarian & Abdi, 2007). This traditional notion of quality, the 'elitist approach', was based on distinctiveness whereby the notion of quality implies exclusivity (e.g. inaccessibility of a higher education institution is of itself quality). However, the concept of 'excellence' in higher education has newly changed (Brusoni et al., 2014) with respect to the international ranking criteria of the higher education institutions. The notion of quality as 'excellence' "limits the number that can actually be identified as 'excellent'" (D'Andrea & Gosling, 2016, p. 172), taking standards as the starting point to define 'excellence' then, questions arise as to who defines the standards and how they are recognized in the higher education context (Ibid).
- 2- Perfection or Consistency: It is when quality is closely linked to the process, "aiming at zero-defect" (Krcal et al., 2014, p. 20). "This definition is adopted in industrial mass and uniform production where specifications are standardized" (Nobarian & Abdi, 2007, p.4). Furthermore, Newton (2006) considers it as "a relative concept of quality more applicable to organizational and service standards than to academic standards" (p. 15). In fact, the graduates in higher education

institutions are not expected to be uniform or identical. Hence, perfection in higher education should be considered as “a shift from measurement of outcome standards, to measurements of process standards” (Ibid). In practice, it is an approach to quality that emphasizes the need to considerably reduce, even eliminate errors or ‘dis-functioning’ in processes or products (Harvey, 2004, p. 17).

- 3- Transformative: It is when quality is “linked with empowering and enhancing students’ ability to control their learning process” (Krcal et al., 2014, p. 20). Following the notion of quality as transformations, the mission and goals of the higher education institutions are to produce transformation in the learner’s achievement that empowers him/her with knowledge attitudes and specific skills in order to be able to live and work in knowledge society (Newton, 2006; Nobarian & Abdi, 2007). There are key elements that identify transformation, such as

- Enhancement of the students’ experience
- Continuous improvement approach
- Initiativeness; effectiveness; taking responsibility; being open-minded; and, the ability to think critically

- 4- Value for money: It is when quality is linked with efficiency and effectiveness of the educative process achieved at the lowest possible cost (Krcal et al., 2014, 9. 20); this is seen by the stakeholders in terms of return on investment which lead to linking quality with monetary cost and implying continuous resorting data on student completion and employment rates of graduates (Newton, 2006). The notion of quality as value for money is generally associated with the accountability process required by the public authorities or by the fund providers (D’Andrea & Gosling, 2016).

If the quality evaluation is to be based on value for money, then the following questions are asked: “Is the nature of what is valued objective? Who determines the value? And, are there other values that are equally important in academia such as value for time?” (ibid, p. 172).

- 5- Fitness for purpose: It is when quality describes the extent to which the institution/program is able to fulfil its mission and objectives (Newton, 2006,

p. 15; Sanyal and Martin, 2007, p. 5; Krcal et al., 2014, 9. 20). Quality as fitness for purpose implies that “the product or service meet a customer’s needs, requirements, or desires” (Nobarian & Abdi, 2007, p. 4). However, in the education sector, stakeholders of the learning services (students, employers, government and society at large) “may have different purposes and different views of both ‘purpose’ and ‘fitness’” (Ibid). Moreover, complicated diversity may be divergent, can exist in institutions’ mission statement, especially depending on the national view of purposes. This diversity could lead to large differences in learning outcomes of the program in the same country or among different countries.

Newton (2006) wonders whether the education service that fits the stated purposes, resonates with the requirement of a quality assurance agency for conformance to defined standard. But Van Ginkel and Rodrigues Dias (2007) believe that “quality in higher education cannot be seen as ‘conformity to a standard’, as higher education is supposed to promote creativity and innovation” (p.42). D’Andrea & Gosling (2016) also consider that fitness for purpose is “problematical if it defines the standards by which the institution will be judged. The later can, in effect, allow the institution to go against stated goals which it defines for itself” (p. 172). Harvey & Newton (2005 cited in Altbach et al., 2009) observe that a notion such as fitness for purpose or value for money are not based on “solid theoretical foundation” (Newton 2006, p. 15). The notion of ‘fitness of purpose’ is also introduced to complement the notion of ‘fitness for purpose’ when “the quality of higher education is determined by the relevance of its mission and objectives for the stakeholders” (Sanyal & Martin, 2007, p. 5).

In addition to the above identified aspects of quality, two practice approaches are introduced to the definition of quality in higher education, namely:

- Quality as threshold: It refers to norms and set criteria which represent a threshold for quality. Institutions or their academic compounds should meet these norms and criteria (to reach the threshold mark) to be considered as having attained a quality level. This approach presents an advantage in that it increases the level of objectivity in the outcome of the evaluation of quality

and certification. Note that many European higher education systems use, as a starting point in the quest for quality, a “minimum standard variety” (Nobarian & Abdi, 2007, p. 5); however, some argue that there are disadvantages (Ibid), such as:

- Setting a threshold creates uniformity across the higher education system because many institutions seek compliance with the threshold limits; they give only minimum effort that satisfies the minimum requirements that would strongly reduce innovation and competitiveness against these institutions and mitigate the improvement that occurred in some institutions.
- In many cases, especially in developing countries, criteria and standards are based on quantitative input factors enacted (decreed) by law; thus, they are not flexible to follow change in higher education and do not present an adaptation capability to circumstance evolution.
- The learning outcomes, particularly, the graduate achievement successes are not taken into account by the threshold approach. In fact, there are some difficulties in assessing and verifying these factors (Ibid).
- Quality as enhancement or improvement: This notion refers to continuous improvement that implies a change in a state or process for the better through directed activity aimed at achieving a valued goal (D’Andrea & Gosling, 2016). This suggests that “the status quo is being regarded as inadequate in some way” and it implies that “a dynamic process rather than a point of arrival” (Ibid, p. 3). Improvement can be considered as motivation engine of activity designed to solve problems (Ibid, p. 4). It can also serve other purposes such as meeting standards or fitness for purpose or value for money (Ibid, p. 173). However, ‘improving’ remain a contested debated concept, particularly as to how to measure the improvement, and to attain evidence to discern it and present it to the outside world (Ibid; Nobarian & Abdi, 2007).

In Literature, Sanyal and Martin (2007) have also identified the definitions of quality which evoked other aspects such as ‘meeting customers’ needs, and ‘providing added value’, which could be considered equivalent to transformative aspect of quality as foretasted. They also

cited Gola's (2003) definition of quality as applied by the International Organization for Standardization (ISO) that it is "specifying worthwhile learning goals and enabling students to achieve them"; this definition implies that the articulated academic standards are "to meet (i) society's expectations; (ii) students' aspirations; (iii) the demands of the government, business and industry; and, (iv) the requirements of professional institutions" (Ibid, p.5). Hence, many means and interpretations of 'worthwhile' are possible because all stakeholders' requirements, needs or interests could be not compatible, while the part of enabling students to achieve the learning goals "requires good course design, an effective teaching/learning strategy, competent teachers and an environment that enables learning" (Ibid). In this context, professional development for most lecturers becomes a requirement among major actions to successful student learning experience (D'Andrea & Gosling, 2016, pp. 66 – 68).

General understanding of the quality concept in higher education has also evolved during the world conference of UNESCO in 1998 in which quality was defined as the following: "Quality in higher education is a multi-dimensional concept which should embrace all its functions, and activities, staffing, students, buildings, faculties, equipment, services to the community, and academic environment" (Van Ginkel and Rodrigues Dias, 2007, p. 39). This definition has been complemented in the proceedings of this conference where it is stated that quality "reflects the increasing complexity of the higher education environment" (Altbach et al. 2009, p. 53). Quality in higher education was also defined as "a multi-dimensional, multi-level and dynamic concept that relates to the contextual settings of an educational model, to the institutional mission and objectives, as well as to the specific standards within a given system, institution, program, or discipline" (Vlasceanu et al., 2007, p.70).

"The meaning given to quality is not only a matter of its underlying conception; it is also very much a matter of who defines it and in what interest" (UNESCO, Module I, 2008, p. 17). Quality is also viewed as stakeholder – relative concept (Newton, 2006). In the pragmatic approach proposed by Harvey and Green (1993), "Quality is not a unitary concept; it is open to multiple perspectives" (Newton, 2006. P. 15). In fact, stakeholders are numerous and have different priorities, interests and vision of quality: specifically the

- Academics emphasis the quality of research work and results that reflect the quality of the institution's academic outcomes.
- Teachers' interest is in the process of education.

- Students' interest is in the quality of teaching and learning experience.
- Employers and professional bodies focus on learning outcomes and skills that students should acquire.
- Government and its agencies require educational institutions meet regulations related to licensing, qualification and physical conditions

As Newton (2006, p. 15) puts it, “the best that can be achieved is to define as clearly as possible the criteria that each stakeholder uses when judging quality, and for these competing views to be taken into account when assessments of quality are undertaken.” Hence, the quality assurance agencies in higher education consider that their main tasks are to take into consideration, when determining their quality approaches, global quality definitions that balance different interests and visions of higher education stakeholders.

On defining quality, D’Andrea & Gosling (2016) conclude that “it is futile to try to come up with the definitive definition of quality... thus we approach quality... in dynamic, rather than static or absolute terms” (pp. 173 – 174).

We can deduce from the articles written on the definition of quality that stakeholders’ interests have determined influence on the perception and ‘measure’ of quality (Altbach et al., 2009, p. 52); and, that “the most constructive way forward is to adopt an approach which acknowledges the relative nature of quality; relative to stakeholders, contexts and to the particular quality assurance mechanisms with which it has become associated (this point will be developed in Section 4.8.2). “Quality is also crucially contingent on how it is used and experienced in practice, by academics and others who are impacted upon by quality assurance arrangements”(Newton, 2006, p.16).

Corpus (2008), presented and examined, explicitly, the evolution of the definition of quality in education, which shifted from traditional education to progressive educational systems. In traditional education, quality is determined and evaluated in terms of inputs (e.g. physical facilities, laboratories, number of computer unites, library, etc.) and processes (e.g. teaching method, curriculum, admission of students, contact hours, testing, etc.). At institutional scale, the vision, the mission, the goals, the objectives, leaderships and management are also subject and parameters of quality investigation. In progressive educational systems, quality is defined

in terms of outputs, i.e. “what the students have learned, such as skills, knowledge and desired attributes that they can use to qualify them to do certain tasks on their own” (Ibid, p. 3). Corpus considers that the introduction of qualifications framework “which describes qualification in terms of learning outcomes” is required. This is an instrument for the development to a set of criteria for levels of learning achieved” (Ibid, p. 5).

4.3.2 Exploring the Epistemology of Quality in Higher Education

In order to explore the epistemology of quality and its relationship to learning, Harvey (2007) examined the various definitions of quality and presented interesting tables whereby he distinguished quality from standards and the so-called quality standards which states, “quality and standards are different; the former is essentially about process and the later refers to the level (grading) of the outcomes.... The so called quality standards are confusing because they are expected norms against which process quality and outcome standards are measured” (ibid, p. 11).

Some examples of epistemological underpinnings are stated herein:

- The models used in the accountability for public money, which is a central aspect of quality process, revolve around standards checking through the use of performance indicators of the provided service and the achieved academic and competence levels (retention, completion and graduate employment ratio, research outcomes...). This performance is often linked to financial constraints; hence, there is an underlying causal relationship (a cause and effect analysis) — positivist epistemology (ibid, p. 12).
- The compliance with professional requirements or norms, which is also another aim of quality assurance, is usually related to the competence of graduates. Hence, checking through measurable and observable variables, is usually with a focus on inputs (facilities, curricula, staffing ...) and/or outputs (learning outcomes, graduates, research...). This is also underpinned by positivist epistemology (ibid, p. 13).

- The quality assurance agency requirements, including those exploring fitness-for-purpose, are usually set out to help and guide institutions in order to make them accountable, able to control their activities, and improve their learning and research processes (additional process step could be involved). The compliance with these requirements is a phenomenological-based epistemology (ibid)
- Improving of the learning process and empowering learners are other aspects of quality assurance. These approaches could encompass transformation of learning process that could deconstruct or transform the role and nature of the teacher and the privileged position of discipline knowledge. This is fundamentally a critical-dialectical approach (ibid). However, quality assurance processes are often uncomfortable with the epistemological paradigm “because there are no simple indicators, no self-evident or taken-for-granted, and easily assimilated criteria for judging how students are empowered as critical reflective learners” (ibid).

This epistemological examination basis of quality “reveals the fundamental underlying differences in quality issues” (ibid, p. 14) that are reflected in how the learning assessment and the impact of quality assurance are perceived.

4.3.3. Quality in Education and Higher Education as Service Sector: Comparative Observation

In the context of globalization trend, education is considered as a service sector; hence, certain initiatives treat quality in educational institution in similar approaches applied in service organizations. But, there are questions such as

- Is the understanding of the quality concept in education the same as the understanding in the industrial and traditional services sectors?
- Are the standards and procedures adopted to determine the level of quality in the consumable service sector applicable to the educational sector? This issue is explicated

in the following section through comparative observation of education ‘service’ and two representative service sectors.

In reality, there is a difference between an educational institution of higher education and various service institutions such hotels, banks, airlines, insurance companies In these service institutions, the chain of service production ends the moment the service duty ends. However, in higher education institutes, the learning process continues in two different aspects: teaching and ‘producing’ a graduate. The latter is assured by an interactive action of different elements especially for the student. For example, personal situations and reasons, environment, how these students act and react towards teaching and learning.

To clarify this issue we present Table 4.I that shows the comparison of the three types of services: functions, objectives, and added values.

Table 4.1 Comparison between the educational service and that of the banking and hotel services.

<u>Educational Services: Learning</u>	<u>Banking Services</u>	<u>Hospitality Services</u>
The educational service is a pedagogical act and an attitude practiced by the instructor and the student in an institutional university environment	The banking services is a combination of readiness and availability of administrative, financial and technical resources to respond to the customer’s needs in a regulated frame and under required conditions set by the bank and accepted by the client.	The hospitality services requires convenient physical and Environmental situation, and continuous readiness of the personnel to respond quickly with expected quality to meet customers’ requests.
<u>Objective:</u> Forming of students (knowledge, competency, and attitude) by placing them in a serious work environment that requires concentration, assiduity.	<u>Objective:</u> Mutual benefit by both partners (Bank and customer) under a proper attention given to the customer throughout the whole	<u>Objective:</u> The customer should feel the security, comfort and leisure.
<u>Added value:</u> a) The added value is not attained immediately, but received at a later time. The presence of the student in class does not necessary assure the obtaining of the expected learning outcome. The student must interact and participate with the	<u>Added value:</u> a) Concluded immediately at end of the service provided. The effect of the service should appear in a short term or at later stages.	<u>Added value:</u> a) Is immediately consumed by the client. The presence of the client in the hotel assures the receiving of all expected quality services.

elements that constitute the learning service.		
<p>b) The educational service is integral and is difficult to decompose into independent subservices. It is impossible to profit from a particular sub-service only because of the nature which is constructive:</p> <p>- The service components are based on each other and are constructed one after the other. <u>Example:</u> it is hard to understand mathematics without knowing the adequate language or understand the physics laws without mathematical tools.</p>	<p>b) The banking service is comprised of a set of independent services. The client may choose one service without being obliged to choose another.</p>	<p>b) The hospitality service is not offered as an integral unit. It is comprised of a set of particular services, which may be independent of each other. The client may consume one particular service without being obliged to consume other services.</p>
<p>c) The educative system determines the learning and teaching processes and procedures, academic calendar, and the amount of material offered to each student level. The student should adapt to the necessary circumstances and be physically and mentally prepared to be able to benefit from their service. This service is programmed and predetermined to a set schedule but not offered to the students' leisure, this service is given to a group of students regardless of the presence or absence of a student.</p>	<p>c) The client at a bank determines his need for a particular service, nature, quantity and time it is required.</p> <p>The bank responds after studying the presented file, negatively or positively.</p>	<p>c) The client at a hotel determines the need for a service (in quality and quantity) at a time of his choice.</p>
<p>d) The service is not repetitive. The student should benefit from this service the moment it is offered.</p>	<p>d) The client may accept the bank's conditions and may benefit from one or more services at the same time or at different intervals.</p>	<p>d) The client may consume one service several times in a very short period of time.</p>
<p>e) The educational service is cumulative limited by time and location. It does not lose its virtue after being received by students.</p>	<p>e) The banking services could be divided. It is not limited to a determined date or time outside the client's request.</p>	<p>e) The hospitality service could be divided. Its duration is relatively short. It stops right after being consumed by the client.</p>
<p>f) The educational service deserves its merits since we continue to find its effect way after it is received, its effect should appear in the students' personality throughout their life.</p>	<p>f) The banking service stops at the end of the contract term between the bank and the client, but may leave a continuous impact on the client down the road.</p>	<p>f) The hotel service touches the physical functions of the client. Its effect is generally limited in time and ends the moment the customer leaves the hotel.</p>

g) The student cannot by himself judge the quality of the educational service based on his personal experience. The society intervenes in the service's evaluation by developing national and official evaluation criteria such as exams, diplomas, etc.	g) The client himself judges within a short period of time the quality of the service.	g) The client judges himself the quality of the service.
h) Universities try to satisfy the need and the requirements of the third party that benefits from the educational service offered to the students	h) The banking service targets the direct need of the client.	h) The hotel service targets to satisfy the personal needs of their customers.
i) The educational service is not confined to a unique determined model. The objective is not the service itself but the deep and lasting changes it produces in the student's personality, attitude and knowledge...	i) The banking sector uses a specific process and model to achieve good quality service which is pre-determined and published. Consequently, the quality level would be expected.	i) The hotel service uses a specific process and model to achieve good quality service which is pre-determined and published. Consequently, the quality level would be expected.
<p>j) The principle components required to achieve quality are usually debatable. Consequently, the expected positive contribution of each of these components is also debatable.</p> <p><u>Example:</u> who can confirm that the use of overhead projectors in teaching procedure in classrooms produces a better learning outcome in students?</p>	<p>j) The quality of service may receive a consensus from potential clients concerning each service component.</p> <p><u>Example:</u> The ATM machine that delivers a 24/7 additional satisfactory service component.</p>	<p>j) The quality of service may receive a consensus from potential clients concerning each service component.</p> <p><u>Example:</u> the 24/7 room service increases the customer's satisfaction, producing better quality service.</p>
<p>k) The evaluation of educational service is not considered accurate if it is limited to an isolated service delivered in a short period of time.</p> <p><u>Example:</u> A judgment of a quality service will not be considered accurate if based on the judgment of a single student or instructor in a single class session.</p>	k) A banking service offered remains subject to a definite evaluation even if the service is isolated from others, regardless of the time duration.	k) The hotel service offered remains subject to a definite evaluation even if the service is isolated from others, regardless of the time duration.

From the above comparative table we denote the following general observations:

- 1- The physical presence or absence of various features, such as factors, parameters or advantages, in an educational service is not sufficient for increasing the quality level of the service. However, these features can improve the quality under the following conditions:
 - a) If they contribute to the creation of a dynamic environment between the student and the proposed service. For example, the use of an overhead projector in class contributes an advantage, and is a quality factor if it contributes to a higher focusing and attracting attention, and accelerating of the understanding of sought knowledge.
 - b) If they contribute to the assimilation of the effect of the service and the deep influence on the personality of the student.
- 2- In non-educational service sector, the quality level of the service is linked to the physical presence or absence of some features of the service, which are considered as a quality indicator.
- 3- Predetermined specifications and profiles that an education institution should include are not enough to allocate it the label of a quality level, while in hospitality services, the number of stars allocated to restaurants and hotels are based on certain specifications. A profile or model is established based on a list that includes all what is acceptable and unacceptable in this sector. This is not applicable to universities. For example, we cannot confirm that a specific curriculum and teaching method are absolutely more efficient than others and that they produce a better quality of educational service.
- 4- In the consumable services, the equipment and facilities are sought by the client for their comfort or pleasure, where these do not constitute a tool for the services. But, in a university, the equipment and facilities are not provided for the pleasure of the students, but to permit, within an integrated learning system, the improvement of the teaching and learning processes.

The educational services signify a pedagogical action and interaction between the instructor and the student produced in an adequate environment. This is an attitude and a

manner of conduct for both instructor and student in an institutional environment which encourages and furthers the understanding of learning and knowledge and self-perfection which produces a desired reaction for both. It also includes cognitive, cultural and intellectual approaches, values and the manner of interaction at a later stage.

4.4 Quality Culture in Higher Education:

Improving quality in teaching and learning has always been a major part of strategic development by most higher education institutions, particularly in European universities; setting internal quality culture at a wide institution levels and compounds has been the challenge for university management (Vettori et al., 2006).

4.4.1: Quality Culture: Concept and Approaches

Quality culture, as a concept, refers to two components: quality and culture (Ibid).

- i) Quality concept, explicated in the last sections is the point of departure of quality culture (EUA, 2006, p.9); it “can be conceived as a construct with multiple dimensions that has to be contextualized; i.e., each quality notion needs to be specific” (Ibid, p.22). The “definitions of quality are culturally sensitive ...; it is a relative concept” (ibid). “When speaking of quality, it is easy to revert back to such managerial concepts as quality control, quality mechanisms, quality management, etc.... These concepts, however, are not neutral. They convey a technocratic and top-down approach that will backfire in academic settings” (ibid, p.6).
- ii) The culture is a social concept which is, as defined by Geertz (1993 as cited by Vettori et al., 2006, p.22 & Lueger & Vettori, 2007, p. 3), “the fabric of meaning in terms of which human beings interpret their experience and guide their action” (p. 145). The dynamic of the process related to these actions, depends on specific context of action. “Culture is not fixed and stable, but can be regarded as the result of multiple interactions involving all participants of these interactions” (Vettori et

al., 2006, p. 22). Hence, “culture can be hardly understood as a homogeneous entity, even though it may refer to a horizon of shared social meaning” (Lueger & Vettori, 2007, p. 2). “The term ‘culture’ was chosen to convey a connotation of quality as a shared value and a collective responsibility for all members of an institution, including students and administrative staff” (ibid). They state that from EUA perspective, “quality culture signals the need to ensure a grass-root acceptance, to develop a compact within the academic community through effective community building, as well as a change in values, attitudes and behaviour within an institution” (ibid).

Quality culture is defined as “an organizational culture in which all stakeholders, internal and external, through critical reflection, contribute to the improvement of the quality” (NVAO, 2013, p.7 cited in Brockerhoff et al., 2015, p.45). Thus, “quality culture refers to an organizational culture that intends to enhance quality permanently and is characterized by two distinct elements.. , i) a cultural/psychological element of shared values, beliefs, expectations and commitment towards quality” (ibid, p. 10); and, ii) “a structural/ managerial element with defined processes that enhance quality and aim at coordinating individual efforts” (ibid). Thus, the first element “refers back to individual staff member”, while the second element “refers back to the institution”.

These two aspects/elements are “linked through good communication, discussion and participation processes at institutional levels” (ibid). However, “quality commitment must be distinguished from quality management and both combine to produce an effective quality culture” (ibid, p. 20).

In fact, “quality commitment aims at creating the engagement of the community in order to meet and improve objectives and to ensure a bottom-up approach quality. By contrast, quality management is the technocratic side of quality culture and refers to tools and mechanisms to measure, evaluate, assure and enhance quality. Both elements are essential and must be mediated by effective communication and participation” (ibid, p. 21).

Quality management and quality assurance strategies are certainly affected by the conception of each component --- quality and culture – as by the ways that they are related to each other

(Ibid). Lueger & Vettori (2007) identified two approaches to organizational/quality culture, namely:

- Functionalist approach which states that quality is to be considered as “an aim that is strived for ...organizational culture is understood as one factor (among others) which fulfils a certain function for the organization and its success and which can be rationally managed” (Ibid, p. 2). In this approach “culture is very much functionalized for achieving pre-defined quality goals” (Ibid, p. 3)
- Interactionist approach that defines quality as “a result of multiple organizational actions and interactions that is very difficult to control and manage” (Ibid, p.2). Thus, “an organizational culture is emerging from the interactions of various actions involved in the organization. It can be seen as a framework of collective structures of social meaning ... creating the premises for specific perception and action” (Ibid, p. 3). In this approach “culture is very much understood as a complex and dynamic construct with rules of its own, impeding its manageability and hindering the predictability of future developments” (Ibid); quality goals as well as the means to achieve them depend “on process of interaction and interpretation” (Ibid).

Even, functionalist approach is required in an organized structure, dynamic interaction of actions and activities between various compounds of the higher education institution is needed to set quality culture within it.

4.4.2: Setting Quality Culture Approach

Quality culture approach was promoted by the European university association (EUA, 2006) (Lueger & Vettori, 2007). This approach differs from the traditional quality management strategies; it shifts attention to “more development-oriented and value-based aspect (Vettori et al., 2006, p. 22). Thus, quality is beheld as “values and practices that are shared by the institutional community” (Ibid).

Quality culture cannot be implemented from above; hence, multiple internal and external stakeholders must be involved. Although leadership should act to start and promote the

process in the first place, yet, in quality culture, it is inspirational rather than just being a services' manager (Harvey, 2006-a).

Considerable exploration of features and characteristics that indicate quality culture setting are specified by Harvey (2006-a), such as:

- There are teaching and learning processes that place the student at the center;
- There are partnership and co-operation inter- and intra- institutions, sharing of experiences and team work;
- The individual is supported as an autonomous scholar in symbiotic relationship context between individual and the learning community;
- External and internal evaluations are welcome and are considered as support to quality enhancement; and,
- There are “facilitating and encouraging reflexivity and praxis; self-reflection, developing improvement initiatives and implementing them” (Ibid).

Setting and developing a quality culture require an incubation system, namely, quality system that mutually support institutional capacity development of mechanisms and processes for sophisticated self-evaluation and to meet the challenge of external assessment represented by quality assurance approaches. The development of quality culture to “design a successful quality system” requires, according the Newton (2006), the following:

- “ An open and active commitment to quality at all levels;
- A willingness to engage in self-evaluation;
- A firm regulatory framework, clarity and constancy of procedure;
- Explicit responsibilities for quality control and quality assurance;
- An emphasis on obtaining feedback from a range of constituencies;
- A clear commitment to identifying and disseminating good practice; and,
- Prompt, appropriate, and sensitive managerial action to redress problems, supported by adequate information” (p. 16).

In part, a quality system includes many components and incarnates many characteristics that are delineated herein:

- Clear specifications of roles, responsibilities and procedures;
- Enablement of achieving institutional aims and objectives;
- Transparency in decision making information;
- Strong reduction even elimination of individual bias;
- Involvement of all academic and administrative staff; and,
- Promotion of continuous improvement. (Ibid)

The quality system should also include the specification of standards and acceptable evidence. In fact, there are differences between the planned or designed conception of the quality culture approach and quality system and the resulting outcomes of their implementation. Then, in the context of quality practice, when setting quality culture policies and when building a quality system, many issues emerge and should be considered, such as

- The ways that academics and administrative receive and respond to quality and quality policy, and the meaning that is attached to the different facets of quality;
- The ways that the staff engage with quality framework and policy; and,
- The manner that quality system is viewed by the staff. (Ibid, p. 17)

At operational levels, quality can be viewed differently by the academics, the students, and the managers; it is also relative to how they construe and construct quality or the quality system (Ibid, p. 20). But, it is worth noting that establishing quality culture system in higher education institution have democratic aspects reflected by the engagement of all HR managers and learners within it rather than by the top to bottom implantation of decisions and procedures.

4.4.3: Democratizing Quality

Democratizing quality includes two components, namely, democracy and quality. As such, one is to consider the following question: What democracy means within the context of quality in higher education?

Democracy is not a simple concept, especially in practice; the general approach to democracy defines it as a form of government (Harvey, 2008), but democratic government should be seen as “more than a free electoral system: a democratic society is also characterized by constitutional government, human rights, tolerance and equality before the law” (Ibid, p. 5).

Quality in this context concerns the quality in higher education provision and in social and humanity development of students, rather than the quality process per se; quality, like freedom or justice, is intuitively understood but often hard to articulate. The higher education institution incarnates quality aspect when it plays the role of an incubator of democracy through its social-educational roles, with quality learning as a key factor to social progress.

The questions asked when assessing the approach of democratization of quality are

- Does quality need democratizing?
- Does democratizing process improve quality?

Quality needs to follow a more democratic process and should act as an agent for democracy. The quality approaches that make actors responsible of the quality of their own part in the production process, and make the establishment responsible through consistency and meeting of their own purposes, propose a simple solution to democratization (Ibid). In these approaches, everyone in the process and institutional operations is expected to be a perfectionist. However, the outcome of the educational process, which is the empowerment of the student through transformative learning experiences, is different from the process that is conducted towards a clear tangible product. The links between each stage of the education process are complex, hence, specifying the quality requirement at each stage is a complex issue. Moreover, sharing responsibility through discussion, communication, distributed decision- making and active-learning approach, particularly through joint committees, should improve quality.

The concept of quality culture incarnates the notion of perfection to attain zero defects and the notion of responsibility sharing. The approach of democratization of quality through the establishment of quality culture could be considered as a fundamental shift from autocracy to democracy in the development of quality in higher education. “Democratizing quality is

shorthand for desire for an empowering and enhancing transformative quality higher education that underpins the fundamental elements of democracy” (Ibid, p. 9).

4.5 Quality in Education and Higher Education: Synthesis and Analysis:

The readings of the different literature and the author’s observations and experience have led to the following:

1) Quality in higher education may give an indication of the efficiency and the yield of the educational service offered. The evaluation is based on the international criteria while taking into consideration the specific conditions and situations of the concerned country.

- a) Quality is an evaluating judgment based on pre-established criteria. In this context, quality is the value given by all beneficiaries to the concerned subject.
- b) Most of the quality criteria must be relative; so, the criteria must be dependent on the situation of the concerned country and its effective potentials.
- c) The concept of quality should not include unchangeable indicators; the indicator must be able to be developed according to changing situations and available potential of cultural platform where we are utilizing this concept.
- d) Quality is not unique nor a rigid state which is declared by its presence or non-presence, but can be presented on a gradual scale.
- e) “Quality has become a dynamic concept that has constantly to adapt to a world whose societies are undergoing profound social and economic transformation” (Uvalić – Trumbić, 2007, p.59).

The conceptions of quality presented and discussed in Section 4.3 (exceptional, perfection, fitness for purpose, value for money, transformation ...) are in fact “used to clarify objectives or rationales of quality assurance” (Brockerhoff et al., 2015, p. 4). Thus, links exist between the objectives of the prime factors and that of quality perception; such as, accountability and that of fitness for purpose, efficient use of resources and that of value for money, and improvement with that of transformative aspects.

2) Any quality definition is necessarily relative; this relativity aspect “must avoid dogmatism that considers as indisputable truth that identifies quality definition” “quality does not belong to the field of truth, but to that of value” (Chauvigné, 2007, p.4); this fact must lead to the development of open position with regard to quality implantation and evaluation (Ibid). Thus, open and dynamic standard should be used and considered as “reference for action, rather than prescription” (Ibid). In higher education context, the relativity of quality is supported by the fact that a university can represent particularities in their educative, academic and administrative operations, available resources, embodied culture, quality perception and in selected priorities. Moreover, this relativity is related to the relativity of the stakeholders’ needs and expectations, which could be taken as dynamic references. This means that quality should not be appreciated “only through the prism of standards, but being aware of and supportive of the initiative and innovation that satisfy emerging needs” (ibid).

3) The degrees conferred by a university should not be considered as an article of merchandise or consumer goods that are measurable. The university, as other service establishments of public interest, offers a common service, and does not produce an article of merchandise. Hence, we should not automatically apply the quality concept used in the consumable service establishments to the institutions that offer educational services. The process, the methodology, the tools, the nature, the dynamics and the results of each type of service are completely different/ independent.

The learning outcome offered by a university should not be treated as a consumable article. Quality in education is always in a dynamic state, vivid, flexible, and a continuous process. We cannot discuss quality without discussing the teaching/ learning operation process. It is a culture that is implemented in the attitude and behavior of the students, instructors and administrators; it is multi-dimensional and should not be summarized by respecting only some physical conditions. If we copy the same physical conditions that exist at Harvard University to a university in a developing country, would we be graduating a similar standard of graduates as that of Harvard graduates?

4) The university does not produce a consumable article but offers public service. Consequently, we should not consider the quality perception of the consumable service as a quality reference to evaluate an educational service. The educational service treated as an

ordinary consumable service caused a deviation in the discussion of the educational quality service by insisting on the presence of the adequate environment such as, class dimensions, modern equipment, sports facilities, students' center, student loans, etc...

5) The promotion and recommendations that incite the giving of more importance to the quality in the educational sector should not force experts to consider the models adopted in the non-educational service sector as a reference so as not to fall into a superficial appearance quality that seduced some educational authorities in developing countries. In many cases, the evaluation of the educational service focuses on the environmental factors of teaching more than the quality of the learning service itself. In this context, the questions at hand are as follows:

- a) Is it sufficient in a certain country to consider the education in this country to be at a high quality level if some factors of the teaching environment obtain a certification in quality?
- b) Does the increase of the factors that obtained a certification in Quality indicate the increase of the quality of education? In another word, can the quality level be calculated by adding the quality points received by each component of the educational service; that is, Cumulative Quality?

Modern equipment used in education provides a service to the instructor, student and the institution. It reduces time and effort that is required to attain the expected objectives. However, in several cases, the overuse of advanced technology, and the over-equipping of classrooms deprive the student and the instructor from the virtue of personal effort. This will drive them to an automatic, repetitive and pre-prepared work that pushes them, now or later, to get used to using a style of pre-set menu of knowledge similar to the pre-pared frozen meals and fast food (Wehbé, 2003). For example, the use of a calculator for simple calculations and the use of the Internet to get a rapid response without analyzing the response's content. Is this what we are trying to accomplish?

If the required physical specification at university assures good results, then we would not have needed placement tests, periodical and final exams to guarantee good quality graduates. If this were true, then, rich countries would have occupied the top ranks in competitions

perform by international evaluation institutions. However, the results of these evaluations don't confirm this hypothesis.

6) The acquisition of quality needs continuous efforts to meet great and consistent objectives, and continuous improvement of learning; required also commitment of values of democracy, freedom and human rights. Moreover, to acquire quality, the adoption of and adherence to the supreme values, such as integrity, sincerity and transparency, are required.

Therefore, quality in higher education concerns “the caliber of the results of the teaching and learning process” (Nobarian & Abdi, 2007, p. 6). Hence, the main questions are: Who assess the quality of provision of higher education institutions? How is quality assessed? What are the approaches and the criteria implemented in the assessment process?

The system of values, standards and indications should concern: the teachers' competencies, including research outcomes and knowledge development, the convenience of the existing facilities, the students' knowledge and skills acquisition, the students' results, the learning effectiveness, the global learning outcomes, the university/society interactions, and the performance of the organization that controls and intervenes in the formative process and management.

To assure that the institution and the learning outcomes attain the expected quality level, assessment approaches and mechanisms are developed: independent evaluation, or accreditation, of organizations around the quality assurance objectives have been put forth; points that are delineated in the following sections.

4.6 Quality Assessment and Certification in Higher Education:

To assess and then to certify quality level in higher education institution, monitoring approaches and assessment mechanisms are considered.

- Quality monitoring is an approach applied to supervise and control quality in higher education institution. It depends on selected quality dimension aspect.

- Quality mechanism is a quality evaluation method, tool, and process adopted to reveal quality level in higher education institution.

Practiced means of quality monitoring and quality mechanisms are presented in this section.

4.6.1 Quality Monitoring in Higher Education

Considering the complexity and the multi-dimensional aspects of the quality concept, there exist various approaches to monitor quality in higher education. Each approach focuses on a selected aspect because all quality dimensions cannot be covered in one approach.

Quality monitoring is done in two ways or manners, namely,

- Internal quality monitoring which is usually executed by internal quality committee or quality department within the institution; it acts under the responsibility of the said institution.
- External quality monitoring which is usually carried out by external authorities (e.g. governmental authorities), or outside body designed for this mission (buffer organizations or agencies).

There are many quality indicators, or variables, to monitor quality of the higher education institutions (Gibbs, 2010-a; (European Commission, 2013 cited in Krcal et al., 2014, p. 21), some are concerned about the teaching staff, independent study hours and total hours, the teaching process and methodologies, research environment, intellectual challenge and student engagement, formative assessment and feedback, peer quality ratings and quality entertainment, student performance and degree classification, student retention and persistence, and graduate employability and destinations.

In the last decade, the global ranking of higher education institutions has been considered among the instruments of quality monitoring, although it is widely disputed (Salmi & Saroyan, 2007) since it tends to neglect the information on student's learning outcomes (Nusche, 2008), and use indicators that mainly focus on research. However, "trends in recent years show that their number is likely to grow" (Krcal et al., 2014, p. 21).

Policy makers and society are tempted to “judge higher education institutions by the standards that ranking use rather than by one of the core principles of quality assurance: ‘Fitness for Purpose’” (Krcal et al., 2014, p. 22). Salmi and Saroyan (2007) presented some general observations and recommendations that came as a result of international experience in ranking and league tables. They consider that the ranking of the higher education institutions should be “explicit about what definition of quality is adopted. Moreover, the measure, the ranking purposes and the audiences for whom ranking is performed, should be specified” (ibid, p. 92). The definition of quality in the context of higher education “implies enabling students to succeed in meeting their aspirations, the expectations of society, the demands of governments, business and industry, and the standards set by professional associations” (ibid). Thus, a wide range of indicators should be used in order to introduce into the evaluation process a wider range of quality dimensions, through greater emphasis on output and outcome (Ibid), hence resulting in multiple scores rather than a global score. They also call to make comparability through ranking credible by comparing similar institutions or programs.

Recently, some international initiatives propose a multi-dimensional ranking (multi-ranking), which includes all aspects of a higher education institution: education, research, knowledge exchange and regional involvement (Krcal et al., 2014). Quality profiles are also used as transparency tools of quality monitoring “whereby higher education institutions display their performance against a set of common indicators in order to enhance comparability ... on higher education institutions study programs” (EHEA, 2010, cited in Krcal, 2014, p. 22).

4.6.2 Quality Mechanism

Quality as a concept is different from quality as a mechanism which refers to the process of assessment (Newton, 2006, p. 15). A variety of mechanisms are involved in practice quality approaches like quality assessment, quality assurance, audit and accreditation. Quality improvement could be also considered as advanced step of quality mechanism. Moreover, there are many common terms used to express quality mechanism such as:

- Quality control which “involves a complex array of tools and procedures that check whether predefined standards are reached” (Krcal et al, 2014, p. 20).

- Quality management which is “described as an instrument developed to ensure evaluation of the work done by academic staff at an educational institution” (Barrow, 1999 cited in Krcal et al., 2014, p. 20). It also applies administrative process, environmental performance of operations, and the quality of outcomes or meeting mission goals” (Krcal et al., 2014, p. 21).

Evaluation of learning outcome quality is also encountered in educational quality processes; it describes student’s real achievements, including student’s learning and skills development as compared against those expected in the curriculum (Harvey, 2004, p. 17; Nusche, 2008).

In practice, quality assurance and accreditation, as an approach to quality assurance, are more commonly evoked; hence, more focus is needed on discussing and analyzing them. Considering that audit is a particular approach of quality assurance which is used to assess the strengths and weaknesses of quality assurance mechanisms adopted by an institution (UNESCO, Module 1, 2007, p. 19), and that quality assessment leads to quality assurance, the definition and objectives of audit and quality assessment mechanism are summarized in the following sub-sections.

4.6.2.1: Quality audit:

In the context of quality in higher education, an audit, sometimes called review, is a method for evaluating the strength and weakness of the quality practice; it is a process of quality assessment for “checking that procedures are in place to assure quality, integrity or standards of provision and outcomes” (Harvey, 2004, p.17). Generally, the objective of adopting it by an institution is “to continuously monitor and improve the activities and services of a subject, a program or the whole institution...” (Nobarian and Abdi, 2007, p.7). Quality audit is the first step in the quality assurance procedure (Sanyal and Martin, 2007) through the inspection of “the existence and the proper work of the relevant systems and structures within an institution” (Krcal et al., 2014, p. 25) in order to ensure that “provision is at or beyond a satisfactory level of quality” (Krcal et al., 2014, p. 25), and to ensure that “the overall internal and external quality assurance procedures of the system are adequate and are actually being carried out” (Vlasceanu et al., 2004, p. 77)

Following Dill (2000, cited in Krcal et al., 2014) audits are focusing in the process “by which academic institutions exercise their responsibility to assure academic standards and improve the quality of their teaching and learning” (Krcal et al., 2014, p. 25). Usually, quality auditors of the external audit organization, which must not be directly involved in the institution submitted to auditing, refer to peer-review based evaluation of “the effectiveness of institutional quality assurance and quality enhancement system and processes” (Singh. 2007, p. 8).

The output of the auditory process is a description of the extent to which the claims to quality are correct (OECD, 1999 cited in Krcal et al., 2014, p. 25); this is shown in the audit report that documents the result, but “without formal recognition decision or direct funding or licensing consequences” (Singh, 2007, p. 98). It is worth noting that in some countries, the function of the audit agencies “is part of the portfolio of mandates and responsibilities that also include accreditation” (ibid).

4.6.2.2 Quality assessment:

The definition of quality assessment, which is a synonym of ‘review’, or ‘evaluation’ (UNESCO, Module 1, 2007, p. 19) is given by Sanyal and Martin (2007) and is based on the glossary cited by UNESCO – CEPFS (Vlasceanu et al, 2007), is as follows: “Quality assessment involves evaluating (reviewing, measuring and judging) the quality of higher education processes, practices, programs and services using appropriate techniques, mechanisms and activities. The process of quality assessment takes into account the content (international, national, regional and institutional), the methods used (self-assessment, external peer-review, site visit, reporting), the levels being assessed (system, institution, program), the areas of assessment (academic, managerial, output and outcome), and the stakeholders’ objectives and priorities” (Sanyal and Martin, 2007, p. 6). Vlasceanu et al., 2007, p.74) also introduced important aspects when defining and operating the concept of quality assessment, the mechanisms (recompenses, policies, structures, cultures), some values ‘attached’ to quality assessment, like academic values, managerial values (relative to instructors, their teaching competencies and their pedagogical practices), professional values (relative to graduates’ characteristics).

Quality assessment involves an external or internal judgment of performance against criteria (for example, the quality of teaching) (Newton, 2006). It leads to quality assurance or lack thereof, for the stakeholders (Sanyal and Martin, 2007). “Many countries have started by establishing quality assessment mechanism that does not practice any type of grading or ranking of institutions, but rather a set of recommendations on how to improve the quality of a given institution or program” (UNESCO, Module 1, 2007, p. 19).

4.6.3 Quality Assurance

The aforementioned definitions of quality in education are mostly broad and general. Quality assurance and accreditation definitions in higher education can be more specific. However, different networks and agencies have their own definitions, thus leading to a number of discrepancies in used terminology and denomination of quality assurance and accreditation; for example, between UK, US, and some European countries (Uvalić – Trumbić, 2007)³³. Note that the glossary published by UNESCO – CEPES, Vlasceanu et al. (2007), illustrates the confusion and frequent overlay between terms such as: standards, quality control, quality management, quality assurance, quality assessment, benchmarking, and so on. In this glossary, quality assurance is related to “a continuous process of evaluating (assessing, monitoring, guaranteeing, maintain, and improving) the quality of a higher education system, institutions or programs. As a regulatory mechanism, quality assurance focusses on both accountability and improvement, providing information and judgment (not ranking) through an agreed and consistent process and well-established criteria” (ibid, p. 74).

The quality assurance that relates to quality control is “a process of establishing stakeholders’ confidence that provision (input, process and outcomes) fulfils expectations or measures up to the minimum requirements” (Harvey, 2004, p. 17). It is used as “the overcharging term for various forms of internal and external quality evaluations, encompassing both audit and accreditation, and both accountability and improvement aspects” (Singh, 2007, p. 98). In fact, quality assurance is a generic term that “take many form and cover a wide spectrum of

³³ Many terms are used such as audit, accreditation, quality assurance, assurance quality – qualité et évaluation, “Management de la Qualité”, “Garomtia de la Calidad” (in Spain).. (Uvalić – Trumbić, 2007, p. 50)

processes designed to monitor, maintain and enhance quality” (Krcal et al., 2014, p. 22). It should be, at the institutional level, a part of the overall management function that determines and implements the quality policy (UNESCO, Module1, 2007, p. 18).

The procedures of quality assurance cover several aspects and many parts of the institution’s functions and activities; such as, institutional accreditation, programs’ validation/review, research activities, courses, academic staff, support functions (e.g. administrative audit (Ibid). it is to be noted that Bologna implementation report (EACEA, 2012) stresses the current trends in quality assurance systems; trends that focus on a combination of institution and programs rather than on either (Amourgis et al., 2009; Krcal et al.,2014, p.25) since, in term of quality practices, there are interactions between program achievement context and institutional management context and governance system. Moreover, traditional quality assurance methods tend to focus on input measures (physical features, teaching environment) while today’s trend is concerned with institutional development, learning outcome, effectiveness and labor market returns (Hopper, 2007).

In quality assurance, two approaches are distinguished: the formative approach, which “monitors an institution’s performance and encourages it to identify strengths and deficiencies and develops strategies to address them” (Krcal et al., 2014, p. 23); and, the summative approach which “judges whether an institution meets certain criteria” (Ibid).

Quality assurance procedures can be operated under the responsibility of the institution itself (internal quality assurance), or the national or international bodies (external quality assurance). Accreditation is among the most widely used method of external quality assurance monitoring.

The major purposes that quality assurance and/or accreditation reflect are accountability, transparency and quality enhancement or improvement (UNESCO, Module 1 & 4, 2007)³⁴; when an institution has quality assurance or accreditation label, a powerful signal is transmitted to students, public, government and other higher education institutions (Eaton, 2007, p. 159).

³⁴ Some experts consider the facilitation of students’ mobility as the 4th purpose (Sanyal and Martin, 2007, p. 6)

As accountability requires external locus of control and publishable outcomes (Newton, 2006, p. 16), external quality assurance “is often commissioned by public authorities as part of their higher education policy agenda”, and is frequently “linked to concerns over ‘value of money’ and creation of transparency and public assurance” (UNESCO, Module 1, 2007, p. 24). It is often conducted “to enforce accountability in order to reassure external stakeholders about levels of ‘quality’ acceptable” (Ibid).

External quality assurance leads to improvement through compliance to objectives, the setting of goal practice standards, and through the formal and systematic self-assessment procedure it helps establish within higher education institutions. Hence, a “compliance culture” is produced and transformative quality improvement is propelled. “Accountability or compliance with standard, including the institution’s own purposes, is used when public information about the quality of a given institution or program is important” (Ibid).

4.6.4 Accreditation

Accreditation term in educational field has been defined in different manners; for example,

- As “the granting of approved status to an academic institution” (Bram et al., 1983, cited in Liston 1999, p. 23) Accredited institution holds “credentials” (Forbes et al., 1986, cited in Liston 1999, p. 23).
- Accreditation is recognizing that a higher education institution “meets an official standard” (Barnhart & Barnhart 1978, cited in Liston 1999, p. 23). But it is important to note that in practice there is a difference between accreditation and recognition means: while accreditation is based on a decision of an accreditation agency, recognition reflects a decision of national authority or sometimes of agency in charge of pronouncing, on request, of a recognition decision. Hence, an institution or a degree can be recognized but not accredited and vice versa (UNESCO, Module 1, 2007).
- In 1983, Young defined accreditation as “a process by which an institution of post-secondary education periodically evaluates its own educational activities, whole or in part, and seeks an independent judgment that it substantially

achieves its own educational objectives and is generally equal to comparable institution or specialized unites” (cited in Liston 1999, p. 23).

We can observe that the term ‘quality’ was not included in these definitions; it was included in the definitions of the 21st century as a result of the international debate on quality assurance; accreditation was then defined as

- i) “The process by which a non-government or private body evaluates the quality of higher education institution as a whole or a specific educational program in order to formally recognize it as having met certain predetermined minimal criteria or standard” (Vlasceanu et al, 2007, p. 25).
- ii) “Every formalized decision by an appropriately recognized authority as to whether an institution of higher education or a program conforms to certain standards” (European Consortium for Accreditation, 2005, cited in Nobarian and Abdi, 2007, p. 8). Note that this definition encompasses the definition of ‘quality’ presented in the previous section.
- iii) “A process of external quality review used by higher education to scrutinize colleges, universities, and higher education programs for quality assurance and quality improvement” (Barrows, 2002, p. 31, cited in Nobarian and Abdi, 2007, p. 8)).

Accordingly, today we can observe that there is ‘convergence’ as to the whole meaning of accreditation. Accreditation is currently widely used as a method of quality assurance; it should “ensure a specific level of quality according to the institution’s mission, the objectives of the programs, and the expectations of different stakeholders” (Singh, 2007, p. 56). It will ensure quality control in higher education; this control means to check the conformity of the experienced higher education activities with minimum quality requirements in terms of inputs, process an outcomes, in order “to protect the interest of stakeholders and safeguard national development objectives” (Ibid).

Accreditation, which is generally performed by external bodies, could be voluntary or compulsory depending on national regulations. It can also be of different types and different approaches, for example fitness for purpose (to check whether the higher education institution

or program is achieving its stated purpose), which could also be complemented by ‘fitness of purpose’ (verification as to whether the purpose itself is acceptable).

According to the standard-based approach, higher education institutions must meet certain standards related to various aspects of institution or program. Good practice standards should also be ensured. “Accreditation for high quality is based on a number of selected factors related to the input, process and output/outcome of institutions and programs.... Each factor is divided into a number of characteristics; each characteristic includes indicators that measure the degree of compliance with respect to a benchmark. Characteristics may be assigned weights, which may vary depending on the type of institution being accredited.” (Sanyal and Martin, 2007, p. 7).

“Quality assurance and accreditation cannot be discussed without taking into account the national context of the higher education system” (ibid). Quality assurance and accreditation are “viewed through their growing links with qualification recognition. Such links are strengthened by different international schemes and programs within a potential context of developments” ((Uvalić – Trumbić, 2007, p.50).

At international scale, the quality assurance systems are diversified; however, whether using audit, accreditation or other methodologies, there is a “tendency towards convergence on an international model of quality assurance practice” (Hopper 2007, p. 170).

4.7 Structure of Quality Assurance Model: Process and Measurement:

4.7.1 Quality Assurance Process

As noted in the previous section, external quality assurance is mostly needed to monitor, set, manage and assess the quality and achieve the procedure of its assurance. Although the external quality assurance is based on internal self-assessment by professionals located in the concerned higher education institution, the procedures, criteria and standards used should be

submitted to external validation. “The need for quality assurance to use peer assessment or the judgment of higher education practitioners is well recognized. This is true even of approaches that rely more on indicators and quantitative norms” (UNESCO, Module 1, 2007, p. 87).

Thus, the basic elements of quality assurance (or accreditation) process are:

- Self-assessment
- Peer review
- Decision-making and public reporting

“These processes culminate in an official determination of quality and standards as defined by the quality assurance system” (Hopper, 2007, p. 170). In general, the quality assurance organizations/agencies share many common practices; however, there are differences between them as to the level of the public authority’s involvement, the assessment tools used, the nature of the pronounced judgments, the method of publishing/reporting, and the nature of the decisions and sanctions. Moreover, the “goals and priorities of quality assurance are generally debated in the local context” (ibid).

4.7.2 Quality Assurance Measurement

Constituting and determining quality in higher education has led to the discussion of quality measurement and assurance (Harvey and Williams, 2010). Although the issue of quality measurement is a debated one (Brockhoff et al., 2015), the question around this issue implies determination of assessing or comparing references. In fact, since there are no universally set definitions of quality in higher education and heterogeneity of institutions and programs, quality measurement becomes complexed. Hence, the indicators for measuring acquired skills and learning outcomes differs between students and institutions (Hopper, 2007).

In higher education, there is a close relationship between quality and standards issues (Harvey, 2006-b). Hence, the quality assurance model includes setting criteria and standards that provide detailed information on how institutions are to be judged.

In quality assurance practice and reporting, agencies use many terms when elaborating on the standards; such as, references, standards, criteria, indicators, benchmarks.... To coherently use these terms, applying a usual consistent meaning is required.

4.7.2.1 Standards

Initially the term ‘standards’ came from the world of industry. In its general meaning, “standards “are set of characteristic or qualities that describe the features of a product, process or practice, service, interface or material” (UNESCO, Module 4, 2007, p. 17). In higher education and quality assurance “standards denote a principle (or measure) to which one conforms (or should conform), and by which one’s quality (or fitness) is judged” (ibid).

In some contexts, the term ‘standards’ (in French reference or norms) is used as synonym of minimum requirement or to signify the degree of excellence required to attain a particular objective. The standard can be expressed in quantitative or/and qualitative ways. This term is “complicated because it means both a fixed criterion and a level of attainment” (Harvey, 2006-b, p. 2). Although there is often an overlay between the concept of ‘quality’ and ‘standards’, in higher education debate, yet, the difference is like the difference between process and outcomes. “Quality refers to how things are done whereas standards are used to measure outcomes” (Ibid, p.2). When standards are used to assess the quality of higher education institutions, they should cover many domains: academic, competence, service, and organization. The corresponding categories of standards are presented verbatim in the following as integrally presented by Harvey (2006-b, p. 3), in his paper ‘Understanding Quality’:

Academic standards: An academic standard is the demonstrated ability to meet specified level of academic attainment, usually relating to objectives or stated outcomes, operationalized via performance on assessed pieces of work.

In the context of academic standards that is related to the intellectual abilities of students, the grade achieved would be the academic standard of the student; the ‘quality standard’ would be the pass mark (minimum grade required to achieve the award). For research, standards are assessed, for example, via peer recognition.

Standards of competence: A standard of competence is a demonstration that a specified level of ability on a range of competencies has been achieved. In the context of standards of competence that is related to the technical abilities of students, competencies may include general transferable skills as well as ‘higher level’ academic skills appropriate to an award. In some cases competence includes particular abilities congruent with induction into a profession and the award of a licence to practice, as for example, in medicine or law. Note that competence is a whole domain of pedagogical research

Service standards: The service standards are the services provided by the higher education institution to the student. They assess whether identified elements of the service (process or facilities) are congruent with specified benchmarks or expectations. Such things as benchmark statements and student charters often focus on quantifiable and measurable items. Satisfaction surveys are used as indicators of service provision.

Organizational standards: They are the principles and procedures by which the institution assures that it provides an appropriate learning and research environment. Organizational standards measure the attainment of formal recognition of systems to ensure effective management of organizational processes and clear dissemination of organizational practices.

Effectively, the quality in higher education institutions has many dimensions; thus, a wide framework of standards should be developed and complemented by a set of criteria and indicators.

4.7.2.2 Criteria

The term ‘criteria’ is defined by the Analytic Quality Glossary (Harvey, 2004) as “the specification of elements against which a judgment is made”. This term is associated with referenced assessment term; criteria-referenced assessment means the “process of evaluating (and grading) the learning of students against a set of pre-specified criteria”. In practice, the terms ‘criteria’ and ‘standards’ are used interchangeably by some quality assurance agencies.

The difference between criteria and standards is significant in the fact that the criteria indicate the elements or aspects, while the standards set the level. The Australian Universities Quality

Agency (AUQA) Glossary indicates that the “function of standards is to measure the criteria by which the quality may be judged” (UNESCO, Module 4, 2007, p. 17).

4.7.2.3 Indicators

In the Analytic Quality Glossary, an indicator is defined as “something that points to, measures or otherwise provides a summary overview of a specific concept. A set of indicators that are combined is referred to as an index” (Harvey, 2004, p. 17). It is defined in Cambridge Advance Learner’s Dictionary (2004) as “a device which indicates a value or a change in level...”

As in production sector, where process transforms input to product, some quality assurance agencies re-grouped indicators in five categories (UNESCO, Module 4, 2007, p. 14). These categories are:

- Input indicators: They refer to resources and elements used by the institution to produce (to achieve) results (outcomes) like financial resources, infrastructures, students, academic and administrative staff
- Process indicators: They concern the manner of the combination and utilization of the resources, to produce (to achieve) results (or outcomes). Like teaching, research, service management...
- Output indicators: They describe the ‘product’ of the institution (learning, research, services, outcomes...).
- Outcome indicators (or result indicators): They describe the effect of the output of the institution in the labor market, individual level, and social environment; for example, the graduates’ employability ratio in the labor market.
- Performance indicators: They are data, usually quantitative in form, which provide a measure of some aspects of an individual’s or organization’s performance against which changes in performance or the performance of others can be compared” (Harvey, 2004, p.17). The performance indicators are used to evaluate the institution’s (organization) effectiveness. This evaluation is, as in economy, based on the idea that a system’s or an institution’s success is the result of productivity aspect in terms of

- Efficacy denoted as degree of objective achievement, like study achievement, graduate (employability) ratio, student satisfaction (outcome aspect).
- Efficiency denoted as optimal use of resources, like instructor/students ratio, unity cost, retention period or duration to graduation (process aspect).

The performance indicators have a statistical aspect fundament that requires the collection and analysis of data to be transformed to indicators; collected data should be analyzed in a particular context or toward a particular norm. The use of the performance indicators in quality assurance, which is usually a complex issue, can be beneficial in many types of processes, such as control, support, decision, comparison, evaluation and enhancement (UNESCO, Module 2, 2011).

4.7.2.4 Benchmarks/ Benchmarking

The term ‘*Benchmark*’ is used in all activities that involve comparison; It is a point of reference that is used to make the comparison (UNESCO, Module 4, 2007). Benchmark is defined in the Analytic Quality Glossary (Harvey, 2004, p.17) as “a point of reference against which something may be measured”. In higher education context, benchmark statement “provides a reference point against which outcomes can be measured and refers to a particular specification of program characteristics and indicative standards” (ibid).

McKinnon et al (2000, cited in UNESCO, Module 4, 2007) distinguish two types of benchmarks; they are

- The criterion reference approach which “defines the attributes of good practice in a functional area. A university wishing to benchmark its success in that area will assess whether it has achieved the criteria” (p. 19).
- The quantitative benchmarks that “distinguish normative and competitive levels of achievement (for example the proportion of postgraduate students within the total enrolment” (ibid).

There are also many methodologies that can be adopted to develop benchmarks; for example, a model based on idealized best practice considering ideal type standards.

Benchmarking “is a process that enables comparison of inputs, process or outputs between institutions (or parts of institution) or within a single institution over time” (Harvey, 2004, p.17). There are many ways of benchmarking that serve different purposes. Usually, the processes of quality assurance in higher education consider external collaborative benchmarks for comparison with a group of institutions who are not immediate competitors” (UNESCO, Module 4, 2007, p. 19).

Benchmarking is considered also among the instruments for quality improvement (ESMU, 2008, cited in Krcal et al., 2014); whether carried out within or between institutions, it must “lie in the identification of strengths and weaknesses with a view to set targets for improvements”. Benchmarking is “a dynamic comparative exercise during which the performance of a group of institutions can be measured” (Blackstock et al., 2012, cited in Krcal et al., 2014, pp. 28 – 29).

4.8 The Assessment of the Learning Outcomes in Higher Education:

It was noted in Section 4.3.1 that in the traditional systems of higher education ‘quality’ is defined and evaluated in terms of the inputs and process, while in progressive systems the concerns are rather of output learning components (Corpus, 2007). Also, the existing ratings and rankings of higher education institutions focus on input, resources used, activities, classes taught, and research outputs (published articles); however, information on students’ learning outcomes are not given their due worth of importance (Nusche, 2008). “Such indicators provide no indication of the degree to which higher education institutions actually develop the knowledge and skills of their students (ibid, p. 3). Moreover, “ensuring that learners actually obtain the knowledge and skills they pay for is a growing concern to governmental and public funders and to the public” (Drisko, 2014, p. 414). Thus, there is a need to develop instruments “to obtain comparable information on what students actually learn across higher education institutions ... to assess and compare higher education learning outcomes between institutions” (Nusche, 2008, p. 5), and to ensure that graduates are truly competent, thus

ensuring the quality of the learning outcomes. But, this task, which is not simple, requires conceptual, procedural and curricular revision.

In their published report on the future of higher education, the Commission – The Department of Education (DOE), USA (2008) came to a conclusion that ‘student achievement’ must be measured on a ‘value-added basis’; they observed that accreditation systems are too process-oriented and that too little focus is given to the learning outcomes.

Accordingly, the Commission proposed a transformation of accreditation practice toward

- Performance outcomes rather than ‘inputs’ or processes
- More transparent and accountable accreditation systems

Moreover, innovation and continuous improvement are emphasized, in parallel to business models of quality control and improvement, such as the standards of the International Organization for Standardization (ISO)³⁵.

4.8.1 Definition of Learning Outcomes

The term ‘learning outcome’ “has its origins in ‘outcome-based education’ systems that organize curricula around explicit and detailed student outcome statements” (ibid, p. 8). The term ‘outcomes’ “describes what the student actually achieves, as opposed to what the institution intends to reach” (ibid, p. 7 citing Allan, 1996); it is essentially “what one ends up with, intended or not, after some form of engagement” (Eisner, 1979, p. 103 cited in Nusche, 2008, p.7).

It is important to distinguish between ‘outcomes’ and ‘outputs’ used in performance indicators of educational quality. Higher education institutions’ outputs are anything that institution produces; they can be measured in terms of published articles, classes taught, degrees awarded, which are steps that lead to outcomes or benefits (Nusche, 2008, p. 7),

³⁵ The ISO ‘conformity assessment’ means checking that products, materials, services, systems, processes or people measure up to the specification of a relevant standard or specification. These issues are discussed in Ch. 5.

Many definitions of ‘learning outcomes’ are given, such as

- Learning outcomes are “something that can be observed , demonstrated and measured” (Milton, 1996 cited in Nusche, 2008, p. 7)
- Learning outcomes refer to the personal changes or benefits that follow as a result of learning which can be measured in terms of abilities or achievements (Nusche, 2008). In higher education, they are “a result of students’ engagement in the learning opportunities offered by higher education institutions (ibid, p. 7).

Thus, in addition to academic staff and other human resources of the institution, students are co-producers of the institution’s learning outcomes.

James (2004, cited in Scott and Martin, 2012) considers that varied communities have socially constructed learning outcomes in order to dictate what is important to know and what is not. In theory, learning outcomes describe to

- Potential learner what will be learned;
- Potential employers, what should have been learnt;
- Quality agents, a measure for audit; and,
- Funders and higher education providers, a means for resource accountability (Scott and Martin, 2012).

High quality learning outcomes related to higher education experience of students, can lead to a more fulfilled life and to a better social and employment opportunities (Ewell, 2005).

4.8.2 Learning Outcomes Categories

Two categories of learning outcomes could be distinguished, namely, cognitive and non-cognitive; however, in practice, these components are independent and overlapping (Bowen, 1977 cited in Nusche, 2008, p.8).

Cognitive outcomes: They “refer to the recall or recognition of knowledge and to the development of intellectual abilities and skills” (Posner, 1992 cited in Nusche, 2008, p. 8);

they “range from domain-specific knowledge to the most general of reasoning and problem-solving skills” (Shavelson and Huang, 2003, p. 13).

Non-cognitive outcomes: The development of non-cognitive outcomes “refer to changes in beliefs or the development of certain values” (Ewell, 2005; Nusche, 2008, p.10); “they may be developed both through classroom instruction and out-of-class activities to supplement the curriculum” (Nusche, 2008, p. 10). Among the most frequently assessed variables are outcomes related to psychological development, attitudes and values (ibid)

Hence, the study of non-cognitive outcomes of higher education is more complicated than that of cognitive outcomes. The non-cognitive outcomes are generally measured indirectly, and are based on individual perceptions that could lead to less objective indicators of students’ learning than direct measurement of knowledge and skills (ibid, p. 11). In fact, non-cognitive outcomes may involve cultural context. Their development that can really be attributed to the university’s experience is questioned if not refuted (Astin, 1984 cited in Nusche, 2008, p. 11), particularly, when we consider socio-cultural and socio-economic effects on student engagement and performance, Note that students in all such environments are also co-producers of the learning outcomes (actor).

General model of learning outcomes is proposed by Rychen (2004) in which “competence is defined as the ability to meet demands or carry out a task successfully, and consists of both cognitive and non-cognitive dimensions” (p. 7). There are two categories of competencies: general and occupational; the latter is referred to as employability (Otter, 1992 cited in Nusche, 2008, p. 11). Though “Preparing students for competence in the workplace is a major goal of higher education” (Bowen, 1977 cited in Nusche, 2008, p. 11), yet, defining detailed occupational objectives for each subject domain is not a simple task; even this is not actually required, because there is a tendency to developing more relatively large intellectual knowledge and skills that would prepare graduates “for lifelong and unpredictable future labor market, rather than just for an initial job” (Melton, 1996 & AAC and U, 2004 cited in Nusche, 2008, p. 12).

4.8.3 Performance and Competence Assessment

Reliable information on the performance of higher education institutions, including student achievement, is one of the major objectives of accreditation. Such information should be provided to the public (CHEA, 2010 – standard 12). In higher education, specific relevant outcomes (competencies) are the target of performance standards. Actually, educators specify the competencies that students should learn in set programs and courses. But what is competence? How are competency's outcomes assessed? These questions remain subject of academic debates.

Drisko (2014) has simply defined competence as the ability to perform a task fully, properly and efficiently. In Human Resources terms, competence is a set of defined behaviors which may be based on knowledge and value that enable the identification, development and evaluation of these behaviors in individual employees (Simmering, 2012). Competence is widely viewed as the inclusion of knowledge, values and skills (Drisko, 2014).

Knowledge is defined “as a set of organized statements of factor ideas”, and as “a set of cultural activities” ((Bell, 1973, p.41, cited in Bliklie, 2004, p. 28). Another definition focuses on knowledge as a specific procedure, like in the definition of scientific method (ibid).

Values: Are defined as a frame of “how and why individuals apply knowledge” (Drisko, 2014, p. 416); they deal with the development of morals, ethics, objective judgment and attitudes.

Skills: Are defined as abilities to act, acquired or developed through training or experiences (ibid). Note that there is overlapping in the meaning of competence and that of skills. For example, in the professional sectors, the essential is the ability to perform specific tasks (Mondofacto, 1998). “In social work, skills are evident in the application of knowledge, integrated with core values, to a specific situation which requires both knowledge and judgment” (Drisko, 2014, pp. 416 – 417); it is worth noting that the meaning of skills could depend on socio-cultural/economic considerations. For example, in England, it includes qualification; while in France, the meaning of skills encompasses socio-economic validation.

Reflecting changes in what the individual has learned is a basic issue when designing a competence test (McClelland, 1973, p. 8 cited in Drisko, 2014, p. 418), and “educators and

learners should know the focus of educational effort and the criteria for demonstrating competence” (Drisko, 2014, p. 418). The criteria used for assessing competence should be known and their measures should reflect a developmental progression (a range of levels), not to simply show presence or absence of competence (ibid). “Optimal measures of competence are based in real-world performance and address open, dynamic, and complex practice situation” (ibid. p.419).

What constitute a valid assessment measure? The traditional assessment measure are

- “Measures of knowledge from classroom testing that can provide partial information regarding the learner’s development.”
- “Measures of simulated performance in open and ambiguous setting, which can assess areas of knowledge, values, and skills through standardized client situation” (ibid, pp. 419 - 420). “Some industries and professions develop standardized tests to determine competence or quality” (ibid, p. 420).

As we have previously mentioned in this section, the value-added approach was promoted as a method to measure competence; it consists of comparison of starting-to-end-point measurements that present the learner’s gains from the course of study (ibid). Thus, it requires the measurement of student’s performance at point of entry as well as at the end of studies. However, establishing and documenting each learner’s progress or gain in each course, standardizing and assessing relative, individual-course learner’s progress level are hard tasks. Moreover, this progress or gain of knowledge, behaviors or attitudes is not linear transformation; thus, it can be qualified and presented by gain ratio. Hence, determining average value-added in class, programs, or at institutional levels, could not be meaningful. This assessment approach is currently required by CHEA policies and standards, also national quality assurance structures. However, it could be implemented it for small social work programs would be practiced (Drisko, 2014).

National standardized tests could be used to document learner’s performance; a range of outcomes can be the targets of the assessments, and combined classroom and field evaluation should be adopted. Having an appropriate, comprehensive and flexible list of competencies is an important aspect of the accreditation process for higher education institutions. Moreover,

this list should allow for feedback from professional organizations so as to make this assessment optimally meaningful and useful audit. It is important to ensure that graduates are fully qualified beginner professionals; it is also important to serve the profession and protect the society.

4.8.4 Assessment of the Learning Outcomes

Under this heading, learning outcomes and assessment are discussed.

The learning outcomes have been described previously in this section; it could be as Brawley et al. (2012) noted: “the skills, abilities and knowledge students take from their individual classes. Learning outcomes are the building blocks for the graduate attributes or graduate capabilities that a student takes from completing a major” (p. 21).

The assessment term, in the context of learning outcomes in higher education is “related to the actual tasks that students complete and for which academics provide feedback and a grade” (ibid); it can also be related to tasks completed by graduates outside the higher education institutions for which external bodies provide feedback.

The learning outcomes in higher education that are based on competencies are generally used to underpin the assessment of job-related skills. Their pedagogic purposes are designed to give a clear indicator of the learning aim and destiny (Scott and Martin, 2011). Providing transparency to destination is an important feature of learning outcomes. It is important for students and instructors to have a common understanding of what they are trying to achieve. But the fact is that the authority predetermines learning outcomes and the objectives, and the assessment methods seem contradictory to the fact that learning motivation and experiences are inherently relational at the individual level.

Hussey and Smith (2010, cited in Scott and Martin, 2011, p. 50) advised that “it is important that we focus on the learning that emerges from experiences rather than that which was intended. The assessment of learning outcomes that is integrated within strategic planning can contribute to greater institution efficiency, effectiveness and enhancement, in clear objectives, staff participation, and organizational commitment contexts. This environment provides

increased assurance of quality for the stakeholders (Roller and Bovee, 2007). In fact, high quality in education cannot grow unattended; it requires careful planning and implementation (Farmer, 1998).

Student learning is traditionally assessed through a variety of direct and indirect measures. The direct measures include comprehensive examinations in the field of study (majors), professional exams, certification and reporting of students' performance in internship activities. Indirect measures include employer surveys, student satisfaction surveys, job placement data, and student success in subsequent institutional settings (Roller and Bovee, 2007). These measurement types imply that learning achievement is attained.

However, in direct measure assessment type, "degree classification cannot be trusted as indicators of the quality of outcomes" (Gibbs, 2010- a, p. 38). In practice, degree standards are not obligatory comparable for all institutions; there are diversity in used assessment methods, situations and environment; the students' behavior during exams in class (ability concern) are different from required professional performance (competencies and skills) concern. Hence, meaning and interpretability of degree classification are not reliable (Brown, 2010). But, "the American engagement with learning outcomes assessment has generally endorsed the notion that assessment processes should be embedded in "activities already taking place on campus" (Proverzis, 2010, p. 10, cited in Brawley et al., 2012, p. 28), and that the work students do in their courses ... is the best representation of their learning" (American Colleges and Universities, 2009, p. 4, cited in Brawley et al., 2012. P. 28); thus, judgment in the accreditation process could be based on the existing student output (Brawley et al., 2012).

Graduate surveys (employability and graduate destinations) are considered among quality dimensions used to "provide information on the way in which students perceive the usefulness of their high education institutions education in terms of occupational outcomes" (Nusche, 2008, p. 12). However, "it should be noted that the labor market indications are not always accurate reflections of the actual competencies gained" (ibid). in fact, the employability of higher education graduates and their destinations depend not only on learning outcomes, but are affected by a variety of factors, such as socio-economic contexts related to job availability and social networks, and institutional reputation or ranking which is a debatable indicator of quality of high education institutions (Nusche, 2008; Gibbs-a, 2010).

Concerning the quality assessment and improvement of learning outcomes, Bradley et al. (2008) noted that there is a movement toward standardize paradigms, presented by setting of minimum standards (threshold learning outcomes). Major stakeholders should be involved in the development and operation processes of these standards. Brawley et al. (2012) described three-step assessment process of the learning outcomes, they are:

Step 1: Setting the standards; “defining what students are expected to take away from their academic experience in a specific discipline/program of study (p. 25).

Step 2: Evaluation; “evaluating whether students are meeting the learning goals set for them” (ibid). The results of this step are exploited to improve the student’s experience.

Step 3: Feedback and improvement; seeking to “close the feedback loop and improve an individual program’s ability to meet the standards and/or the compliance requirements” (ibid).

These processes are adopted to develop global, comprehensive exams, permitting academic managers to assess the learner’s competencies gained through the teaching and learning operations (ibid).

4.9 The Organization Involved in Quality Assurance: Status and Functions:

4.9.1 Status

As previously mentioned, external quality is done by specialized organization or agencies; they can be governmental bodies, private or independent organizations, and that can operate at national or regional level, or have international activities. There are also quality assurance organization created and managed by professional bodies (for example in engineering and health fields) leading to specialized accreditations. Their objectives are guarantee quality and pertinence of programs and qualification level of graduates in the field (example Commission des Titres d’Ingénieurs (CTI) in France).

Whatever is the status of quality assurance agencies, they should benefit of large degree of independence and autonomy to be credible and honest in their decision-making. For agencies that have a public status, their major role is a control role within the higher education system, such as recognition of the status of higher education institutions, enabling a degree of quality control, and accreditation in limited areas. Private agencies that are mostly created by university association, have quality assurance/accreditation as a major role, and operate at national, regional, and international levels. As the national and cultural contexts should be considered in quality assurance issues, the existence of national quality assurance structure could play a complementary role with the regional or international quality assurance structures.

4.9.2: Functions

The activities of the quality assurance structures include major functions, such as:

- The choice of quality assurance model to be adopted, defining the field , the range and the general orientation (formative, normative).
- Elaboration of quality assurance framework, and the setting of standards and criteria (consulting the concerned actors is required). In this activity, the agency should seek equilibrium between the admitted quality assurance principle at the international level and that of the national expectations.
- The preparation and the setting of the elements needed in the quality assurance process (methodology, guideline, standards document...)
- The development of competencies for quality assurance within the higher education institutions.
- The decision and declaration of quality assurance assessment.

Quality assurance structure should also assure administrative, coordination, and decision-making functions which play a main role in the procedure of evaluation and in the coherence of the procedure. In all of the aforementioned activities, assuring transparency is viewed as good practice on the part of the quality assurance agencies. In fact, Information exchange for quality is a fundamental challenge for quality assurance (Eaton, 2007, p.159). All needed

documents should be available and disseminated, such as documents concerning self-assessment, external evaluation, procedures, objectives and appeal mechanisms. Moreover, the credibility of the procedures and the decision of quality assurance assessment are a major responsibility of the quality assurance agencies; these decisions should be founded on deep and independent judgment. The credibility of the procedure is due to clear policy, patience and integrity of staff/ experts, transparency of procedure, and the impact of the procedure on the concerned institution. Thus, quality assurance agencies are submitted to recognition, periodic enabling through periodic control and meta-evaluation from ‘higher organizations’; for example, CHEA in USA; ENQA in Europe, AUQA in Australia. Detailed description of international initiatives (quality assurance systems and agencies is given in Chapter 5.

4.10 Quality Management in Higher Education:

Education is a complex system where many quality dimensions interact in varied contexts, making the measuring and managing quality in higher education institutions a challenging task (Gibbs-a, 2010). Nevertheless, “there is still no universal consensus on how best to manage quality within higher education institutions (Becket and Brookes, 2008); “a variety of quality management (QM) models have been implemented in different higher education institutions” (ibid, p, 40).

Most quality management models have been firstly developed for corporation sectors; they were “adapted or tested within higher education institutions on a global basis. Internationally, the tool most frequently drawn upon is total quality management (TQM)” (Becket and Brookes, 2008, p. 43). The standards ISO9001 which focuses on quality assurance were developed to assist educational organizations in implementing quality management systems that determines the customer (student, parent,...) requirements, the development of adequate processes, the delivery of the product, measurement and analysis of customer satisfaction, and actions to be taken to improve this (Dumond and Johnson, 2013). Thus, to guide higher education institutions towards performance improvement, manager/administrations should develop a vision, put goals and policy, and implement competent HR unit without creating “a

bureaucratic system that clashes with the open academic environment” (ibid, p. 133). Hence, it integrates quality perspectives of both external and internal stakeholders (The ISO standards implementation in higher education is discussed in Chapter 5).

The following two issues are evoked in some models which could be considered as major shortcomings:

- 1- “There is a continued debate on the role of the student as consumer or co-producer in the higher education system and the impact this has on the measurement and management of quality” ((Becket and Brookes, 2008, p. 45).
- 2- “There is an inherent difficulty in quantifying the outputs of higher education for self-assessment purposes. When assessing the outputs, the models are reported to have far greater applicability in measuring administrative functions within higher education institutions rather than the quality of research or teaching and learning” “as the learning of students is a fundamental product of higher education, this would appear to be a major shortcoming” (ibid).

Srikanthan and Dalrymple (2002, p. 215, cited in Becket and Brookes, 2008, p. 45) consider that TQM models “are inappropriate for what they term ‘academic functions’” they also “highlight that students is a customer when it comes to using administrative services, but a participant within the teaching and learning process; TQM models do not recognize this distinction”. They noted a lack of development between quality management techniques and educational processes. The authors developed a QM Model in education (QME) that addresses the fundamental products of higher education and reflects higher education characteristics and the student learning experience. The model that have been developed on the bases of educational rather than managerial literature, include three core elements:

- “A focus on the transformation of learners, enhancing them through adding value to their capability and empowering them;
- Synergistic collaboration at the learning interface; and,
- Senior management that encourages and ensures a collegial culture” (Becket and Brookes, 2008, p. 46).

In closing, it is argued that there are some benefits to TQM approaches within higher education for both administrative and service functions, particularly in the perspective of new managerial and economic aspects of higher education (corporation of higher education institutions, in higher education market, students as consumers...). But the quality in all its aspects remain a primordial in higher education issues, even models refer to student's role as a participant.

4.11 Recapitulation of the Chapter:

In this chapter, the key perspectives found in the literature on the debate and definition of quality in higher education is explored; in addition, the considered aspects that constitute quality and the factors that determine quality are also discussed. This has led to the discussion of the means to measure, assess and assure quality in higher education. In fact, quality concerns are considered an established and an accepted part of higher education (Brockerhoff et al., 2015, p. 8); quality practices are forefront issues in higher education institutions; they encompass purpose, function, teaching process and the outcomes. The following quality aspects and factors are analyzed:

- 1- In order to have an understanding base as to what does quality mean, experts have set forth quality conceptions (Harvey, 2007), many of which hold multiple labels and contain key terms. Quality is denoted as
 - Exceptional, exclusive, unique, distinctive ...
 - Perfect, exclusive, process-focused, perfectly meet specifications...
 - Fitness for purpose, inclusive, measured against the objectives, effective-focused (service provider or students' and employees' perspectives).
 - Value for money, value-based, efficiency-focused, accountability...
 - Transformation, qualitative value added changes, improvement...

These conceptions underline the following epistemological approaches:

- Interpretative when conceiving quality as transformative or exceptional, “in that quality judgments are situational and socially constructed” (Brockerhoff et al., 2015, pp. 4-5).
- Positivist when quality could be objectively measured against standards and benchmarks (ibid, p, 5).

Moreover, it has been argued in the literature that quality in higher education practices is mostly a relative concept; it depends on different viewpoints of the stakeholders. For example, students and staff emphasize the quality of the student’s experience; employees emphasize more the importance of employability; and, governments find quality as means of control (accountability). Quality is “relative to the standards one maintains... and meaningful if measured against a benchmark” (ibid, p. 4).

- 2- The overview of the literature on quality and quality assurance indicates that the meaning, conception, practice and management of quality and quality assurance have changed, whereby more attention is being given to the underlying value of quality in a functionalistic approach (Van Keurenade et al. 2008, Brockerhoff et al., 2015). On the other hand, higher education institutions focused more on the outcomes of the functions (Corpus, 2007).

Hence, “quality perspectives can be made operational by asking to whom, by whom, by which standards and against which values (Brockerhoff et al., 2015, p. 6). This approach encompasses the following:

- Object— the unit of analysis (students, curriculum, courses, lectures, university, educational process...)
- Subject – the agent that determines the features and benchmarks.
- Standards that should be linked to the object taken into account (e.g. student learning outcomes) and the benchmark for assessing the level of quality.
- The basic value systems that include commitment of shared learning and student transforming into world citizen, control values and procedure of

compliance, continuous improvement, creativity and flexibility of education that encourage students to become the leaders of the future (ibid).

- 3- Quality and quality assurance, observations and analysis are conducted to distinguish between elements in the educational system and that of the higher education institutions (ibid, p. 5); such as, quality of teaching, quality of supervision, curriculum content, teaching activities and self-study, quality of support facilities, quality of physical infrastructure, social climate.... However, these could significantly and differentially correlate.

Moreover, meaningful quality improvement implies operationalizing quality and including variables that affect levels and dimensions of quality (ibid). These factors could be evoked at individual (student), organizational, and system levels.

- 4- The quality of higher education's effect on the learner level should focus on the student experience, specifically on student learning and engagement, whereby two learning approaches are identified:³⁶ the deep approach and the surface approach to learning; Table 4.2 delineates their characteristics. "There is a fundamental agreement found in the literature that quality is measured through students adopting the deep approach to learning" (ibid, p. 9).

Table 4.2 Deep and Surface Approaches of Learning Characteristics

Student Level	Deep Approach of Learning	Surface Approach of Learning
Scholastic gain	* Critical thinking skills * Comprehensive understanding of ideas	* Uncritical as to new information * Unreflective as to new information *Focus primarily on rote memorization
Personal gain	* Students generate an overall enjoyment in the learning activity * Satisfaction with the learning activity	*Students see little value or meaning in the learning activity
Motivation and activities	*Student is motivated to learn in order to understand ideas for themselves – intrinsic interest in learning * Student is an active agent in the learning process	* Student is motivated to complete the task at hand; he studies without reflection on purpose or strategy. * "Fear of failure" (obtain diploma). * Student is a passive observer.

³⁶ Biggs et al. (2001) also identified a third approach to learning called achievement; the student is "motivated by achievement and use a strategy that effectively uses time and resources"

Knowledge building	<p>* Student enters into an active learning process which involves relating ideas to previous knowledge and experience, identifying core patterns and principles, and critically assessing new ideas.</p> <p>* Student constructs knowledge (teaching is not solely about transmitting information to students, but about engaging them in an active learning process which builds upon their pre-existing knowledge).</p>	<p>* Reproducing knowledge and rote learning</p> <p>*Focusing on factual content rather than bigger picture issues</p>
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It is important to denote that there are many factors that influence the learning approaches; in addition to the personal factors (intelligence, learners' engagement such as their investment in their studies, social context..) there are factors that are linked to learning activities, like, teaching method (conditions structured by the teacher), assessment and institutional climate (how an institution organizes resources and learning opportunity) (Biggs et al., 2001, p. 135).

The interaction between these factors could deeply determine the quality of learning outcomes, particularly the involvement of faculty in good teaching process, and the student-teaching interaction (Umbach and Wawrzynsk, 2005 cited in Brockerhoff et al., 2015, p. 14); "good teaching is a compilation of different elements, appropriate feedback and assessment, flexible teaching style and curriculum, and most importantly values the learner as an active agent in the learning process" (Brockerhoff et al., 2015, p.17).

- 5- Quality of higher education at organizational level should focus on the link between the teaching and learning quality in higher education and institutional characteristics (size, selectivity, expenditure...), and on exploiting the effects of institutional policies and culture, and staff positions. It deals with the impact of the governance arrangement, the impact of micro-process of learning, teaching and curriculum, on quality level; the impact of macro-level (the system level) characteristics on the performance of the institution, and with some dimensions of the institution's performance (Brockerhoff et al., 2015). Hence, at the organizational level, the relationship with quality is complex.

The improvement of quality in teaching and learning becomes deeply connected to an organization's quality in their functionalistic and interactionist approaches culture. The multi-dimensions and aspects of the quality concept should be considered through

internal quality culture at a wide institution level and compounds, where combined quality commitment and quality management produce effective quality culture.

- 6- The learning outcome assessment in quality assurance assessment is a main element to be considered. It should be integrated within the strategic formation of the educational system as a whole and of each higher education institution; this can lead to greater institution efficiency and to the learning effectiveness and improvement, which in turn, provide increased quality assurance for the stakeholders. Hence, there is a trend to develop standards and criteria of quality assurance; improvement of learning outcomes and process are adopted; hence, comprehensive exams are developed to assess the learner's competencies gained through the teaching and learning operations.

To attain collective and participative interaction which involves all participants, including educative and social actors, is needed, hence, constituting an effective academic community that adopts and practices change in values, attitudes and behaviour within higher education institutions. Thus, certain features and characteristics are to be considered, such as placing students at the center of the teaching and learning process, partnership and cooperation, sharing experiences, welcoming internal and external evaluation which is considered as a support to quality enhancement, and developing initiatives to improve and support quality enhancement. A quality incubation system should support institutional capacity development of mechanisms and processes to self-evaluate and to meet the challenges of external assessment as induced by quality assurance approaches. This quality system should also include the specification of standards and the criteria of the evaluation of the different compounds of the higher education within the context of quality practice; this topic will be presented in details in the next chapter.

CHAPTER FIVE

Chapter 5 Quality Assurance: Initiatives, Structures, Dimensions, and Practices

5.1. Introduction:

As developed in the previous chapter, the issue of quality of learning that higher education institutions provide has drawn, in the last decades, growing interest at national and international levels. In fact, considering higher education as a service sector, with an increasing participation context of the private sector in higher education provision, has made it a worldwide issue (Reinalda and Kulesza, 2008). Moreover, an increase in the worldwide competition has resulted in significant change in the structure of the international education market, and has shown that there is a great need for highly-individual-performance level of graduates (ibid). Thus, these contexts reveal that new regulations, including quality requirements of provided education ‘services’, has become an urgent need, hence, the conduct of the promotion and implementation of many initiatives and approaches by national and international bodies and organizations.

In this chapter, various quality assurance initiatives and accreditation systems that are very active in the higher education sector are presented. This is followed by the description of structures of quality assurance organizations, agencies, procedures, and main elements. Moreover, many following sections discuss quality dimensions and variables within the learning context; specifically, i) elements that exist within higher education institution context before a student starts learning; ii) elements of the learning process which affects the learning quality; and, iii) quality assessment elements of learning outcomes.

Accordingly, these sections consider international and regional quality initiatives and practices, taking into account the national context (Lebanon case); a new template model of quality assurance practice is proposed. It covers many areas of the higher education institution structure, functions and activities, and suggests gradual levels assessment outcome declaration.

5.2. Worldwide Initiatives:

In this section, the main worldwide initiatives that focus on quality assurance in higher education are summarized; they are The United Nations Educational, Scientific and Cultural Organization (UNESCO), Organization for Economic Cooperation and Development (OECD)³⁷, World Bank³⁸, and World Trade Organization (WTO).

5.2.1: *The UNESCO Initiative*

UNESCO has been very active in the higher education sector; it has launched forums on international quality assurance (UNESCO, 2002), and published ‘Higher Education in a Globalized Society’ document in 2003, which included a commitment to “assuring the quality of global provision of higher education in an increasingly diverse higher education arena and raising the awareness of stakeholders, especially students, on emerging issues” (Reinalda and Kulesza, 2006, p. 59; UNESCO, 2003).

It has also developed, together with the OECD, guidelines on quality provision in Cross-Border Higher Education. The main policy objective of the guidelines is:

- i. “Protection of students and learners from the risk of misinformation, low quality education and qualification of limited validity”.
- ii. “Readable and transparent qualification to increase their international validity and comparability”.
- iii. “Transparent, coherent, fair and reliable recognition procedures”.
- iv. “Intensified international cooperation between national quality and accreditation agencies” (Reinalda and Kulesza, 2006, p. 63; UNESCO/OECD, 2005).

UNESCO has also published many documents (modules) on external quality assurance (UNESCO, 2007, 2008).

³⁷ Organization for Economic Cooperation and Development is an intergovernmental organization based in Paris. It includes 30 advanced industrial countries and promotes economic growth, employment and improved standards of living

³⁸ World Bank: International Bank for Reconstruction and Development

5.2.2: The OECD Initiative

The OECD organization produces recommendations and good practices and is engaged in the development of indicators and statistics for educational performances (OECD, 2014-a). With regard to higher education, its activities are focused on trade in educational services and key trends and issues in international e-learning practices (Forums held in Washington DC, May, 2002; and, in Trondheim, Norway, November 2003), and also in analyzing trends in international quality assurance, accreditation and recognition of qualification (Reinalda and Kulesza, 2006, p. 61; OECD, 2008).

In the OECD forums, the experts consider that there are challenges in front of existing national quality assurance and accreditation systems in “enhancing consumer protection in the field of higher education against the background of increased internationalization systems” (ibid, p. 62). OECD argues that the process of convergence and standardization that aims to have a common understanding of academic functions and qualification affects the higher education system, particularly in the Bologna Process; it highlights the need of an increased understanding to achieve convergence in the formal input and process characteristics of programs so as to arrive at comparable outcomes, including compatible degree structures; however, some national contexts should be preserved (see Chapter 2, under section of Convergence and Diversity). Considering the increased academic and graduate mobility described in Chapters 2 and 4, OECD considers that the comparability and recognition studies across countries could be improved by describing learning outcomes as competencies. Accordingly, higher education institutions and quality assurance agencies should “reexamine their assessment criteria and procedures for comparing programs and qualifications in order to accumulate learning outcomes and competencies and not focus only on input and process characteristics” (ibid, p. 64).

5.2.3: The World Bank Initiatives

In the World Bank's report on higher education, in 1994, the lesson of experience, key directions in this sector have been discerned, particularly by introducing policies that give priority to quality and equity objectives. Later, after the UNESCO Conference on Higher Education in the 21st Century, in 1998, the actions of the World Bank on higher education issues increased. The World Bank considers that "some existing changes had taken place in higher education, such as a trend toward mass higher education (this trend is discussed in Chapter 2, Section 3), and a growing governmental interest in establishing policy mechanisms to ensure quality and accountability in higher education" (ibid, p. 75). Moreover, it considers that the quality of knowledge generated within higher education institutions has become a critical competitiveness factor for most economic sector (World Bank 2000).

5.2.4: The Higher Education Issue in GATS/WTO Organization³⁹

The General Agreement on Trade Services (GATS) is a special agreement on trade services derived from the WTO. In 1994, education, considered as service, was incorporated into international trade agreements (WTO, 1994). However, most representative members of states introduced limitations on trade in basic schooling level (primary and secondary education levels), though "the growing importance of trade in services in higher education and adult education and anticipated market opportunities have moved some governments to put proposals for further liberation of trade in these services" (Reinalda and Kulesza, 2006, p. 69). Many governments and organizations stressed the need to establish a measure to maintain and improve the quality of the services and also "to retain their right to determine their own domestic educational policies" (ibid), particularly when considering quality in their relative and contextual aspects, as described in the previous chapter.

From a European perspective, it is preferable to describe education in terms of stakeholder's model which "should be used in defining the position of the education world with regard to the GATS" (ibid, p. 71). However, in the GATS' view, the stakeholder model includes delicate

³⁹ The GATT is the General agreement on tariffs and trade. It was transformed in 1994 into World Trade Organization (WTO)

balance between parties: students, parents, staff, government, the labor market, and society at large. There is yet another stakeholder, namely, the international community. “It would be unwise and unhealthy to ignore this new stakeholder, but it would be equally unwise to allow this new stakeholder to define the other balances” (Oasterlinck, 2002, p.8). Although the European commission position was in favor of the internationalization of trade in services, yet it proposed no commitments in education and health services.

5.3. The International Initiatives and Practices:

The quality assurance and accreditation system exist in many countries and regions (North America, Latin America, Europe, Asia, Pacific region, Indian region ...); however, the American system and the European system mainly have wide dissemination at international scale. Quality assurance agencies act within these regions, but there are many higher education institutions from other regions in the world which also seek quality assurance and accreditation certification from these. Thus, the two systems are presented and discussed.

5.3.1: Accreditation of Higher Education in North America (USA and Canada)

The dominant accreditation system in higher education in this region is the US systems. Although there are many interesting aspects of the Canadian systems, yet they are less reputable than the US systems. However, both in US and in Canada, there are diverse systems of higher education and approaches of quality assurance and accreditation (El-Khawas, 2007). Moreover, since both countries implement a federal system, states (USA) and provinces (Canada) have substantial power to take policy action on their own, including quality assurance mechanisms, recognition or approval of programs or institutions (ibid).

5.3.1.1: Quality assurance and accreditation in Canada

In Canada, there are numerous quality assurance agencies, mainly independent and non-governmental entities. Each has authority only within limited territory (province) (ibid). The central role of these agencies is the accreditation of specific degree programs offered by the higher education institutions (professional accreditation). They could also assume the role related to the validation of the education in the private sector. The professional accreditation is organized by specialized professional associations. It aims to determine whether a specific program meets certain standards. For example, the Canadian Engineering Accreditation Board has developed standards that “articulate specific expectations in such areas as governance, program objectives and content, pedagogical methods, student assessment, student support, student success and resources” (ibid, p. 269).

To coordinate with Canadian accrediting association; and, to promote good practice in accreditation, the Association of Accrediting Agencies of Canada (AAAC), a non-governmental body was created in 2006. The Association of University and College of Canada (AUCC) is also a non-governmental organization formerly known as ‘Rectors Organization’; it is active “in promoting good practice on quality assurance matters” (El-Khawas, 2007, p. 267), and “has led the process of improving information on the internal quality assessment mechanisms used by colleges and universities” (ibid).

To maintain quality and to control the development of higher education in Canada, a significant quality assurance mechanism for program review (new program review or program revision) is involved (El –Khawas, 2007). Moreover, audit mechanism is also involved in monitoring the process employed by the universities for their own internal review. For example in Quebec, each university conducts a cycle of periodic program reviews (ibid).

The methods used in the quality assurance approaches include elements mainly used in many accreditation systems that operate in other countries (Eaton, 2006); such as, institutional self-assessment followed by site visitations and expert judgments. The accreditation committee of the association/agency may decide to “accredit (for a certain length of time) an academic program if it is judged to meet the agency’s standards” (El- Khawas, 2007, p. 268). The academic programs in Canadian quality assurance systems are considered as a strong point;

“even with strong elements of external quality assurance, universities can be given serious responsibility for ensuring quality” (ibid, p. 275). Canadian universities regularly conduct internal review of programs.

The following is an example of evaluation criteria of an academic program in Quebec:

- “Clarity and validity of the program’s learning objectives
- Compliance with the institution’s mission and development plans
- Appropriateness of admission criteria
- Appropriateness of program’s structure
- Consistency between learning activities and the development of the field of study
- Appropriateness of teaching and assessment strategies
- Appropriateness of human resources, including part-time faculty members
- Appropriateness of physical and financial resources
- Relevance of the programs within the university, within Quebec University system and in terms of society’s expectations and needs” (ibid, p. 269)

5.3.1.2: Quality assurance and accreditation in USA

Accreditation is the core of US quality assurance; the accreditation reviews are conducted by independent and non-governmental agencies (The federal government and state government play no direct role in accreditation). “The current arrangements for US quality assurance reflect a legacy of decades of development in accreditation practice. Regional accrediting agencies, and some professional accrediting agencies, have roots that go back to the early twentieth century” (ibid, p. 276).

There are two types of agencies that conduct accreditation evaluation/ procedure in the USA; they are

- Institutional accrediting agencies which “review and accredit the educational capacity of entire universities, colleges, and community colleges” (ibid). There are regional agencies that accredit degree-granting institutions; for example, western, southern, New England agencies, ...

- Program accrediting agencies which “review and accredit academic programs, such as health care programs and professional programs (engineering, law, ..)

Moreover, there is a non-governmental organization, the Council for Higher Education Accreditation (CHEA) which represents the view of accrediting agencies in US (Eaton, 2003; CHEA, 2006); “ It is the National Advisory Committee on institutional quality and integrity reviews and ‘recognizes’ accrediting agencies” (El-Khawas, 2007, p. 271). The submission of an institution to accreditation is voluntary in USA; however, almost all higher education institutions undergo accreditation review. In fact, higher education institutions must provide the ‘public’ a verification and evidence of their performance.

The accrediting practice of US includes steps and requirements that are to be abided by, such as self-study, peer review self-assessment report, validation and reports, quality agency decision and assessment outcome publication. Accrediting agencies rely heavily on formal standards and guidelines to assess quality (CAS, 2013; IACBE, 2002; SACS, 2008; AACSB, 2017)⁴⁰; to ensure that the standards are met, quality agencies conduct reviews and use collected information to make decisions as to whether to accredit an institution/ program or not. Note that the decision is either accredited or not; the report/result does not include a grade or mark/ratio indications of the assessment of the quality. The appropriate standards developed focus on major areas such as curriculum design, administrative good practice, sufficient available resources, and statistics that show that satisfying performance has been achieved (El-Khawas, 2007, pp. 272 – 273). In general statistics on students’ progress in their studies and graduation rates are required (ibid).

The accreditation agency often revises and updates the standards with open collective developed judgment; the emerging trend in program accreditation involves greater interest in competency-based approach where standards are structured around the expected abilities of graduates (ibid, p.274). Consequently, change in academic programs is required to align them

⁴⁰ CAS: Council for the Advancement of Standards in Higher Education (Washington – USA (see www.cas.edu)
IACBE: Accreditation Manual International Assembly for Collegiate Business Education – Olathe, Kansas, USA.

SACS: The principle of Accreditation: Foundations for Quality enhancement- Southern Association of Colleges and Schools – Commission on Colleges (www.SACSCOC.org) edition 2008 – De Catur – Georgia.
AACSB: Association to Advance Collegiate Schools of Business (formerly The Association to Advance Collegiate Schools of Business)

with specific competencies that could “involve change in philosophical, policy, procedural and technical aspects of quality assurance” (Knight, 2004, p. 61). In order to transform accreditation in US to create a more effective system of quality assurance, substantial re-envision of the institutional accreditation for higher education is suggested by Ewell (2015) who “focused explicitly on the assessment of student learning as the essential manifestation of quality for all types of institutions” (ibid, p. 1).

As suggested by the Spelling Commission (USDOE⁴¹, 2006), the use of comparative outcomes, measured by institutions accreditors, should help them determine academic quality (Ewell, 2015). “The primary purpose of a comparative exercise of this kind is to demonstrate that effective quality assurance approaches for higher education can be organized and operate in very different ways” (ibid, p. 96). Ewell notes that there is a new environment around and within higher education characteristics constituting “changes in the ‘ecology’ of higher education affecting accreditation” (ibid). These changes include students’ participations in new kinds and wide diversity of learning experience, access new kinds of learning resources, deal with a broad range of providers” (ibid). Moreover, providers harness new technologies as new aspects of performance occur in global market place of higher education. Also, a transformed and contingent faculty body has appeared, for the face of faculty has shifted markedly to part-time faculty (ibid, p. 8). In fact, for long time, accreditors considered that the teaching staff should be centered on full-time faculty on a tenure track. Thus, current accreditation approaches should be evolved (ibid), particularly , the role of the academic staff members in monitoring and assuring the quality of teaching and learning, and the move of evidence on student learning outcomes to the center of quality assurance. Ewell also considers that several dimensions of globalization affects US accreditation system: “The US higher education system is not operating in isolation from those of the rest of the world... the Bologna process in Europe is the most visible manifestation of the emergence of aligned global standards” (ibid, p.9).

Institutional accreditation in US system has been criticized; the most common complaints about accreditation can be summarized as follows:

⁴¹ USDOF: Department of Education in United States

- Lack of rigor; obtaining accreditation is just too easy (Carery, 2013; Gillen et al., 2010; Dickeson, 2006).
- Conflict of interest; accreditation is owned and operated by the entities that are supposed to judge (Gillen et al., 2010; Dickerson, 2006; Vedder, 2004).
- Does not inform the public; accreditation rarely communicates more than just the accredited status of a given institution (Jones, 2002; Dickeson, 2006).
- Costs and burdens unnecessary imposed on institutions that believe that their quality is self-evident, such as elite and well-established institutions (Ewell, 2015).
- Encourages 'compliance' behaviour; some institutions have tendency "to do just the minimum reporting required to maintain accredited status rather than signing the accreditation process as an opportunity to genuinely improve what they do" (ibid, p. 11), and embrace a culture of continuous improvement (Kuh et al., 2015; Massy et al., 2007).

In fact, the US accreditation of higher education institutions faces challenges that Ewell specify as the following (2015, pp. 11 – 12):

- "What aspects of quality are reviewed?
- How accreditation is organized and who oversees and manages it?
- Establishment of multiple levels of institutional recognition as the outcomes of an accreditation review". Currently, the pronounced outcome is: an institution is accredited or it is not.
- Enhancing and standardizing a limited set of quantitative indicator of institutional condition and performance.
- The role that students should play in the accreditation review process to reflect their centrality in the teaching and learning process.
- Make the results of the accreditation review visible to the higher education stakeholders."

Actually, the accreditation practices in the US system cover many aspects which are organized under groups related to functioning higher education institutions, such as "mission, governance, administrative leadership, curriculum, faculty and teaching staff, student affairs, finance, equipment, and physical plant" (ibid, p. 14). But, considering the limited resources

and time that accreditors put in, a comprehensive review of all these issues cannot be performed. Thus, it could be more rational to choose a specific issue to examine explicitly in order to show all the ‘strengths’ and ‘weaknesses’ of the aspects within. For example, considering that teaching and learning at the undergraduate level is a core function of most higher education institutions; it would be significant to focus “on critical aspects of teaching and learning such as the meaning, quality, and integrity of the degree” (ibid, p. 15), and on the effectiveness of the institution’s teaching and learning approaches.

To end, the primary purpose of the accreditation process in US system is to establish minimum standards and to help institutions to improve through systematic self-examination and external review. Some accreditation criteria evolved towards extensive focus on the examination of educational quality and students’ academic achievement (ibid, p. 2).

To illustrate the different topics of accreditation practiced by the US accreditation agencies, the examined topics by the three US accreditation agencies are presented herein:

- The commission of the Southern Association of Colleges and Schools: a regional accreditation agency (SACS, 2008). In this accreditation system comprehensive standards are developed in the following areas: Institutional Mission, Governance and Administration, Institutional Effectiveness, Educational Programs, Faculty, Library and other learning resources, Student Affairs and Services, Financial Resources and Physical Resources.
- The International Assembly for Collegiate Business Education: Business programs’ accreditation agency (IACBE, 2002). This accreditation approach is “based on the results of the assessment of educational outcomes, rather than on perspective input standards” (ibid, p.2). Accreditation expectations related to best practices in business education are developed; they respond to the business unit characteristics of the following aspects:
 - Outcome Assessment Expectations: these include process implementation, plan, identification of change and improvements, documentation and integration into the institution’s planning process.

- Program Expectations: these include topical areas, breadth of curriculum, review and improvement, interdisciplinary programs, graduate programs, and admission policy.
 - Faculty Expectations: these include faculty qualifications, deployment, load, evaluation, development, policies and faculty involvement in scholarly and professional activities.
 - Resources Expectations: these concern financial aspects, facilities, learning and educational technology and support and off-campus locations.
 - Business and Industry Linkage Expectations.
 - Educational Innovation Expectations.
 - Articulation and Transfer Relationships and International Cooperation Expectations.
- The Association to Advance Collegiate Schools of Business (AACSB) accreditation “focuses on appropriate high quality inputs (humans, financial, physical, etc.), and the outcomes of these inputs within the context of the business schools’ mission and supporting strategies” (p.3). The developed accreditation standards focus on the quality of education and supporting functions; the institution’s mission is considered as the main reference to the accreditation process. The peer review teams “exercise judgment regarding the reasonableness of deviation from the standards” (p.3). However, these standards are considered “as guidelines that may be interpreted and applied in different ways in different countries, or regions of the world.” “AACSB recognizes that high-quality management education is achieved around the world in different ways” (p.3); thus, its approaches to accreditation should be adapted to different cultural situations.

AACSB criteria and standards are presented in two sections: The first concerns the eligibility criteria for AACSB international accreditation that includes core values and guideline principles and general criteria; the second section presents 15 standards for business schools’ accreditation, covering the following four domains:

- Strategic Management and Innovation
- Students, Faculty, and Professional Staff
- Learning and Teaching

- Academic and professional engagement

Definitions, basic for judgment and guidance for documentation are given for each criteria and standard.

These standards and expectations are mainly common among the most accreditation agencies.

5.3.2: The European Initiatives – the Quality Assurance in Higher Education in the EU

The notion of the European Higher education area and the Bologna reform reflect high impact of higher education globalization and internationalization. This notion “follows the idea of the European Economic Area which extended the European Community’s single market to the member states of the European Free Trade Association (EFTA)” (Reinalda and Kulesza, 2006, p. 8). Open European area for higher education is declared by the action lines defined in Bologna Declaration (June, 1999) which includes:

- “Adoption of a system of easily readable and comparable degrees;
- Adoption of a system essentially based on two cycles (undergraduate and graduate);
- Establishment of a system of credits (European Credit Transfer System – ECTS);
- Promotion of mobility by overcoming obstacles;
- Promotion of European cooperation in quality assurance; and,
- Promotion of the European dimension in higher education” (ibid, pp. 118 – 121).

The Bologna reform, which is a European response to global development challenges in higher education, was completed by many follow ups pertaining to structure and activities (ibid; Crosier and Parveva, 2013; EC, 2015), in 2000; these follow-ups are the recommendations adopted by the Council of Ministers of Education on European Cooperation in Quality Assurance in Higher Education: European network for quality assurance in higher education (ENQA, 1998)⁴². Quality and quality assurance in higher education were included

⁴² ENQA: On November, 2004, ENQA was changed from a network into an association (European Association for Quality Assurance in Higher Education)

as main issues in reports or declarations of the ministers of education of the signatory countries of the Bologna process.

In 2003, a European Consortium for Accreditation in higher education (ECA) was established, having the achievement of mutual recognition of accreditation decisions among the participants as the main objective. In 2004, further European cooperation in quality assurance in higher education was reflected in founding of register of independent trustworthy quality agencies operating in Europe (European Council 2004). The European Quality Assurance Register (EQAR) was launched in March, 2008 (Crosier and Parveva, 2013). In 2005, a joint code of good practice with 17 standards was agreed upon by the members of the European Consortium for Accreditation in Higher education (ECA 2005). After this, annual European forums on quality assurance in higher education were organized during which many experts' contributions were presented and discussed. Moreover, many editions of ENQA reports on standards and guidelines for quality assurance in the European higher education area were published: 2005, 2009, & 2015.

The Bologna reform aimed to improve quality in multiple ways:

- “Through the opportunities they offer to reflect and review curricula and to reform teaching methods, students’ centered learning, continuous assessment, flexible learning path.
- Through strengthening horizontal communication and institutional transparency” (Reichert, 2007, p. 5).

This reform was conceived as a process of quality enhancement by considering that “the readability of curricula structure and the underlying quality assurance system would increase cooperation and competition, mobility and institutional good practice, with quality enhancement occurring as a natural consequence of wider and deeper comparison” (ibid,p. 6).

The Bologna process can be seen as a concerted and cooperated pan-European response to societal shift and economic challenges (post-industrial knowledge society research and innovation development, competitiveness and modernization, efficiency and quality improvement in higher education mission...). It can also be seen as “a means of engaging students, higher education institutions, stakeholders and public authorities in debate over a

common project” (Crosier and Parveva, 2013). It also “reflects a certain shift to student and stakeholder interest away from the pure supply perspective” (Reichert, 2007, p. 7). Students become active participants in the quality assurance process, and have the right to support and information; and, graduates have the right to success (preparing students for employment) (Reinalda, 2011).

Moreover, in the Bologna reform, the strongly required links in the knowledge chain, research, higher education, and innovation are considered as a critical success factor (Sursok and Smidt, 2010; EC, 2010⁴³; Reinalda, 2011), where the research product is to be directed towards the benefits of society (Keeling, 2006). Note that as a result of the focusing in the Bologna process on students and the learning outcomes, the university staff was not regarded as stakeholders and were absent from various Bologna bodies. However, teachers’ roles remain essential. They remain in charge of educating and training the new generation of students, doing research; a fact that is supported by the Bologna process as strategic synergy in higher education institutions. Thus, learning and research have become a necessarily collaborative activity (Keeling, 2006), and “the continuous character of the interrelated transformation process with regard to teaching and research should not be misunderstood” (Reinalda, 2011, p. 13).

The impact of the Bologna reform on the quality assurance practice in the European higher education area is illustrated by the development of a set of standards. Many editions of standards and guidelines for internal quality assurance in the European higher education area (ESG)⁴⁴ are published. The latest ESG was approved by the Ministerial Conference in Yerevan on May, 2015. It covers the following ten areas (ESG 2015):

1. Policy for quality assurance
2. Design and approval of programs
3. Student-centered learning, teaching, and assessment
4. Student admission, progression, recognition and certification
5. Teaching staff
6. Learning resources and student support
7. Information management

⁴³ EC: Assessing Europe’s University – Based Research Expert Group on Assessment of University.

⁴⁴ ESG: European Standards and Guidelines for Quality Assurance in the Europeans higher Education Area.

8. Public information
9. On-going monitoring and periodic review of programs
10. Cyclical external quality assurance

For each of these areas, a standard is developed and detailed elements that should be examined and assessed are described (guidelines).

5.3.3: ISO 9000 Series in Higher Education

In 1987, the International Organization for Standardization (ISO) published the ISO 9001, ISO 9002, and ISO 9003 standards which define the requirements of a Quality Management System (QMS). In 2000, these standards were revised and combined into one standard: the ISO 9001:2000. This standard gives “a set of generic requirements for implementing a quality management system independently on the organization’s activities” (El Abbadi et al., 2013, p. 14). It stipulates “a number of minimum requirements on which an organization’s quality system can be assessed and subsequently verified as compliant to a quality system model” (Karapetrovic, 2001, p.6B8-2), major requirements of which concern management responsibility, resource , management, product realization, and measurement analysis and improvement (ibid).

The ISO 9001 and related ISO management standards are based on seven quality management principles: i) customer focus, ii) leadership, iii) engagement of people, iv) process approach, v) improvement, vi) evidence-based decision making, and vii) relationship management (ISO, 2015).

“The ISO system is a formalized system that requires documented functioning” (Ulewicz, 2013, p. 261). The documentation should include quality records, instructions, procedures, and overall quality documents that describe systems introduced in the organization submitted to potential ISO certification” (ibid).

Educational institution, in many countries, consider ISO 9001 standards as opportunity to implement a quality management system on their academic and administrative structures (Karapetrovic, 2001; Ulewicz, 2013; Thonhauser and Passmore, 2006; El Abbadi et al., 2013;

Cheng et al., 2004). The most apparent benefits that higher education institution could gain by the implementation of this standard are summarized as follows (Karapetrovic, 2001)

- i) Guides teaching and learning in a convenient and generally acceptable way.
- ii) Improves understanding among faculty and staff through documentation requirement.
- iii) Improves the flow of operations at the higher education institutions.
- iv) Identifies, corrects and prevents quality problems, hence improving results in a systematic manner.
- v) Provides clear articulation of responsibilities of academic and administrative staff.
- vi) Provides an external and independent point of view which is recommended for higher authority to reach adequate improvement decisions.

However, ISO standards, being a formalized quality system, could be perceived by the academic staff as a limitation of academic freedom. Applying the ISO 9001 in higher education has been a subject of debate and has been criticized (Thonhauser and Passmore, 2006; Karapetrovic, 2001); some of the reasons behind this are listed herein:

- 1- Originally, this standard has been developed to be applied across large manufacturing organizations; however, “the education sector has its specificity that makes it different from manufacturing and other services sector activities” (El Abbadi et al., 2013, p. 14). This issue has been discussed the previous Chapter, Section 4.3.3.
- 2- Requirements and key terms used need to be interpreted to seek the corresponding terms and means in the educational field (Karapetrovic, 2001).
- 3- The standard suffers of “lack of emphasis on continuous improvements of inability to ensure a quality output” (ibid, p.6B8-1).
- 4- The role that research plays in higher education was not taken into account, though there are many higher education research intensive institutions.

To make the ISO 9001:2000 standard easier for higher education institutions to understand and to implement, the International Organization for Standardization published, in 2003, 2007, 2009,..., guidelines and a handbook for the application of ISO quality management system in education: IWA2 (El Abbadi, 2013; West et al., 2012). The guidelines provided

definition and interpretation within the educational context of key terms, such as customer (learner), product (the outputs of all activities undertaken by educational organization), education provider, supplier, stakeholders

Considering education as a service (customer focus), the ISO standard, “states that the focus of the educational organization’s top management is to identify and document the needs and expectations of a learner and that specific performance indicators often imply learner requirements” (El Abbadi et al., 2013, p. 16). But, there is a fundamental difference in custom and product definition and role, between manufacturing or service organization and higher education institution, which should be considered when establishing and applying quality standards and codes; this issue has been discussed the previous Chapter, Section 4.3.3.

Indeed, in manufacturing (or service) organization, developed product objectives should be customers’ needs and expectation and satisfaction; personnel (staff) are responsible for the realization and the quality of the product. In higher education institution, learning outcome delivery is the result of the learners’ and the academic staff’s contributions and efforts. The learner plays a dual role: as “a ‘customer’ in the sense that the individual acquires new knowledge, skills and attitude” (ibid); and, as “an ‘actor’ who contributes in the delivery of higher education services and whose behavior influences the quality of services offered by an institution” (ibid).

Moreover, the ISO documents focus on the implementation requirement rather than on higher education institution’s activities and role, in terms of ethics, value, institution/stakeholders’ interactions, and social responsibilities and interactions. That is why Gadnov (2010) and el Abbadi et al. (2013) conclude that “both the ISO 2001 and IWA2 do not seem to be easily applicable or sufficiently appropriate for higher education.”

Recently, the International Organization for Standardization, has presented new standard, ISO 21001, that “provides a common management tool for organizations which provide educational products and services” (ISO, 2018, p. 1). It “focuses on specific interaction between an educational organization, the learner, customer, and other relevant interested parties” (ibid).

ISO cites the following potential benefits that this standard provides:

- “Better alignment of objectives and activities with policy;
- Enhance social responsibility by providing inclusive and equitable quality education for all;
- More personalized learning and effective response to all learners and particularly to learners with special education needs and distance learners;
- Consistent processes and evaluation tools to demonstrate and increase effectiveness and efficiency;
- Increased credibility of the educational organization;
- A means that enables organization to demonstrate commitment to effective quality management practices;
- A culture for organizational improvement;
- Harmonization of regional, national, open and proprietary standards within an international framework;
- Widens participation of interested parties; and,
- Stimulation of excellence and innovation” (ISO, 2018, p.2).

The ISO 21001 standard is based on eleven principles which, in addition to the concerned seven principles that ISO 9001 standard cited (above), four principles related to social responsibility, accessibility and equity, ethical conduct, and data security and protection are taken into consideration (ibid, pp. 2-3).

5.4. Quality Assurance: Agencies, Procedures and Main Elements:

5.4.1: Quality Assurance Agencies

The quality assurance agency term is used to indicate a structure that undertakes quality assurance responsibility. As stated in the previous sections of this chapter, this structure could

have much status, depending on the national context of the countries. Quality agencies use the quality assurance term to indicate the practices aiming at particular purposes and engaging responsibility of the quality agency. In practice, the quality agency should combine many approaches adapted to national contexts and aiming at purposes; thus, it defines the quality criteria, the preliminary conditions of quality assurance, and the processes to be practiced.

Quality approaches vary depending on the national context and referential chosen; however, the basic elements adopted are quasi-identical. Hence, the quality assurance systems have the following common characteristics (UNESCO, 2007):

- Predefined and transparent assessment criteria;
- Self-assessment and extra assessment are associated;
- Report of the assessment outcome; and,
- Determined period of the assessment validity.

Some quality assurance agencies apply the same criteria to assess higher education institutions (assessment according standard basing approach); some others undertake assessment according their own institution's purposes (fitness for purpose approach), or adopt an intermediate assessment approach such as fitness of purpose approach.

Self-assessment presents interests and advantages for institution. It is a means to conduct debate within the institution with the participation of the teaching and administrative staff to determine and identify reasons of the weak and strong points, and proposes improvement solutions. This debate could be undertaken according to open question list or indicators. This approach contributes to the establishment of a quality interest culture. In fact, an institution that knows well their weakness, strengths and capacities could better accomplish its educative mission.

Quality assurance agency should be precise in detailing its role in the self-assessment procedure. It should help the institution to conduct critical self-assessment (which is not always possible), and to develop self-assessment guide, including general directives, tables, open questions, ... The self-assessment process should be based on collected data in response to predefined standards and criteria, which constitute the assessment referential. In order to

improve institutional practices, self-assessment should also be based on wide collective reflection and contribution. The human resources evolved in the elaboration of the self-assessment report should be capable of undertaking detailed self-criticism procedure. Thus, assessment and critical thinking culture should be present and well established within institutions.

5.4.2: Procedures and Elements

5.4.2.1: Definition of quality assurance criteria

Defining quality assurance criteria is a fundamental step in quality assurance procedure. Different manners are practiced to handle and prepare these criteria by a quality assurance agency:

- Establishment of standards and quantitative indicators (benchmarks) that institutions should respond to. In general, this method is used when conformity to public authority requirement is sought; these indicators would denote regulation conformity more than being educative (learning process and outcome), social, or economic strategic aspects.
- Quantitative standards and criteria combination approach which often results in exchanges and negotiations between strategic actors of the system (academic staff, professionals, orders, employees associations...). This approach could assure standards 'respect' of discipline, profession or institutional model. However, it leads to a uniform approach within institutions or departments; some actors could introduce considerations that are in relation with their own preoccupations, without references connected to quality aspects (UNESCO, 2007).
- Use of fitness for purpose approach (adequate to purposes) that consists of developing standards in relation to the purposes of the institution (or department). However, this approach must be completed by an analysis of the adequacy of purposes because all purposes are not valid for all higher education institutions. This approach is interesting when a minimum level of quality is assured by other mechanisms of the system (ibid). Nevertheless, it could be insufficient to assure the quality in wide diversity

institutional context. In practice, quality assurance agencies combine approaches that are better adapted to the context of the concerned institutions.

5.4.2.2: External peer review

External peer review, which should have common professional codes with the assessed institution, offers external point of view that enrich the institution's experiences. This procedure aims to evaluate the institution's efficiency and/or functioning. External peers should visit the institution, collect information, interview internal actors, examine self-assessment report, confirm the included analysis and validate its conclusions (for example an improvement plan presented by the institution), then write a report and give recommendations that is to be submitted to quality assurance agency.

5.4.2.3: Assessment outcomes

The assessment outcome depends on the assessment context and purposes, whereby many announcement aspects could be considered, and different publication options could be envisaged as delineated in Table 5.1.

Table 5.1 Assessment Outcomes

Assessment Outcomes	
Announcement Aspects	Publication Aspects
<ul style="list-style-type: none"> * Report produced by quality agency indicates the conformity level with the established standards or criteria. * Yes or No decision (accreditation) * Assessment base on multiple point scale Accreditation with multi-level classification * Audit report 	<ul style="list-style-type: none"> * Publication of the decision (report reserved to institution) * Limited publication (summary of the report is published) * All the report's content is published

After the publication of the report, the institution should declare professional intent to consider the report's assessment results and accordingly perform corrective or improvement actions; this follow-up should be a strategic issue and responsibility of the institution. The three

process stages that are to be followed by the quality assurance agencies are shown in Table 5.2.

Table 5.2 Process stages followed by quality assurance agencies

Stage	Structure	Activities
	Institution	* Provides information/data * Self-assessment
1	Quality Assurance Agency	* Information and data analysis * Predefined criteria
2	Quality Assurance Agency (external experts ‘peer review’)	* Visit to the institution * Self-assessment report validation * Writing of the report and recommendations * Submission of the report to quality assurance agency
3	Quality Assurance Agency	Assessment outcome – decision based on - external expert recommendations - self-assessment - relevant /pertinent information that quality assurance agency has at one’s disposal - Publication of assessment outcome

Note that the quality assurance system could be a compulsory system or a voluntary one. It could imply control that would ensure that minimum standards exist within the institution (generally in compulsory system type); or, be pushed by an improvement strategy (generally in a voluntary system type). This strategy could be motivated, in a competitive higher education environment, by advantages that accreditation attracts students and funds (in US, accreditation is required to allocate public funds to higher education institutions).

5.5. Analysis of Quality Dimensions and Standards in Higher Education:

The quality issue in higher education has given rise to the fundamental questions: What constitutes quality in higher education? What are quality dimensions and how are they represented by standards? To analyze these issues, the following point is to be considered: “Higher education should be a transformative process that supports the development of

graduates who can make a meaningful contribution to wider society, local communities and to economy” (Gibbs, 2010-a, p. 2). This implies that the relevant dimension is the improvement of the quality of student learning that should be on a par with quality learning outcomes. In other words, “what best predicts educational gain as measures of educational process” and “what higher education institutions do with their resources to make the most of the students they have” (ibid); to maximize educational gain, the most effective educational practices to be implemented and to what objectives are to be considered.

As discussed in the previous chapter, quality becomes a multidimensional issue that should be encompassed by an institutional and departmental quality culture environment where all elements and actors are engaged in educational enhancement activities; for example, teaching practice is evolved, valued and rewarded. Innovation in teaching is discussed, recognized and supported; enhancing quality and quality assurance become an institutional policy and practice. Moreover, quality being a relative concept, “what matters is whether one educational context has more or less quality than another, not whether it meets an absolute threshold standards so that it can be seen to be of adequate quality, nor whether it reaches a high threshold and can be viewed as outstanding and exceptional quality, nor whether a context is perfect, with no defects” (ibid, p. 11). Thus, it is important to distinguish context, or presage dimensions, from effective practiced educational quality. The relativity aspect of the quality concept may be also seen in the relativity of the higher education purposes as viewed by ‘customers’ or reflected by institutional missions.

The quality conception as transformation (Harvey and Green, 1993) should involve enhancement of educational gains of students, which is a relevant student judgment of the quality of teaching. Here, the judgment should not focus on “what students like or want, but what is known to work in term of educational effectiveness” (ibid). Standards within educational quality do not necessarily have a complete sequential impact on the quality of educational outcomes. In fact, attaining a standard level does not mean possessing expected quality outcome that higher education stakeholders expect (graduates should accumulate skills and competencies expected by stakeholders), particularly about standards concerning physical facilities and ratios to be respected (for example, teacher/student ratio). In general, quality

standards are a combination of quality criteria that cover category of elements or variables of institution's functioning.

Practicing higher education activities is a complex issue that includes managerial aspects and varied contextual, intellectual, individual and collective interaction; thus, “to understand what is going on it is necessary to have a way of conceiving the variables involved” (Gibbs, 2010-a, p. 12), and of organizing and framing the interaction and the relationship between them. There are ‘input-presage’, ‘environment-process’, and ‘output-product’ variables interacting with each other (Biggs, 1993; Astin, 1993; Prosser & Trigwell, 1999; Gibbs, 2010-a; Tran, 2015). Other elements in higher education institution's activities should be also included as impacting factors on quality learning issues; for example, institutional governance, research, international cooperation, society services, institution or programs labor market interaction. The aforementioned dimensions and variables as considered in Biggs' 3P Model (1993), and in Gibbs' analysis (2010-a), are listed in Table 5.3, and are detailed in depth afterwards.

Table 5.3 Categories of quality dimensions and variables

Presage Variables	Process Dimensions	Product Dimension
<ul style="list-style-type: none"> * Resources- institutional funding * Degree of student selectivity * Quality of students * Quality of the academic staff * The nature of the research 	<ul style="list-style-type: none"> * Class size * Class contact hours * Independent study hours * Quality of teaching * The effect of the research environment * The level of intellectual challenge * Level of the curriculum * Depth of approach to studying * The student engagement * Formative assessment and feedback * Reputation * student support services * Quality enhancement process 	<ul style="list-style-type: none"> * Student performance and degree classification * Student retention and persistence * Employability * Graduate destination

5.5.1: 'Input-presage' Variables

The 'input-presage' variables "are those that exist within a university context before a student starts learning and being taught, and include resources, the degree of student selectivity, the quality of the students, the quality of the academic staff and the nature of the research enterprise" (Gibbs, 2010-a). Although the nature of the conducted educational process is not directly determined by these variables; however, it is often affected by said variables as follows:

5.5.1.1: Institutional funding

This type of funding affects student's performance through many physical and educational elements, like

- . the size of class
- the kind of teachers the institution can afford to undertake teaching
- the provision of learning resources

These effects may be explained by the fact that "the best students go to the best resources institutions; and, the quality of the students predicts their performance" (ibid, p. 14). However, note that some US studies do not confirm relationships between educational gain measurement results and that of institutional funding (Pascarella and Terenzini, 2005), particularly, if fund spending is primarily allowed on buildings, marketing, research ... But, it could indirectly affect student's performance through effective use of faculty deployment, teaching and learning, staff academic support, and others.

5.5.1.2: Quality of the students and degree of student selectivity

Students' educational outcomes/students' performance could be correlated to or explained by how student quality was before entering the university. The US-SAT scores confirm the existence of such correlation of about 90% (Gibbs, 2010-a, p. 127). Evident correlation exists in UK, although the link is less strong (Smith and Naylor, 2005). However, more than one variable intervenes in the level of student performance or the quality of its educational outcome, such as, the degree of university's selectivity and the quality of the institution itself. Yet, the selectivity degree could not necessary be considered as an indicator to predict the

degree of student engagement that could be related to student self-motivation (Gibbs, 2010-a). In fact, highly selective institutions do not need special educational practices because their students are able to engage themselves. It might be argued that in classes that include ‘highly’ able and ‘medium’ able students extent collaborative learning can be undertaken, which is a good prediction of educational gain (Gibbs, 2010-b). There are seven principles of good practice in undergraduate education, widely used in the US and elsewhere as guide to the improvement of university teaching; good practice encourages student-faculty contact; encourages cooperation among students; encourages active learning; provides prompt feedback; emphasizes time on task; communicates high expectations; and respects diverse talents and ways of learning (Chickering and Gamson, 1987a – 1987b, 1991 cited in Gibbs, 2010-a).

5.5.1.3: Quality of the teaching staff

It is known that quality learning is undertaken by qualified teaching staff; however, teaching qualification does not systematically mean earning highest diploma. Quality teaching could be also undertaken by experienced graduate teaching assistants (adjunct faculty). “In vocational and creative art courses students may experience a significant proportion of their teaching undertaken by professionals.” “Adjunct faculty and professionals may bring special characteristics and talents to their work” (Gibbs, 2010-a, pp. 16 – 17). However, the need of full-time tenured academicians is ‘inevitable’ to accomplish many academic and educational tasks; for example, programs and courses development, meet students out of class and provide detailed comments on their assignments, academic and administrative departmental affairs, meetings, and the like. It is worth mentioning that some relationships exist between the students/full-time teachers ratio that institutions can afford.

5.5.2: Process Dimensions of Quality

Many variables are included in the process dimension of the quality that could have effects on educational effectiveness as is shown in Table 5.3. These variables are detailed herein:

5.5.2.1: Class size and student/staff ratio

The negative effect of large class-size is known in higher education to be quite substantial on the quality of student engagement in that there is a tendency to adopt surface approach, and on student performance (Glass and Smith, 1978; Bound and Turner, 2005; Lucas et al., 1996, all cited in Gibbs, 2010-a.). Class size also effects the quality of the educational process in class (what teachers do), and on the quality of physical learning environment, and on the students' attitudes to learning (Smith and Glass, 1979, cited in Gibbs, 2010-a). As class size increases, the educational process becomes compromised: "A whole range of things go wrong" (Gibbs, 2010-a, p. 19). But, it is to be noted that in higher education, the range of class size is very wide; perhaps 20 to 200, depending on majors and on the class type within the same course (largest lecture, seminar group, problem class, laboratories...). The laboratory classes are more concerned in the above analysis. Today, it might be argued that the class size variable and the class contact hours should be revised. The use of new technology helps teachers and students in the educational process and its effectiveness. It is known also that the potential to arrange educational practices that improve educational outcomes are better when student/staff ratio is low and when class contact with teacher is possible. In this context, "the volume, quality and timelines of teachers' feedback on students' assignments are good predictors of educational effectiveness" (ibid, p. 15). However, suggesting low student/staff ratio could be partially hidden if institution focuses on exploiting their potential advantages through the use of effective educational practices, and/or on taking into account student entry characteristics (for example, student selectivity).

5.5.2.2: Class contact hours and total study hours

In the educational literature, reducing or increasing class contact hours from the existing unchanged pedagogies could not make any difference in the students' learning level (ibid). This highlights the lack of relationship between class contact hours and outcomes. Moreover, as deduced by Dochy et al. (2003) the shift "from traditional didactic pedagogies, characterized by large numbers of large class lectures, towards problem-based pedagogies, characterized by a much smaller number of small interactive classes... accompanied by a substantial increase in independent learning hours" (Gibbs, 2010-a, p. 22) could imply evidence of greater pedagogical effectiveness. However, reducing much class contact hours

may result in “a lack of conceptual framework within which subsequent study can be framed, a lack of engagement with the subject” (ibid). The provision of class contact hours that involve interaction between teachers and students should be associated with greater educational gains, independent from the total number of class contact hours (Pascarella and Terenzin, 2005). What seems to matter is the nature of the class contact which includes effectiveness of the educational approach used. Thus, the class contact hours’ effect “depends on what the role the class contact is performing. What matters is the quantity and quality of engagement generated by the particular uses to which class contact is put... What seems to be more important than class contact hours is the total number of hours that students put in both in and out class” (Ibid). According to the principles of good practice in undergraduate education (Chickering and Gamson, 1991), higher average study hours on a degree program would higher average performance. Thus, students’ effort could be mainly used as an indicator of engagement (except very able students who may be able to meet assessment requirements without having to study very hard). The total student effort that includes class contact hours and independent study hours, is considered in the European credit system (ECTS – Bologna process), to define the required credit of graduation degree programs (Bachelor, Master, Doctorate). Note that there is limitation when considering student’s effort as indicator of engagement because this indicator is not easy to assess.

5.5.2.3: Quality of teaching

The quality of teaching could be affected by many academic and practice factors, such as teacher qualification, experience and training, professionalism and commitment to teaching facilities, student support services, to name a few; “High quality teaching should be delivered by academic staff who are appropriately qualified and committed to their continuing professional development” (Gibbs, 2010-a, p. 2). To this end, accrediting teaching qualification in higher education is an important procedure in quality improvement of teaching and learning. Moreover, teaching and assessment approaches could also affect the quality of learning.

The evaluation of teaching in higher education was a subject of debate and often of controversy, particularly which utilize collection of student feedback (Tran, 2015, Pratt, 1997; Barrie et al, 2008; Carrell & West, 2010; Darwin, 2010; Pounder, 2007). The quality of

teaching, as judged by students could predict aspects of student learning process and learning outcomes. In fact, students could readily tell who they think are good teachers (Gibbs 2010-a, p. 27), but what does good mean? Does it mean teachers who engage in activities that are known to improve learning? Are teachers seen to be good if they undertake independent learning and develop visions of knowledge? It is important to note that students' judgment can evolve in time when there is change in their satisfaction as learners, particularly in their conception of learning and knowledge (Säljö, 1997; Perry 1970, cited in Gibbs, 2010-a), and also depending on the 'distance' (stepping away in perspective) at which students judge: Is it just after the course, or at the end of the program, or months or even more after the course, once confronted by job(s) and the use of learning in 'real-job' situation? Many researchers have argued that it is important to insist on the development of reliable and valid student feedback (Tran, 2015; Darwin, 2010; Carrell & West, 2010; Galbraith et al., 2010; Theall, 2010; Barrie et al., 2008; Pounder, 2007).

5.5.2.4: Level of intellectual challenge

It is argued that higher education institution which poses a high level of intellectual challenges reflects high quality academic practice. The intellectual challenge is illustrated by i) the level of the curriculum; ii) the depth of approach that students take to their studies; and, iii) the level of student engagement with their studies (Gibbs 2010-a, p. 30).

5.5.2.4.1: The level of the curriculum

Curriculum documentation's content could give information about the level of student intellectual challenge. It should be examined on the level of difficulty of what students are supposed to do with the content (remembering, applying, criticizing, analyzing...), on the educational objectives specified at each level (knowledge, synthesis, analysis, and professionally oriented skills), and on the specified learning outcomes that concern generic skills or capabilities; for example, skills in computer use, communication, curriculum content, critical thinking and capability in creativity and character. Curriculum examination could be carried out using unambiguous defined standards. In fact, judging intellectual demands of programs requires examination of the products of students' learning.

5.5.2.4.2: Depth of approach to studying

The approach that students adopt predicts educational outcomes to some extent (ibid). As discussed in Chapter 4 (Section 4.13, Table 4.2) students in deep approach of learning intend to make sense out of material (what is significant). This approach is for long-term and meaningful to higher education, while in surface approach, students intend to reproduce material; it has short-lasting consequences even for memory facts (Marton et al., 1984). Identifying each approach's feature is possible; for example, when the assessment system rewards memorization like superficial multiple-choice question test, students tend to adopt a surface approach, while they tend to adopt a deep one when the assessment system rewards analysis subject in question test or exam, "and when they have a clear sense of the goals of the course and the standards that are intended to be achieved" (Gibbs 2010-a, p.32).

5.5.2.4.3: Student engagement

Student engagement is considered as changes are introduced into the educational practices in an attempt to improve students' learning (Carinin et al., 2006); these are included in the principle of good practice described by Shickering & Gasnson (1991 cited in Gibbs, 2010-a), and have been used as indicators of quality in reviewing and improving educational practices and student outcomes (Pascarella et al., 2008, 2010; NSSE⁴⁵ Questionnaire). As example of identified process variables, "the level of academic challenge, the extent and quality of student faculty interaction" (Gibbs 2010-a, p. 33), which are also affected by 'class size' and 'class contact hours' (see 5.5.2.2).

5.5.2.5: Formative assessment and feedback

The purpose of the formative assessment is improving impact on student learning and giving provision of more, better and faster feedback on students' work (Hattie and Timperley, 2007). Increasing the volume of formative assessment conducts students to take a deep approach to their studies (Gibbs and Dunbar-Goddet, 2007), which is considered as predictor of good learning outcome. Formative assessment with feedback implies repetitive occasions on which students are required to undertake an assignment purely for the purpose of learning (Gibbs and Dunbar-Goddet, 2009; Jessop & El-Hakim 2010). Higher education institutions

⁴⁵ NSSE: The National Survey of Student Engagement in the US

administrators and academicians consider this type of assessment costs time and places time pressure on teachers, although it is not substantially represented in the quality assurance systems in most countries.

5.5.2.6: Research environment

The research environment is the research activity generated by the majority of the teaching staff within the institution. These activities, even with their cumulative impact and effect, should not be considered as mathematical operation of individual academic's research measurement linked to quality of teaching undertaken by individual teachers. Some quality assurance bodies consider teacher research activity as an element that predicts teaching quality (Hattie and March, 1996). Even some excellent researchers make excellent teachers, but some others do not. Thus, evidence of relationship between research and improvement of teaching quality is not confirmed (Gibbs, 2010-a). In other words, there is no relationship between measures of an individual's academic research and the measure of their teaching process. The same could be said about the department level, "the best research department may or may not be the best teaching department" (ibid, p. 28). However, at the graduate level, or in some cases at the undergraduate level⁴⁶, research environment could be an interesting catalyst and an incentive to teach many courses or perform senior projects included in educational programs. In these cases, deep approach learning is a consequence of the collegial system that fosters active inclusion in a community of research practice (Trigwell, 2005).

5.5.2.7: Reputation

Reputation is also considered among process dimensions of quality that reflect influence on educational quality. Thus, deans and presidents in many higher education institutions heavily invest in the highly influential university ranking systems (US News and World Report, America's Best Colleges, Shanghai...) in order to establish the institution's reputation. However, these reputational ranking systems generally derive from criteria based on research grants, undergraduate selectivity, per student expenditure, number of doctoral awarding

⁴⁶ Higher education institutions with strong research orientation, like MIT-US, enable about 80% of their undergraduates to engage in a real research project (as junior research student in a research group). They have good evidence as to how students benefit if they are given this opportunity (Bergan et al., 2007)

departments..., while these variables do not necessarily predict effective educational gains. Reputation data, as based on the above elements and with much certitude (Gibbs, 2010-a, p. 35). It is rational to envisage reputation description linked to stakeholders' satisfaction, to graduates' employability and destination, and to national or international benchmarking (academic programs, research, societal service impact) according to relative available resources.

5.5.2.8: Student support services

The implementation within the higher education institutions or academic departments of student support services has various kinds, such as study skills development, counseling, as well as library, work space, access to documentation and resources; the implementation of these services could reflect a level of institutional quality and of student follow-up process of quality. However, it is difficult to estimate the extent to which these services play a role in educational effectiveness or gain (Gibbs, 2010-a), although “there is clear evidence of the role of various kinds of student support concerning the impact on student performance of the development of student's study skills” (ibid, p. 87).

5.5.2.9: Enhancement processes

The implementation of quality enhancement process in higher education institutions in order to improve the level of quality includes many elements, such as, student evaluation of teaching, student engagement, educational gains, faculty development, teaching improvement supported by teaching and learning center activities.

5.5.3: Outcome Dimension of Educational Quality

This section deals with category of elements of higher education institutions outcomes that are to be discussed as potential indicators of educational quality. They include, student performance and degree classification, student retention and persistence, employability and graduate destinations which affect the institution's reputation (Gibbs, 2010-a).

5.5.3.1: Student performance and degree classification

The proportion of students gaining ‘good degrees’ is mostly used in some educational systems as a measure to indicate the quality of the higher education outcome; however, this proportion continuously increases across institutions (Yorke, 2009) with a grade inflation phenomenon. Moreover, the way student degree classifications are generated varies, depending on the educational systems, majors, type of courses, and pattern of degree classification of the concerned institution. In fact, the comparability of degree standard does not have meaningful sense (Brown, 2010); and, since degree classification use as indicator of the quality of the educational outcome and its interpretation are criticized, “degree classification cannot be trusted as indicator of the quality of outcome” (Gibbs, 2010-a, p. 88).

5.5.3.2: Student retention and persistence

Student retention and persistence are considered as indicators of student performance and degree of educational quality in higher education institutions. However, these elements vary considerably from one institution to another and suffer from many issues; different institutions take their students from different subsets of ability range, with or without selectivity in entering higher education. The retention rate is affected by the admission requirement and procedures; moreover, academic and psychological (motivation ...) variables could affect retention in a higher education system.

As discussed in the previous section, effective practices could also improve students’ performance and the quality of educational outcomes in general (LaNasa et al., 2007); they imply retention improvement, such as, fostering collaborative and interactive learning and pedagogical communication with teachers, which have a greater impact on less able students. If all of these variables could be taken into account, retention performance could be used as indicator, among others, of educational quality. But, the following question remains legitimate: Can this dimension issue of quality be considered as trusted practice irrespective of the currently available information and data?

5.5.3.3: Employability and graduate destinations

The employability and graduate destination are actually used as mean factors to indicate the quality of the educational outcomes of an institution. They reflect the extent graduating students are able to obtain employment reasonably quickly under appropriate conditions that include:

- Employment in graduate jobs;
- Employment in fields relevant to their field of study; and,
- Employment with a salary that corresponds to the social level of higher education graduate and specialization.

To analyze and conclude about these issues, data is usually collected by the concerned higher education institution service or by the institution's alumni. The surveys involve student's self-reporting; generally, the collected data concerning employability constitute real issues because they are differently interpreted from one institute to another. However, many variables can intervene in these dimensions (Gibbs, 2010-a), where employability and graduate destinations are affected by:

- Graduate qualification, learning outcome quality
- Degree classification and student performance that are also affected by students' prior educational qualifications.
- Institutional regulations, although the league tables that classify higher education institutions may not be valid and a sure source.
- Economic context changes at regional, national or international level.
- Student's social class: the mixt of social class varies between institutions.
- Employment field: all majors or programs delivered in higher education institutions do not have identical employment opportunities. Labor market demand could be higher in some specialties than in others.

These factors could affect the employability of graduates between institutions while they could present comparable effectiveness and educational outcome quality.

As data on these variable varieties are not easy to obtain and interpret, assessing and judging an institution's graduate performance in relation to these variables should be considered with certain cautiousness and prudence. Moreover, new technology and knowledge economy transition contexts create "fluid employment market that is constantly changing in relation to the capabilities that are required" (Gibbs, 2010-a, p. 42). This labor market requires two types of expertise: "expertise for efficiency, which is what employers recruiting graduate normally demand, and adaptable expertise that enable an individual to operate effectively in unpredictable new situations" (ibid; Schwartz et al., 2005). Consequently, higher education institutions should develop educational approaches, programs, and processes that take into consideration these two forms of expertise. These types of employment market needs imply the necessity of extending time interval to long-term employability statistics.

5.6. Quality Assurance and Accreditation in Higher Education Systems in Lebanon:

For many decades, higher education systems that operated in Lebanon were considered, rightfully or falsely, as being more successful than the higher education systems operating in the middle east region; however, it should be noted that in the context of an increasingly competitive international higher education market place, many higher education systems in some countries in this region have demonstrated extensive progress and improvement in term of educational policy and quality. It should be noted also that there are differences in term of quality policy and practice between the higher education institutions operating in Lebanon.

Most higher education institutions in Lebanon did not implement quality assurance and accreditation procedures that were conducted by recognized national or external agencies, two decades ago; however, governmental bodies had practiced control on the higher education institutions, such as The Council of Ministers, The Council of Higher Education, or the committees within the General Directory of Higher Education.

In the public sector, the Lebanese University is governed and managed according to laws and decrees regulation texts. Governmental decrees control the creation of new faculties; fund

resources (budget) are allowed by the government; and, administrative and teaching staff is appointed by governmental decisions. According to the Lebanese University's regulations, academic affairs are under the authority of the University Council. However, in practice, no serious measures are taken by this council that would affect the quality of the education, such as, teaching and learning process, teaching staff evaluation and the assessment of the quality of the learning outcomes. Starting 2004, the Lebanese University has undertaken quality assurance experiences, which remain limited to self-assessment procedure (L.U. Report, 2004)⁴⁷, and recently to quality assurance procedures in some academic unites.

In the private sector, the quality assurance and accreditation have been claimed when the Lebanese Government 'licensed' many higher education institutions; this authorization was not accompanied with follow-up policy and control mechanism of the educational practice in higher education in Lebanon. There is only some control items through required physical and descriptive criteria. Then, under pressure of some higher education institutions and many stakeholders of the Lebanese higher education systems, new regulatory law was voted upon by deputy assembly in 2014 (see Chapter 3, Section 3.3). This law includes new required conditions and criteria to be met by all private higher education institutions; moreover, in this law, creation of a Lebanese quality assurance and accreditation agency is anticipated (Law 285/2014, Article 37). Then, much effort and many seminars have been undertaken by the Ministry of Education and Higher Education – General Directory of Higher Education, and supported by the European Cooperation Program, particularly the Tempus Program; this resulted in the publication of many quality assurance documents of proposals of expected structure, governance and criteria system of the future national quality assurance and accreditation agency (GDHE, 2017)⁴⁸.

In parallel, many private higher education institutions started external accreditation procedures, particularly conducted by US accreditation and European quality assurance agencies (IACBE, ABET, Evalag, ...); some of them have achieved institutional or program accreditation. Quality Standards and Guidelines (QSG) are also proposed by the University

⁴⁷ L.U. Report: Self- Assessment in Lebanese University, Synthesis Report, Lebanese University Publications 2004 (in Arabic)

⁴⁸ GDHE: Information given by the General Director of Higher Education during a personal interview, 2017.

Association of Lebanon (UAL); they were based on reviews of standards of international institutions and accrediting agencies and on standards developed in Lebanese projects funded by Tempus programs (UAL- QSG, 2016)⁴⁹. These QSGs cover eleven areas:

- 1- Mission Vision and Goals
- 2- Planning and Assessment
- 3- Governance
- 4- Management
- 5- Human Resources
- 6- Financial Resources
- 7- General Resources
- 8- Teaching and Learning
- 9- Students
- 10- Research
- 11- Public Disclosure and Integrity

We can observe that quality assurance or quality control or accreditation system always focus more on an institution's quality assurance than that on educational process and outcomes.

As for the quality issue in higher education institutions in Lebanon, we propose a template model in order to assess quality assurance in these institutions, and which could be extended to other countries that have comparable situations.

5.7. Template/ Model of Quality Assurance Assessment:

5.7.1: General Motivation

Taking into consideration the international experiences on quality assurance assessment in higher education institutions, the international debate on quality and means of measure, the

⁴⁹ UAL-QSG: Quality Guidelines and Standards, University Association of Lebanon, 2016

national efforts on quality criteria, and the discussions presented above on quality dimensions and the analysis presented in previous chapters, a template/ model has been developed which we propose to be used to assess quality assurance in higher education institutions in Lebanon and in other countries that have comparable educational, social and economic situations.

The bases and ground motivations of this proposition are delineated herein:

- 1- Learning in most higher education institutions in Lebanon is the principal function; therefore, wide interest should be given to the educational dimensions of quality and to learning outcome assessment.
- 2- Quality as culture and relative concept: “the internal quality assurance is not to be reduced to formalized process but should be linked more to a set of institutional and individual attitudes, a quality culture, aiming at continuous enhancement of quality” (Reichert, 2007, p. 7). Thus, improvement policy, practice and results are considered as quality indicators.
- 3- Diversity aspect in the education and learning process should be seen as natural characteristics in higher education institutions; it should be considered when talking about quality because innovation cannot prosper when all institutions are to follow the same standard type and level in their educational and management activities.
- 4- As “higher education should be a transformative process that supports the development of graduates who can make a meaningful contribution to wider society, local community and the economy” (Mahoney, 2010, p. 2), the quality of learning should demonstrate transformation in terms of student experience gain and skills acquisition, and in terms of character development, like critical thinking and personality development.
- 5- The quality of educational outcome needs regular and good institution that is frequently governed and managed; especially, since administrative dysfunction strongly and negatively affects the quality of the outcome. Basically, it is not only the university’s management or some specialized quality assurance unit that produces quality, but also various actors like students, teachers, researchers, administration, .. (Luger and Vettori, 2007).

- 6- Stakeholders should change their vision about higher education as being suppliers, but are to consider themselves as partners in the learning issues.
- 7- Quality environment should contend with student support and information, graduate success, and active participation of students in quality assurance processes (Reichert, 2007).
- 8- “In higher education, quality assurance can be understood as policies, procedures and practices that are designed to achieve, maintain or enhance quality as it is understood in a specific context” (Croisier and Parvera, 2013, p. 42).
- 9- In learning institutions, the teaching process and methodologies, teachers’ and students’ qualification and skills are considered as key elements, and parameters when seeking quality practices and outcomes.
- 10- Physical facilities are needed to allow higher education institutions to accomplish their teaching and research functions, but their role in learning outcome performance remains limited if other inputs or process dimensions do not align with quality standards or meet quality criteria.
- 11- Development, innovation, research and openness are considered as institutional and international dimensions of quality; in fact, higher education institutions should be active establishments that seek improvement in all their resources and educational components, including research and innovation in teaching methodologies and in sciences and technologies that should reflect commitments to society’s benefit.
- 12- Assessment outcome declaration should not be limited to yes or no accreditation institution, but should express and reflect real institutional situations; thus, it presents weakness and strength points in terms of quality in different areas through gradual scale of quality evaluation. This, on one hand, permits stakeholders to clearly see the real situations, and on the other hand, to encourage competitiveness and enhancement among and within the higher education institutions.

Quality or accreditation declaration could be considered as credibility certificates. It is a necessary act but not sufficient to assure a quality level; the agency’s declaration reflects a quality level having been met and not whether quality assurance per se is met. Moreover, higher education institution could meet the requirements of quality in a number of areas, at different levels of quality. It is not objective or fair to declare that an institute having reached

the main required quality level, to state it has met the level of quality assurance and accreditation on a par with institutions of a high quality level.

There are “some dimensions of quality are difficult to quantify” (Mahoney, 2010, p. 2); therefore, although it is difficult, their assessment should be based on experts and educators experiences. On the other hand, it is not difficult to conduct quantitative evaluation based on indicators on learning environment like the buildings, laboratory equipment, exams, and other measures that accompany the teaching and learning processes and indicators on teaching staff and teaching tools and methodologies. Note that quantitative evaluation is generally made through smart estimation, but their success and credibility strongly depend on expert competencies and experiences; they also depend on evidence concluded from the analysis of statistical surveys and investigations. However, how can the learning performance be assessed? Is it through labor market evidence and testimony? Is it through exams and tests where students’ assimilation of knowledge or the course’s content is tested? Is it through personality or personal character development like critical thinking and social professional virtue commitment (how are the procedures to assess personal character developed?) (Gibbs, 2010-a).

5.7.2: Description of the Template/ Model

5.7.2.1: Areas of quality dimensions

Six areas of quality dimensions are considered in this model; these categories were considered as the result of international experiences, the literature review, and discussion and analysis made in the previous chapters and the earlier sections of this chapter. They are listed herein:

- 1- Institution’s mission, vision, and purpose
- 2- Governance and management
- 3- Physical facilities and environment supports
- 4- Educational dimensions and learning outcomes
- 5- Development and research
- 6- Openness and reputation

Standards, criteria, and indicators are developed for each area (Tables 5.4 – 5.10). Considering that the indicator element could not have the same ‘weight’ in quality assessment, coefficients ‘ α_{ni} ’ are dependent on indicators; the total coefficient of each area ($\alpha_n = \sum \alpha_{ni}$) is not necessary the same as seen in Figure 5.1.

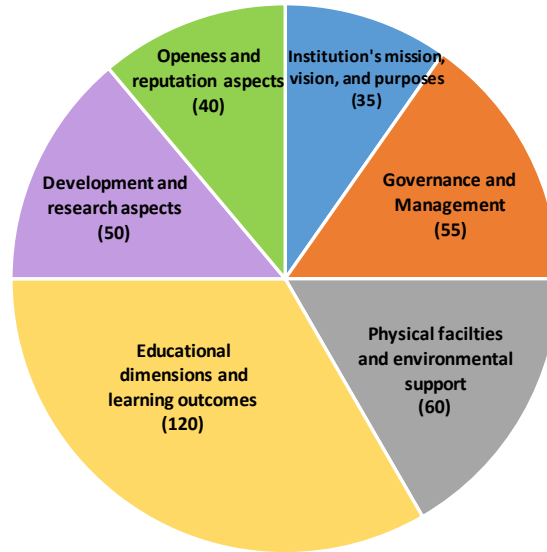


Figure 5.1 Quality assessment coefficients of each area

For example, learning within higher education institution context, educational dimensions and learning outcomes should receive more attention when considering quality assessment; thus, high coefficient α_n is affected in this area. Note that the determination of each coefficient is based on the institution and the education system contexts. The coefficient value, evaluated by the expert committee, could not be completely objectively made or determined; however, the area coefficient presented in Figure 5.1 represents the attention that each area subject received in the quality assessment outcome.

Considering that higher education institutions to be evaluated have not the same characteristics and do not play the same role in national and social context, standards and criteria should be adapted to institutional and national context. Thus, areas, standards, criteria, indicators and coefficient that are included in this template model are not exclusive. They could be added to or changed, corresponding to institution and education system context or assessment purposes of concerned institution.

5.7.2.2. Quality scale

The assessment outcome of the institution is represented in a quality scale that indicates the quality level that resulted from the cumulative assessment of areas expressed as percentage marks. In another term, it is a cumulative contribution (expressed in percentages) of assessment result of each area, which is also a cumulative contribution of each indicator within an area. The mark attributed to each indicator is, in fact, a pondered average mark of attributed sub-marks to sub-indicator elements.

It is very important to note that overall institution assessment outcome (average result) should not screen the detailed assessment results of each area. The corresponding information is very important in the correction or improvement operation. The mark scale for each indicator and within indicator is over 10. However, considering human assessment bias, the mark attributed within indicator should be between 4 and 10 with step of 1; this mark should indicate the level of requirement met. Note that this assessment template/model is applicable only in higher education institutions licensed (obtained authorization) from competent governmental authorities. Thus, a mark 4 of 10 corresponds to minimum mark to be obtained. Below this, the institution should be out of the higher education system.

Average area score N_n (percent) is determined by:

$$N_n = \frac{\sum \alpha_{ni} N_{ni}}{\sum \alpha_{ni}}$$

And, average institution score (percent) is determined by

$$\bar{N} = \frac{\sum \alpha_n N_n}{\sum \alpha_n}$$

α_{ni} represents the coefficient values affected by indicator 'I' in area n. For example, in the governance and management area: $n = 200$, $i=1,2,\dots,13$; in educational dimension and learning outcomes: $n=400$, $i=1,2,\dots,15$.

To show the assessment results and outcomes, the following representations are proposed:

- Each area is represented by a table.
- Average area score N_n and average institution \bar{N} are given in tables (see Tables 5.9 – 5.14). Then, they are represented in histograms shown in Figures 5.3 -5.9, in which α_n N_n is the surface of the rectangle that represents indexed area n, where, α_n represents its width. Polygon pattern (radar) is also used to represent each area's result and the

institution's overall results. Institution assessment's outcome is given as per the quality level label as shown in Figure 5.2.

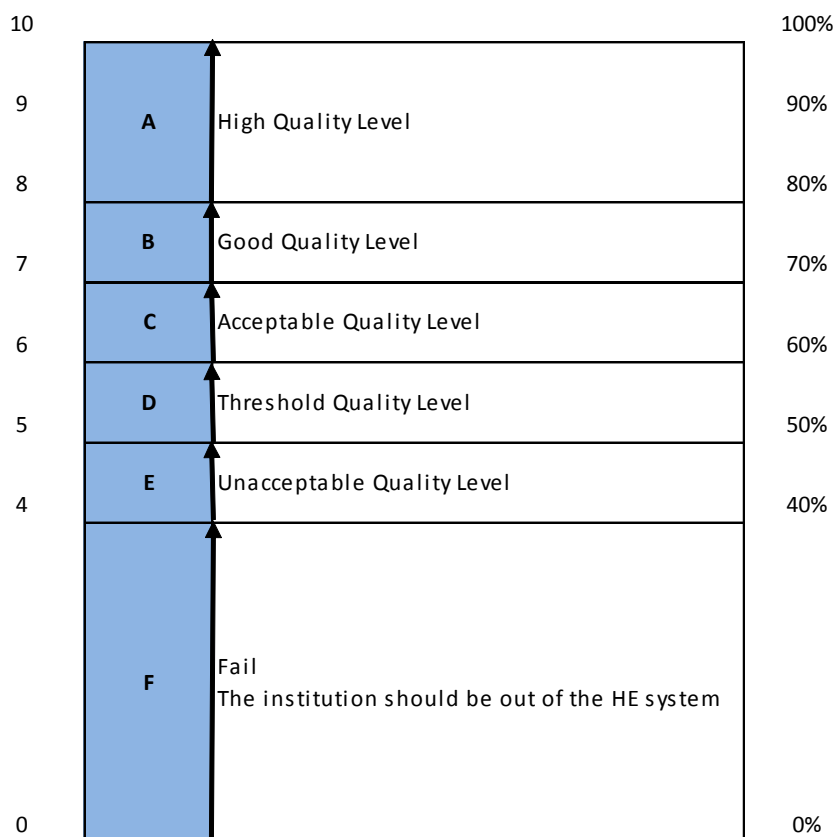


Figure 5.2 Quality scale

5.7.2.3: Additional required conditions

Whenever the institution's average score $\bar{N} \geq 5$, the assessment outcome remains E⁻ if

- the average mark of two areas or above is of E level.
- the average mark of corresponding tp educational dimension and learning outcome is E level.

5.7.3: Standards, Criteria, and Indicators in the Assessment of Area Quality

As for area categorization, in this section, the standards and criteria construction and development are based on the national and international experiences, the literature review, and discussion and analysis presented in the previous chapters and the earlier sections of this chapter.

In the research subject, the term ‘standard’ represents a general objective and requirement, while ‘criteria’ represent the elements of judgment that should exist and which branch off the ‘standard’ hence, to meet a standard, one criterion or more could be required and developed. Moreover, within the same area or between areas, standards could present some inter-dependence; that is, more than one criterion could concern one standard or more.

5.7.3.1: Institution’s mission, vision and purpose

5.7.3.1.1: Standards

S101: Mission, vision and purpose of the higher education institution should be developed and published by the board council.

S102: The mission, vision and purpose of the higher education institution should include commitment to educational, societal, cultural and moral responsibility and practices towards individual and society.

S103: Higher education institution should be committed to integrity, honesty and transparency in policy and procedure practices.

5.7.3.1.2: Criteria

C101: Institution should clearly declare their mission, vision, goals and purpose that should i) embrace a commitment to widen the participation in higher education; encourage achievement; and, fulfil students’ potentials; ii) delineate culture and knowledge dissemination and moral and human values implementation; and, iii) safeguard academic freedom, equality of opportunity, and freedom of individual expression.

C102: Higher education institution recognized as ‘a social good’ should be integrated into national society and economic environment, and play a central role in the community life. It should i) foster intellectual development, technical skills; and, ii) promote the value of equity, inclusion and citizenship.

C 103: Higher education institution should have integrity, operate with honesty, and implement transparency in policy as well as in procedures’ practices.

5.7.3.1.3: Indicators

The indicators have been deduced from the different element included under ‘criteria’, in consultation with the expert committee. The ‘sub-coefficient’ affected to each ‘indicator’ is determined in consultation with the expert committee, based on what each indicator subject received in the assessment of the concerned area.

Table 5.4 presents indications of the quality assessment in the area of an institution’s mission, vision, and purpose.

Table 5.4 Indications of the quality assessment in the area of an institution’s mission, vision, and purpose

Codes	Indicators	Coefficient α_{ni}	Evaluation Mark % N_{ni}
I₁₀₁	Higher education institution has already declared its mission, vision and purpose	$\alpha_{101} = 4$	
I₁₀₂	Higher education institution reviews its mission, vision and purpose in order to develop their continuous improvement	$\alpha_{102} = 4$	
I₁₀₃	Practicing commitments of the higher education institution’s mission, vision and purpose through the learning program and activities.	$\alpha_{103} = 7$	
I₁₀₄	Consistency of the higher education institution’s mission, vision and purpose in the development of commitment to environment preservation and public health and hygiene.	$\alpha_{104} = 5$	
I₁₀₅	Consistency of higher education institution’s mission, vision and purpose through learning programs and activities, intellectual development (development of learner’s critical thinking and rational argument)..	$\alpha_{105} = 5$	
I₁₀₆	Consistency of higher education institution’s mission, vision and purpose in commitment to the widening of the level of participation in higher education to all who have the ability and	$\alpha_{106} = 5$	

	motivation to benefit from the experience, without race, religious, social or political discrimination.		
I107	Consistency of higher education institution's mission, vision and purpose through activities and events committed to safeguard academic freedom.	$\alpha_{107} = 5$	
	Total Coefficient $\Sigma \alpha_{ni}$ Score: $\frac{\Sigma \alpha_{ni} N_{ni}}{\Sigma \alpha_{ni}}$	35	

5.7.3.2: Governance and management

5.7.3.2.1: Standards

S201: Higher education institution should be governed and managed according to regulations adopted by the board council. In these regulations, resources, decision making and accountability process should be clearly defined.

S202: Higher education institution should develop and mountain a strategic plan that is to be regularly reviewed.

S203: Policy on quality assurance and continuing improvement should be developed as institution purposes, and should be implemented in all institution's activities.

5.7.3.2.2: Criteria

C201: Higher education institution should develop and demonstrate the existence of regulations adopted by the board and in which the following items are defined: i) institution's mission and objectives; ii) administrative and academic structures; and, iii) all bodies and senior-staff function, responsibilities, appointment conditions and decision making procedures.

C202: Higher education institution should develop and demonstrate the existence of internal regulations adopted by the board and in which resources of the executive management teams are defined and organized.

C203: Higher competent governance and management structure teams should be appointed; they are set to support institution's goals, and promote quality and best practices.

C204: Higher education institution should be determent to and strive for i) high- standard achievements; ii) strong commitment to quality; and, iii) continuous improvement in institution's mission and purpose.

C205: Higher education institution should develop and implement policy and procedures on monitoring, review, and accountability.

C206: Higher education institution should develop strategic and systematic plans on resourcing, improvement and global openness that influence decisions about institutional style practice and progress.

5.7.3.2.3: Indicators

Table 5.5 shows indicators of the quality assessment in the area of governance and management of an institution.

Table 5.5 Indicators of the quality assessment in the area governance and management of an institution

Codes	Indicators	Coefficient α_{ni}	Evaluation Mark % N_{ni}
I₂₀₁	Existence of regulations adopted by the board and transmitted to the concerned members of the councils and committees	$\alpha_{201} = 3$	
I₂₀₂	The following are clearly defined in the set regulations 1) Institutional mission and objectives 2) Administrative structure 3) Academic structure 4) Functions and responsibilities of all bodies and senior staff 5) Conditions and procedures of appointments	$\alpha_{202} = 5$	
I₂₀₃	Existence of commitment to quality and continuous improvement of institution's mission and purpose.	$\alpha_{203} = 4$	
I₂₀₄	Existence of internal regulations adopted that are adopted by the board and are transmitted to the concerned staff and stakeholders.	$\alpha_{204} = 3$	
I₂₀₅	Internal regulations explicitly define: 1) Job description and required qualification of the administrative staff, deans and chairpersons. 2) Academic faculty (recruitment, evaluation, promotion) 3) Flowchart of responsibilities and decision procedures	$\alpha_{205} = 6$	

	4) Process of staff appointment, evaluation, development and grading 5) Litigation committees and decision procedures 6) Student and academic affairs (admission, ... graduation,)		
I₂₀₆	The institution's regulations are explicitly defined, including 1) accountability procedures for administrative staff 2) accountability procedures for academic staff 3) accountability process outcome	$\alpha_{206} = 6$	
I₂₀₇	Board and committee meetings' reports and decisions are documented and transmitted to concerned staff and offices.	$\alpha_{207} = 3$	
I₂₀₈	Existence of technical and administrative procedures and appointed responsible members to safeguard information and data.	$\alpha_{208} = 6$	
I₂₀₉	Existence of plans and procedures to train administrative staff and develop their competencies and skills.	$\alpha_{209} = 3$	
I₂₁₀	Existence of students' records and process that is set to seek improvement through self-knowledge of strengths and weaknesses.	$\alpha_{210} = 4$	
I₂₁₁	Existence of procedure practiced by governing bodies and executive managers that support goals to promote quality and best practices.	$\alpha_{211} = 4$	
I₂₁₂	Existence of strategic and systematic plans in order to develop resources, introduce improvement and global openness (presentation of implemented schedules); and, to show how these plans have influenced or would influence decisions about institutional style of practice and progress.	$\alpha_{212} = 4$	
I₂₁₃	Existence of participation opportunities that permit the higher education stakeholders' representatives to be members of higher education institution's governance bodies.	$\alpha_{213} = 4$	
	Total Coefficient $\Sigma \alpha_{ni}$ Score: $\frac{\Sigma \alpha_{ni} N_{ni}}{\Sigma \alpha_{ni}}$	55	

5.7.3.3: Physical facilities and environmental supports

5.7.3.3.1: Standards

S301: Required adequate physical infrastructure and facilities, including buildings and equipment that should exist in order to permit institutions to meet their educational mission and purpose.

S302: Necessary and adequate academic, administrative, technical and technological resources which should be provided to assure regular learning and management processes.

S303: Necessary and adequate social and health services which should be provided at institutions' campuses; environmental measures should be ensured.

5.7.3.3.2: Criteria

C301: Higher education institution should provide the necessary and adequate physical infrastructures to meet the institutions' educational mission.

C302: Higher education institution should provide the necessary and adequate resources that permit regular and smooth operation of all campuses and branches.

C303: Higher education institution should provide the necessary and adequate academic and administrative infrastructure and equipment to assure regular learning and management processes.

C304: Higher education institution should provide the necessary and adequate technological infrastructure, human resources and equipment to assure and ensure regular learning and administrative operation (function).

C305: Higher education institution should ensure hygiene, safety and security measures, and that environment preservation measures are taken into consideration.

C306: Higher education institution should provide necessary resources to equip library with books, hardware and software that permit teachers and students to consult academic documents and do research.

C307: Higher education institution should provide the necessary logistic services at their campuses and branches.

C308: Higher education institution should provide several types of student services.

C309: Higher education institutions should provide staff members with medical insurance services.

5.7.3.3.3: Indicators

Table 5.6 shows indicators of quality assessment in the area of physical facilities and environmental supports.

Table 5.6 Indicators of quality assessment in the area of physical facilities and environmental supports

Codes	Indicators	Coefficient α_{ni}	Evaluation Mark % N_{ni}
I₃₀₁	The lecture halls and other used areas are appropriate (conformity with regulations).	$\alpha_{301} = 9$	
I₃₀₂	Laboratories and training areas are appropriate.	$\alpha_{302} = 8$	
I₃₀₃	Library measurements	$\alpha_{303} = 8$	
I₃₀₄	Regular management of occupation of teaching spaces: availability according to the teaching schedule.	$\alpha_{304} = 2$	
I₃₀₅	Administrative offices areas are appropriate.	$\alpha_{305} = 2$	
I₃₀₆	Green area, parking, and cafeteria spaces are appropriate (conformity with regulations)	$\alpha_{306} = 2$	
I₃₀₇	The campus is furnished with safety and environmental practice requirements.	$\alpha_{307} = 4$	
I₃₀₈	Setting of the needed information technology equipment in all the campus' compounds.	$\alpha_{308} = 6$	
I₃₀₉	The higher education institution allocates necessary resources for the maintenance and logistic services.	$\alpha_{309} = 8$	
I₃₁₀	Existence of student services.	$\alpha_{310} = 8$	
I₃₁₁	Existence of Job fair event – contact with employers.	$\alpha_{311} = 3$	
	Total Coefficient $\Sigma \alpha_{ni}$ Score: $\frac{\Sigma \alpha_{ni} N_{ni}}{\Sigma \alpha_{ni}}$	60	

5.7.3.4: Educational dimensions and learning outcomes

5.7.3.4.1: Standards

S401: The student admission's conditions should be regulated and published according to institution's mission, vision, and value.

S402: Required adequately qualified and competent academic staff to be recruited and supported. Their achievement should be periodically evaluated.

S403: Academic programs and teaching methodology should be developed and periodically reviewed.

S404: Higher education institution should regularly assess student learning experience and educational gain. It should include higher education stakeholders in the learning outcome's effectiveness assessment and in its improvement.

S405: Higher education institution should develop detailed regulations and take adequate measures to plan, organize and supervise teaching and learning activities, including the tasks of the academic and administrative staff.

5.7.3.4.2: Criteria

C401: Student admission regulation should include student entrance requirement with respect to the governmental requirement and dependent on department to be joined by the student.

C402: Institution's decision of student admission should be free of social, racial, political or religious discrimination factors.

C403: Higher education institution should publish admission and study guidelines that inform student of study plan, requirements and fees.

C404: Institution should recruit qualified and competent academic staff. Their academic achievement and performance should be continually assessed, recognized, developed, and supported.

C405: Institution should adopt a social plan and work-load conditions for academic staff.

C406: Academic programs should include objectives and content that are compatible with the education field and with the institution's mission and competence development.

C407: Teaching methodology and approaches should be developed and revised in concert with education actor according to the needs of the students.

C408: Deans, chairpersons and coordinators are to plan semester's activities in accordance with the institution's internal agenda.

C409: Deans and chairpersons should prepare reports that delineate the preparations of the academic schedule of each department, at the start of each semester; as well as the duties and activities to be implemented during the semester.

C410: Academic program achievement should be a subject of continual academic supervision of deans, academic chairpersons, and coordinators.

C411: The higher education institution should take precautionary measures to avoid the cessation of the teaching process in case of involuntary or accidental absence of an instructor.

C412: The higher education institution should present each faculty with an assessment chart against which activities of each course within the said faculty are assessed.

C413: The higher education institution should set a teaching-staff evaluation template that includes students' evaluation and other criteria that stipulates the standards of a good teaching practice.

C414: Student's learning experience and educational gain should be periodically assessed (including exams and tests); follow up of students who need academic support is a must.

C415: Learning outcomes' effectiveness should be the result of collective stakeholders' concentration and participation that is to guide the learning improvement within all educational components (programs, approaches, assessment, staff development...).

5.7.3.4.3: Indicators

Table 5.7 shows indicators to assess the quality in the area of educational dimension and learning outcomes.

Table 5.7 Indicators to assess the quality in the area of educational dimension and learning outcomes

Codes	Indicators	Coefficient α_{ni}	Evaluation Mark % Nni
I401	Admission requirement and procedures are well defined and published.	$\alpha_{401} = 7$	
I402	Students are advised on major and fees.	$\alpha_{402} = 5$	
I403	Existence of academic staff recruitment and promotion policy, regulations and procedures.	$\alpha_{403} = 6$	
I404	Existence of faculty evaluation procedure and criteria	$\alpha_{404} = 10$	
I405	Academic staff activity requirements are defined and adequate	$\alpha_{405} = 8$	
I406	Existence of social insurance plan for the academic staff (fringe benefits included)	$\alpha_{406} = 4$	
I407	Existence of litigation case committees for academic staff	$\alpha_{407} = 3$	
I408	Existence of survey of the overall academic staff's satisfaction.	$\alpha_{408} = 4$	
I409	Academic programs, objectives, development, organization, content and revision	$\alpha_{409} = 16$	
I410	Teaching methodology and learning approaches	$\alpha_{410} = 10$	
I411	Practical teaching process and delivery style.	$\alpha_{411} = 12$	
I412	Academic activity planning and reporting	$\alpha_{412} = 5$	
I413	Student learning experience and educational gain	$\alpha_{413} = 10$	
I414	Student assessment and exams' procedures	$\alpha_{414} = 10$	
I415	Interactive learning programs and programs that meet the labor market requirements.	$\alpha_{415} = 10$	
	Total Coefficient $\Sigma \alpha_{ni}$ Score: $\frac{\Sigma \alpha_{ni} \cdot N_{ni}}{\Sigma \alpha_{ni}}$	120	

5.7.3.5: Development and research

5.7.3.5.1: Standards

S501: The higher education institution should develop a policy plan and procedure for academic and research development that contribute to the academic staff's professional improvement, and to the empowerment of the learning process and outcome..

S502: The higher education institution should promote and sustain social and economic development, and meet the needs of the national community and fulfill its values.

5.7.3.5.2: Criteria

C501: The academic development should include educational/pedagogical research on learning effectiveness that implies review, and update of academic programs and teaching methodologies.

C502: The higher education institutions should encourage and support academic staff to participate in scientific events, and to publish in relevant scientific conferences.

C503: Higher education institutions should play a central role in the life of the community through their academic staff's involvement and initiative (research project).

5.7.3.5.3: Indicators

Table 5.8 delineates the indicators to assess the quality in the area of development and research aspect of the educational process

Table 5.8 Indicators to assess the quality in the area of development and research aspects

Codes	Indicators	Coefficient α_{ni}	Evaluation Mark % N_{ni}
I501	The higher education institutions have policy and plans for academic staff's professional development.	$\alpha_{501} = 4$	
I502	The higher education institutions provide appropriate institutional support for the academic development of the faculty, including support of steps to improve teaching and research.	$\alpha_{502} = 4$	
I503	Academic program is regularly reviewed and updated to stay abreast of the outcome of pedagogical research on objectives and learning effectiveness.	$\alpha_{503} = 5$	
I504	Existence of research activities' policy that is reviewed in light of the strategic objectives and quality practice of the institutions.	$\alpha_{504} = 4$	
I505	Academic staff participates in wide academic debates and in international scientific conferences.	$\alpha_{505} = 5$	
I506	The higher education institution encourages and supports research collaborations at national and international levels.	$\alpha_{506} = 6$	
I507	The academic staff are involved in research programs in cooperation with private corporations or public establishments; existing research projects sponsored by external enterprise.	$\alpha_{507} = 4$	
I508	Institution engagement and support of research; the institution provides the necessary research equipment and resources (financial, laboratories, and library).	$\alpha_{508} = 4$	
I509	Research activity outcomes, patents, publications and quality of the research (citation).	$\alpha_{509} = 4$	

I510	The higher education institutions promote and sustain social and economic development. It is integrated within the national economic and social environment.	$\alpha_{510} = 4$	
I511	The higher education institution plays and demonstrates human and social commitments through learning and activities.	$\alpha_{511} = 6$	
	Total Coefficient $\Sigma \alpha_{ni}$ Score: $\frac{\Sigma \alpha_{ni} N_{ni}}{\Sigma \alpha_{ni}}$	50	

5.7.3.6: Openness and reputation

5.7.3.6.1: Standards

S601: The higher education institution should promote a global perspective aspect of its mission and purposes

S602: The institution should seek stakeholders' feedback, conduct graduate employability, distribute surveys, and do external evaluation.

5.7.3.6.2: Criteria

C601: The higher education institution should take part in research and academic development in international institutions.

C602: The higher education institution should demonstrate openness as to its cooperation with national and international educational institutions.

C603: Higher education institution should be cognizant of labor market needs and requirements.

C604: Higher education institutions should conduct follow-up survey on graduates' employability and destination.

C605: Higher education institution should seek external institutional and program evaluation.

5.7.3.6.3: Indicators

Table 5.9 delineates the indicators to assess the quality in the area of openness and reputation aspects of the educational process.

Table 5.9 Indicators to assess the quality in the area of openness and reputation aspects

Codes	Indicators	Coefficient α_{ni}	Evaluation Mark % N_{ni}
I₆₀₁	The mission and the purpose of the institution include global dimensions	$\alpha_{601} = 7$	
I₆₀₂	The higher education institution takes part in academic development, and national and international co-operations.	$\alpha_{602} = 7$	
I₆₀₃	Higher education institution cooperates in research activities with national and international education institutions or other related entities.	$\alpha_{603} = 6$	
I₆₀₄	Higher education institutions takes into consideration the labor market's needs and the requested competencies and skills.	$\alpha_{604} = 6$	
I₆₀₅	The higher education institution conducts follow-up survey concerning learning outcome performance.	$\alpha_{605} = 6$	
I₆₀₆	The higher education institution seeks international external evaluation	$\alpha_{606} = 8$	
	Total Coefficient $\Sigma \alpha_{ni}$ Score: $\frac{\Sigma \alpha_{ni} N_{ni}}{\Sigma \alpha_{ni}}$	40	

5.8. Quality Assurance Practice: Quality Assessment of Lebanese Private Higher Education Institution:

The template model of quality assurance assessment described in the previous sections is adopted to evaluate quality assurance in a Lebanese private university that was designated in this case study as University X. Note that in the Lebanese higher education systems, it is not easy to obtain permission from university authorities to have access to data and documents for case study research purposes. University X is the sole university that has given us such an access.

5.8.1: The Steps

The steps that were implemented in the assessment procedure are as follows:

- 1- An assessment group was chosen to undertake quality assurance self-assessment

- 2- The group organized meetings in which the template model components were examined, after which different assessment steps were planned.
- 3- The group visited different university units (departments, administrative offices, campus facilities...), and met with academic and administrative staff.
- 4- The group wrote an assessment report whereby the assessment outcomes were noted. These were then submitted to the president of University X.

5.8.2: Results Presentation

The assessment group presented the evaluation results as in the following tables:

Table 5.10 Institution's mission, vision, and purpose

Codes	Indicators/Observations	Coef. α_{ni}	Evaluation Mark Nni						
			4	5	6	7	8	9	10
I101	Higher education institution has already declared its mission, vision and purpose.	2							
	1) Its mission, vision, and purpose are published in the University Catalogue and on the website							√	
	2) Its mission, vision, and purpose are discussed with the faculty and staff					√			
	3) Its mission, vision, and purpose are discussed with the students						√		
	Observations: 1) Catalogue and website cover what is needed 2) Discussion should be extended to cover all levels of staff and faculties. 3) All new students have to attend a course that covers these matters thoroughly.	$\alpha_{101}=4$	N₁₀₁ = 8.25						
I102	Higher education institution reviews its mission, vision and purpose in order to develop their continuous improvement	1	4	5	6	7	8	9	10
	1) Process for review exists				√				
	2) Process is implemented and documented			√					
	3) Changes are declared and shared			√					

	Observations: <i>Each year, reports cover recommendations from heads of departments to the Executive Council that might trigger changes in the university's mission, vision and purpose.</i>	$\alpha_{102} =$ 4	$N_{102} = 5.25$						
I103	Practicing commitments of the higher education institution's mission, vision and purpose through the learning program and activities; hence, the higher education institution 1) fosters social values and promotes social justice including the value of equity and citizenship.	3	4	5	6	7	8	9	10
							√		
	2) diffuses and implements many students' human right principles and moral values.	2					√		
	3) demonstrates commitment to social and cultural inclusion.	2					√		
	Observations: <i>Many cultural and social activities are planned throughout the different departments in which students practice good citizenship principles and values.</i>	$\alpha_{103} =$ 7	$N_{103} = 8$						
I104	Consistency of the higher education institution's mission, vision and purpose in the development of commitment to environment preservation and public health and hygiene. Observations: <i>The university joins public and NGOs in their efforts to raise awareness of the commitment to environment preservation and good public health.</i>	5	4	5	6	7	8	9	10
							√		
I105	Consistency of higher education institution's mission, vision and purpose through learning programs and activities, intellectual development (development of learner's critical thinking and rational argument). Observations: <i>Many courses are designed to include research projects and the presentations of these projects and the students' final analysis in front of a selected professional jury.</i>	5	4	5	6	7	8	9	10
							√		
		$\alpha_{105} =$ 5	$N_{105} = 8$						

I₁₀₆	Consistency of higher education institution's mission, vision and purpose in commitment to the widening of the level of participation in higher education to all who have the ability and motivation to benefit from the experience, without race, religious, social or political discrimination.	5	4	5	6	7	8	9	10
								√	
	Observations: <i>The commitment of the university to keep low tuition fees allows a substantial number of students to pursue higher education.</i>	$\alpha_{106} = 5$	N₁₀₆ = 9						
I₁₀₇	Consistency of higher education institution's mission, vision and purpose through activities and events committed to safeguard academic freedom.	5	4	5	6	7	8	9	10
							√		
	Observations: <i>Faculty shares their publications and academic achievements that are published freely, whether through international peer-reviewed publications or through the university's weekly newsletter.</i>	$\alpha_{107} = 5$	N₁₀₇ = 8						
	Total Coefficient $\Sigma \alpha_{ni}$ Score: $\frac{\Sigma \alpha_{ni} N_{ni}}{\Sigma \alpha_{ni}}$	35	$\bar{N}_{100} = 7.857$						

Table 5.11 Assessment of the governance and management of an institution

Codes	Indicators/Observations	Coef. α_{ni}	Evaluation Mark N_{ni}						
I₂₀₁	Existence of regulations adopted by the board and transmitted to the concerned members of the councils and committees		4	5	6	7	8	9	10
	1) Availability of regulations as documented information	1							√
	2) The board members adopted the regulations	1							√
	3) Transmission of regulations to the members of the concerned councils and committees.	1				√			

	Observations: 1) The regulations are available and documented 2) The regulations are adopted by the university's board 3) The members of concerned committee have the opportunity to access the regulations that pertains to them.	$\alpha_{201} = 3$	$N_{207} = 9$						
I₂₀₂	The following are clearly defined in the set regulations		4	5	6	7	8	9	10
	1) Institutional mission and objectives	1						√	
	2) Administrative structure	1						√	
	3) Academic structure	1						√	
	4) Functions and responsibilities of all bodies and senior staff	1						√	
	5) Conditions and procedures of appointments	1						√	
	Observations: Many sections are included under the university's regulations: 1) Mission, vision, and objectives. 2) The administrative structure that is comprised of the Board of Trustees, the President and Vice President, the Executive Council, and the administrative departments 3) The academic structure that is comprised of the University Council, Faculty Council, Council of departments 4) The functions and responsibilities of all bodies and senior staff. 5) The required qualifications and appointment procedure	$\alpha_{202} = 5$	$N_{207} = 9$						
I₂₀₃	Existence of commitment to quality and continuous improvement of institution's mission and purpose		4	5	6	7	8	9	10
	1) Availability of quality improvement plans with related key performance indicators	2			√				
	2) Availability of regular quality audits with effective follow ups.	2		√					
	Observations: 1) The university through institutional and program accreditation process has undertaken quality processes. 2) Permanent quality structure should be implanted and acted upon in or to set regular quality audit and improvement.	$\alpha_{203} = 4$	$N_{207} = 5.5$						

I204	Existence of internal regulations that are adopted by the board and are transmitted to the concerned staff and stakeholders		4	5	6	7	8	9	10
	1) Availability of internal regulations as documented information	1							√
	2) The internal regulations have been adopted by the board.	1						√	
	3) Transmission of internal regulations to the members of the concerned staff and stakeholders.	1			√				
	Observations: <i>There are documented internal regulations that are adopted by the university board and which are available to the concerned staff and stakeholders.</i>	α 204= 3	N₂₀₇ = 8.33						
205	Internal regulations explicitly define:		4	5	6	7	8	9	10
	1) Job description and required qualification of the administrative staff, deans and chairpersons.	1					√		
	2) Academic faculty (recruitment, evaluation, promotion)	1				√			
	3) Flowchart of responsibilities and decision procedures	1					√		
	4) Process of staff appointment, evaluation, development and grading	1			√				
	5) Litigation committees and decision procedures	1	√						
	6) Student and academic affairs (admission, ... graduation,)	1					√		

	Observations: <i>Many sections are included under the internal regulations of the university, and are complemented by explicit notes that are documented as part of the internal regulations, especially</i> 1) <i>Job description and required qualification of the administrative staff and academic senior staff.</i> 2) <i>The recruitment, evaluation and promotion conditions and procedures of the academic faculty.</i> 3) <i>Flowchart of responsibilities of senior staff members and decision procedures.</i> 4) <i>The process of staff appointment, evaluation and development and grading should be more explicitly defined.</i> 5) <i>Litigation committees and decision procedure are not explicitly defined.</i> 6) <i>Student and academic affairs regulations that concern admission, advertisement, assessment, and graduation are defined; however, some procedures could be simplified and re-organized.</i>	$\alpha_{205} = 6$	$N_{207} = 6.833$						
I₂₀₆	The institution's regulations are explicitly defined, including		4	5	6	7	8	9	10
	1) accountability procedures for administrative staff	2			√				
	2) accountability procedures for academic staff	2			√				
	3) accountability process outcome	2			√				
	Observations: <i>The accountability procedures and process outcome are included in the university's regulation, but they should be explicitly defined and periodically reviewed.</i>	$\alpha_{206} = 6$	$N_{207} = 6$						
I₂₀₇	Board and committee meetings' reports and decisions are documented and transmitted to concerned staff and offices.	3	4	5	6	7	8	9	10
							√		
	Observations: <i>The university has presented board and committee meeting reports; the transmission of these documents is reserved to the key senior staff.</i>	$\alpha_{207} = 3$	$N_{207} = 8$						

I208	Existence of technical and administrative procedures and appointed responsible members to safeguard information and data		4	5	6	7	8	9	10
	1) Appointed responsible members to safeguard information and data - Qualified and competent responsible	2						√	
	2) Technical and administrative procedures to safeguard information and data - Back up procedures - Restore procedures - Preventive maintenance procedure - Corrective maintenance procedure - Restricted access policy	4						√	
	Observations: <i>1) The university has appointed a qualified and competent team to manage the university's information system and to safeguard the gathered data.</i> <i>2) The university has undertaken technical and administrative measures to safeguard information and data through implementing strict procedures.</i>	α 208= 6	N208 = 9						
I209	Existence of plans and procedures to train administrative staff and develop their competencies and skills		4	5	6	7	8	9	10
	1) Availability of annual training plan including individual training plans	2		√					
	2) Availability of competency testing process	1		√					
	Observations: <i>The university should develop improvement qualifications and competency plan and procedure to be applied by all administrative staff.</i>	α 209= 3	N209 = 5						
I210	Existence of students' records and process that is set to seek improvement through self-knowledge of strengths and weaknesses.	4	4	5	6	7	8	9	10
	Observations: <i>The university, through student performance survey, has set a process in order to support and deal with students' weakness cases.</i>	α 210= 4	N210 = 7						
I211	Existence of procedure practiced by governing bodies and executive managers that support goals to promote quality and best practices		4	5	6	7	8	9	10
	- Availability of regular reports on SMART objectives and key performance indicators.	4				√			

	Observations: <i>The university has started preparation to set and implement quality and best practice procedures.</i>	$\alpha_{211} = 4$	$N_{211} = 7$						
I₂₁₂	Existence of strategic and systematic plans in order to develop resources, introduce improvement and global openness (presentation of implemented schedules); and, to show how these plans have influenced or would influence decisions about institutional style of practice and progress.		4	5	6	7	8	9	10
	1) Availability of a documented strategic plan	2			√				
	2) Regular review of the documented strategic plan	1		√					
	3) Evaluation of the strategic actions and follow up decisions	1		√					
	Observations: <i>The university is in the final phase of developing a strategic plan which is a part of the quality assurance body requirement to attain institutional accreditation.</i>	$\alpha_{212} = 4$	$N_{212} = 5.5$						
I₂₁₃	Existence of participation opportunities that permit the higher education stakeholders' representatives to be members of higher education institution's governance bodies:		4	5	6	7	8	9	10
	1) Labor market representatives	1				√			
	2) Administrative staff representatives	1				√			
	3) Academic staff representatives	1				√			
	4) Students' representatives	1	√						
	Observations: <i>1) Labor market representatives do participate as members of the university's councils and committees.</i> <i>2) The administrative senior staff representatives do participate as members of the university's councils and committees.</i> <i>3) The academic staff representatives do participate as members of the university's councils and committees.</i> <i>4) The students' participation is temporary suspended for reasons presented by the university's authority.</i>	$\alpha_{213} = 4$	$N_{213} = 6.25$						
	Total Coefficient $\Sigma \alpha_{ni}$ Score: $\frac{\Sigma \alpha_{ni} N_{ni}}{\Sigma \alpha_{ni}}$	55	$\bar{N}_{200} = 7.129$						

Table 5.12 Assessment of physical facilities and environmental supports

Codes	Indicators/Observations	Coef. α_{ni}	Evaluation Mark Nni						
			4	5	6	7	8	9	10
I ₃₀₁	The lecture halls and other used areas are appropriate.								
	1) The lecture halls area conforms with the set regulations.	2			√				
	2) Conferences and event and extra-curricular activities are located appropriate location.	2			√				
	3) Physical access and facilities for students and staff with special needs are available.	2			√				
	4) The classrooms are equipped with the necessary and adequate equipment and teaching tools.	3					√		
	Observations: 1) <i>There should be more spacious lecture halls</i> 2) <i>Improvement is required to be introduced to conferences and event and extra-curricular activities halls, and better location is to be appropriated.</i> 3) <i>Improvement is required to provide appropriate physical access and facilities for students and staff with special needs.</i> 4) <i>adequate equipment and teaching tools requirement is respected in most classrooms.</i>	$\alpha_{301} = 9$	N₃₀₁ = 6.66						
I ₃₀₂	Laboratories and training areas are appropriate.		4	5	6	7	8	9	10
	1) They are organized and of acceptable area, and are available at appropriate locations.	3					√		
	2) They are appropriately equipped to meet the educational needs.	5					√		
	Observations: 1) <i>Laboratories and training halls are well organized, and have acceptable area and are available at appropriate locations. Should extend green areas.</i> 2) <i>All laboratories are appropriately equipped to meet the educational needs.</i>	$\alpha_{302} = 8$	N₃₀₂ = 8						
I ₃₀₃	Library measurements		4	5	6	7	8	9	10
	1) Existence of a library of an adequate area and study environment.	2			√				
	2) Compliance of documents with provided programs.	2					√		
	3) Richness of books and e-library software.	2					√		
	4) Easy access to library.	2		√					

	Observations: 1) Library area, study environment should be improved. 2) The existing documents complement the provided program. 3) There is an e-library software that allows the student to access numerous scientific and international publications as related to their different fields of study. 4) The library's location makes it difficult to be accessed; hence the need for a re-location plan to be put into effect.	$\alpha_{303} = 8$	$N_{303} = 6.75$						
I₃₀₄	Regular management of occupation of teaching spaces: availability according to the teaching schedule.		4	5	6	7	8	9	10
		2				√			
	Observations: Well organized, but are some difficulties that make it difficult for students to reach their classrooms on time.	$\alpha_{304} = 2$	$N_{304} = 7$						
I₃₀₅	Administrative offices areas are appropriate.		4	5	6	7	8	9	10
		2					√		
	Observations: Administrative offices are well-organized and have acceptable areas	$\alpha_{305} = 2$	$N_{305} = 8$						
I₃₀₆	Green area, parking, and cafeteria spaces are appropriate (conformity with regulations)		4	5	6	7	8	9	10
		2				√			
	Observations: Should extend green areas	$\alpha_{306} = 2$	$N_{306} = 7$						
I₃₀₇	The campus is furnished with safety and environmental practice requirements		4	5	6	7	8	9	10
	1) The campus' infrastructures are equipped with safety and security measures, including the use of safe material and technical compounds.	2					√		
	2) Environment safeguard measures are practiced.	2				√			
	Observations: 1) The campus infrastructures are equipped with safety and security measures, including the use of safe material and technical compounds; fire-escape stairs are easily accessed. 2) The requirement concerning environment safeguard measures are respected as much as possible.	$\alpha_{307} = 4$	$N_{307} = 7.5$						

I₃₀₈	Setting of the needed information technology equipment in all the campus' compounds.		4	5	6	7	8	9	10
		6						√	
	Observations: <i>The university has implemented the needed information technology equipment in all the campus's compounds.</i>	$\alpha_{308} = 6$	$N_{303} = 9$						
I₃₀₉	The higher education institution allocates necessary resources for the maintenance and logistic services.		4	5	6	7	8	9	10
	1) Buildings and all campus space are well maintained	2					√		
	2) Existence of the necessary logistic services: - communication - emergency power sources - technical maintenance - cleaning and waste gathering - supplies, material and magazine services - cafeteria and hygiene food	6						√	
	Observations: <i>1) The buildings and campus are regularly maintained; they are in good shape.</i> <i>2) The university has ensured all the necessary logistic services.</i>	$\alpha_{309} = 8$	$N_{303} = 8.75$						
I₃₁₀	Existence of student services in		4	5	6	7	8	9	10
	1) extra-curricular activities	1					√		
	2) citizenship practice and civic engagement activities	1					√		
	3) part-time jobs and career service guidance	1					√		
	4) financial and grant possibilities	1					√		
	5) housing	1				√			
	6) first aid and medical visitation	1					√		
	7) social and psychological support	1				√			
	8) academic support	1				√			
	Observations: <i>The university has made available many student services as cited above.</i>	$\alpha_{310} = 8$	$N_{303} = 7.625$						
I₃₁₁			4	5	6	7	8	9	10
	Existence of Job fair event – contact with employers.	3						√	
	Observations: <i>The university organizes a job fair every year whereby hundreds of institutions' representatives participate; this permits a direct</i>	$\alpha_{311} = 3$	$N_{311} = 9$						

	<i>contact between students and prospective employers.</i>		
	Total Coefficient $\Sigma \alpha_{ni}$ Score: $\frac{\Sigma \alpha_{ni} N_{ni}}{\Sigma \alpha_{ni}}$	60	– $N_{300} = 7.73$

Table 5.13 Educational dimension and learning outcomes assessment

Code s	Indicators/Observations	Coef. α_{ni}	Evaluation Mark Nni						
			4	5	6	7	8	9	10
I401	Admission requirement and procedures are well defined and published.								
	1) The admission requirements are clearly defined in the catalogue.	1						√	
	2) The admission requirements are clearly stated in the students' application pamphlet.	1						√	
	3) The admission requirements are published on the university's website under "prospective students" section.	1						√	
	4) The admission requirements take into account all types of perspective students.	1					√		
	5) The institution applies a scoring admission system to meet its mission, vision and values.	1					√		
	6) The process for admission is clearly mapped for the perspective student.	1						√	
	7) The process for admission is clearly mapped for internal staff and advisors.	1						√	
	Observations: <i>The university has exerted effort to define, and clarify to and share the admission requirements and procedures with the students as well as with all concerned staff and advisors.</i>	$\alpha_{401}=7$	N₄₀₁ = 8.714						
I402	Students are advised on major and fees.		4	5	6	7	8	9	10
	1- General orientation is given to new students at the beginning of each semester.	1						√	
	2- The institution collects data in order to advise students as to what major is needed in the labor market.	1			√				
	3- Courses' flowcharts and courses' syllabus pertaining to all majors are published online.	1					√		

	4- The schedule of advisement is published online	1					√		
	5- Students are advised as to fees and scholarship programs.	1						√	
	Observations: <i>There exists a good student advisement system. More effort is to be given to the collection of data on its graduates so as to advise students of potential opportunities in each major.</i>	α 402=5	N₄₀₂ = 8						
I₄₀₃	Existence of academic staff recruitment and promotion policy, regulations and procedures.		4	5	6	7	8	9	10
	1- The existing regulations and procedure are adopted by concerned authorities	1					√		
	2- Vacancies and the applicants' qualifications are clearly outlined on the website	1			√				
	3- The recruitment process is clearly mapped for the applicants	1			√				
	4- The recruitment process is clearly mapped for internal stakeholders	1					√		
	5- Existence of set rubrics to be followed by the recruitment team when filtering and interviewing candidates	1					√		
	6- The criteria for promotion and ranking are clearly stipulated in the Instructors' Handbook	1					√		
	Observations: <i>The university should publish and outline in adequate media services the available vacancies with academic opportunities, the recruitment process, and the criteria for academic staff promotion and ranking.</i>	α 403=6	N₃₁₁ = 7.33						
I₄₀₄	Existence of faculty evaluation procedure and criteria		4	5	6	7	8	9	10
		2					√		
	1- Existence of a constant evaluation procedure and criteria, and is adopted by the concerned authorities.								
	2- The criteria are clearly stated in the Instructors' Handbook.	2					√		
	3- Student's evaluation form/system is available	1						√	
	4- Chairperson's evaluation form/system is available	1						√	
	5- Dean's evaluation form/system is available	1						√	
	6- Evaluation results are shared with the instructors who were evaluated.	1				√			
	7- Follow-up on faculty evaluation, recognition of educational skills, academic development, support, mapping for promotion	2				√			

	Observations: <i>The university has implemented an evaluation procedure and criteria of academic staff; evaluation outcome is shared with concerned instructors for the sake of improvement.</i>	$\alpha_{404} = 10$	$N_{404} = 8$						
I405	Academic staff activity requirements are defined and adequate		4	5	6	7	8	9	10
	1- The academic staff activity requirements are defined under the institution's regulations.	2			√				
	2- Required teaching and advisement hours of each member of the academic staff	2			√				
	3- Required research activity of each member of the academic staff	2			√				
	4- Required society service and extra-academic activities of each member of the academic staff	2			√				
	Observations: <i>The academic staff activity requirement should be revised in order to establish equilibrium between the three main required activities; reducing teaching load, increasing time for research activity, society service and extra-academic activities should be recognized as a part of required activities.</i>	$\alpha_{405} = 8$	$N_{405} = 6$						
I406	Existence of social insurance plan for the academic staff (fringe benefits included)		4	5	6	7	8	9	10
	1- Insurance plan is clearly defined in the Instructors' Handbook and published on the website	2					√		
	2- Academic staff benefits of social/medical insurance	1					√		
	3- Academic staff benefits of schooling tuition fees discount	1					√		
	Observations: <i>The university has implemented an insurance plan that is clearly defined and published, including inscription in medical and life insurance, and university tuition fees discount. However, national higher education authorities should require integral social insurance for the academic staff, including retirement plan.</i>	$\alpha_{406} = 4$	$N_{406} = 8$						
I407	Existence of litigation case committees for academic staff		4	5	6	7	8	9	10
	1- Existence of committees' by-laws (composition, appointment, procedures...)	1			√				
	2- Procedures and by-laws are published online	1			√				
	3- The committee's function and intervention areas are published online	1			√				

	Observations: <i>There are incomplete measures taken by the university concerning litigation case committees for academic staff; the university treats this issue case by case.</i>	$\alpha_{407}=3$	$N_{407} = 6$						
I408	Existence of survey of the overall academic staff's satisfaction		4	5	6	7	8	9	10
	1- Existence of the survey questionnaire	2		√					
	2- Corrective actions are taken as a result of the survey's outcome	2		√					
	Observations: <i>There are incomplete measures taken by the university concerning the collection of data on all academic staff's satisfaction.</i>	$\alpha_{408}=4$	$N_{408} = 5$						
I409	Academic programs, objectives, development, organization, content and revision		4	5	6	7	8	9	10
	1- All components of academic programs are published online	1						√	
	2- The program's objectives reflect institution's vision and mission and value	2						√	
	3- Existence of a matrix that details the common points between educational objectives and that of student's learning outcomes (by course)	1				√			
	4- The learning objectives of the programs are adequate to the field of study (major)	1					√		
	5- The program includes courses pertaining to new trends in the field of study.	2					√		
	6- Existence of courses' flowcharts and the syllabus of each course offered in a said semester, including required number of courses and credits in addition to course description.	1						√	
	7- Flowchart , description, and graduation criteria are published	1						√	
	8- Appropriateness of the program's structure to meet educational objectives	1					√		
	9- Benchmarking the programs against those offered nationally or internationally	1						√	
	10- Availability of procedures of program development	1						√	
	11- Existence of program-review committees' structure and members; also, minutes of the meetings of the program committees, including decision taken	1						√	
	12- Revision and improvement of programs in accordance with teachers' and students' feedback, taking into account the students' needs	1						√	

	13- Follow-up on the program review decisions	1						√	
	14- Existence of supplementary learning programs such as professional certifications that are clearly stipulated in the program's educational objectives and students' outcome	1						√	
	Observations: <i>This academic dimension has retained big interest from the university; serious work has been ongoing</i>	$\alpha_{409}=16$	N₄₀₉ = 8.25						
I410	Teaching methodology and learning approaches		4	5	6	7	8	9	10
	1- Existence of procedures related to determination and adoption of teaching methodology and learning approaches	2			√				
	2- Teaching methodology and learning approaches are defined and shared among faculty and academic staff	2			√				
	a) Teaching methodology clearly specified in the syllabus b) Course outcomes are clearly specified in the syllabus	2					√		
	3- Appropriateness of teaching methodology to learning approaches	1				√			
	4- Usage of technology, and innovative teaching practices	1					√		
	5- Characteristics of the teaching methodology and learning approaches (stimulate students' motivation, encourage a sense of autonomy in the learner, take into consideration the diversity of students)	2				√			
	Observations: <i>Although the university has given great importance to the teaching methodology and learning approaches; serious practices are observed. The procedures should be clearly developed and the methodology should be clearly specified.</i>	$\alpha_{410}= 10$	N₄₁₀= 6.9						
I411	Practical teaching process and delivery style		4	5	6	7	8	9	10
	1- Course folder is available for each course	2				√			
	2- Course topics are detailed in the syllabus by session and day	1				√			
	3- needed material (slide, handouts, ...) is uploaded online	1				√			
	4- Adequacy of classes/laboratories/workshops' equipment and tools	2					√		

	5- Delivery style to meet the needs of students, class activities, assigned homework that encourages critical thinking in three levels of difficulty: easy/average/difficult or complex, assigned individual or group projects, project presentation....	2					√		
	6- Regular review of teaching methodology and the learning approaches' improvement	2			√				
	7- Teaching achievement evaluation by academic responsibilities (chairperson, course coordinator,...) as a result of class visitation	1			√				
	8- Instructors' and students' feedback on student/teacher interaction and student-course content-program interaction	1		√					
	Observations: <i>The university has given much importance to the teaching process and delivery style practices. However, more effort should be exerted concerning regular review of teaching methodology and the learning approaches' improvement, and concerning the student-course content/program interaction.</i>	α₄₁₁ = 12	N₄₁₁ = 7.083						
I₄₁₂	Academic activity planning and reporting		4	5	6	7	8	9	10
	1- Higher education institution has developed, for each major, activities, including plan of teaching progress, and students' activities and assessment	2						√	
	2- Higher education institution undertakes measures in order to avoid instructions to be stopped in any course due to involuntary or accidental absence of an instructor	1						√	
	3- Deans and chairpersons report on tasks accomplished in each department according to planned semester's activities	2						√	
	Observations: <i>The university presents excellent organization, planning and reporting of academic activities; serious and accurate practices are observed</i>	α₄₁₂ = 5	N₄₁₂ = 8.6						
I₄₁₃	Student learning experience and educational gain		4	5	6	7	8	9	10
	1- Existence of a survey on students' satisfaction as to the quality of the learning experience	2			√				
	2- Outcome of the survey	2			√				

	3- Building students' personality through - Including project presentations in all courses - Participating in curricular activities (competitions, exhibitions, seminars, ...) - Participating in social/sports activities	3					√		
	4- Building students' intellectual capabilities and a sense of competition through - Critical thinking exercises - Intellectual and practical challenging projects	3					√		
	Observations: <i>The university has presented evidence as to students' project presentations, students' participation in many curricula and extra-curricular activities, and critical thinking exercises and intellectual and practical challenging projects.</i>	α₄₁₃ = 10	N₄₁₃ = 7.2						
I₄₁₄	Student assessment and exams' procedures		4	5	6	7	8	9	10
	1- Exams' regulations are clearly detailed in the Students' Handbook	1						√	
	2- Exams' regulations are clearly detailed in the Instructors' Handbook	1						√	
	3- Rules and regulations are posted and announced in classes for special cases	1						√	
	4- Students' assessment means are appropriate and related to the learning objectives	1					√		
	5- Exam procedure that safeguards the objectivity and integrity of the exams	1					√		
	6- At the end of each semester a students' survey on students' exam results is conducted	1					√		
	7- Data analysis of the results of students' survey according to which improvement actions are set and implemented (eg. Student educational support)	1				√			
	8- Existence of comprehensive exit exams for each major	1					√		
	9- Data analysis of the exit exams according to which improvement actions are listed and elaborated upon	1				√			
	10- Regular review of the objectives and regulations of students' assessment procedure	1				√			

	Observations: <i>The university has implemented and published students' assessment, and regulations that are related to the learning objectives. It has practiced procedure that safeguards the objectivity and integrity of the exams. Moreover, the university obliges its graduates to sit for a comprehensive exam in many majors; their outcome has been used to set and implement improvement.</i>	$\alpha_{414}= 10$	$N_{414}= 8$						
I₄₁₅	Learning programs outcome and its interaction with the labor market requirements		4	5	6	7	8	9	10
	1- Participation of labor market representatives in program advisory committees	2					√		
	2- Survey of graduates' satisfaction of the programs' learning outcomes	2					√		
	3- Survey of faculty's satisfaction of graduates' competencies and skills	2			√				
	4- Survey of the overall academic staff's satisfaction of the learning outcomes	2			√				
	5- Improvement of learning procedure in response to and in concert with the stakeholders' participation in evaluating the effectiveness of the learning outcomes	2				√			
	Observations: <i>The university has taken many initiatives concerning the participation of employer's representatives in program advisory committees, especially in profession programs. It sets and implements program improvement according to the stakeholders' evaluation of the effectiveness of the learning outcomes.</i>	$\alpha_{415}= 10$	$N_{415}= 7$						
	Total Coefficient $\Sigma \alpha_{ni}$ Score: $\frac{\Sigma \alpha_{ni} N_{ni}}{\Sigma \alpha_{ni}}$	120	$\bar{N}_{400}= 7.45$						

Table 5.14 Development and research aspects assessment

Codes	Indicators/Observations	Coef. α_{ni}	Evaluation Mark Nni						
			4	5	6	7	8	9	10
I501	The higher education institutions have policy and plans for academic staff's professional development as to the								
	1) Availability of academic staff development plans	2				√			
	2) Availability of time line for each action	2				√			
	Observations: <i>There is an approved plan and budget to cover expenses that go towards aiding faculty members to continue their perusal of higher degrees and professional certificates as part of their professional development.</i>	$\alpha_{501} = 4$	$N_{501} = 7$						
I502			4	5	6	7	8	9	10
	The higher education institutions provide appropriate institutional support for the academic development of the faculty, including support of steps to improve teaching and research.	4				√			
	Observations: <i>Special seminars and workshops are held yearly on teaching and academic research development; some of which result in the attainment of professional teaching certificates</i>	$\alpha_{502} = 4$	$N_{502} = 7$						
I503	Academic program is regularly reviewed and updated to stay abreast of the outcome of pedagogical research on objectives and learning effectiveness , and as evidence of		4	5	6	7	8	9	10
	1) revision of the academic program's policy	2					√		
	2) regular revision of the academic program through minutes of departmental meetings	3					√		
	Observations: <i>Each faculty is involved in academic retreats where departments involve the advisory board to review and update curricula on a yearly basis, indicating the objectives and learning outcome requirements for each course of each major</i>	$\alpha_{503} = 5$	$N_{503} = 8$						
			4	5	6	7	8	9	10
I504	Existence of research activities' policy that is reviewed in light of the strategic objectives and quality practice of the institutions	4				√			

	Observations: <i>The university is involved in research at the Master's level internally and externally whereby each student is required to complete either a research project or a research thesis that is published in known magazines in different fields of interest.</i>	$\alpha_{504} = 4$	$N_{504} = 7$						
I₅₀₅	Academic staff participates in wide academic debates and in international scientific conferences.		4	5	6	7	8	9	10
	1) Evidence of organization of academic debate in major or special societal, scientific or technological subjects	2				√			
	2) Evidence of participation in international conferences	3				√			
	Observations: <i>1) Faculty members have been participating in academic debates on national and international levels, and have organized conferences and seminars on vital academic issues</i> <i>2) Faculty members have attended many international scientific and professional conferences.</i>	$\alpha_{505} = 5$	$N_{505} = 7$						
I₅₀₆	The higher education institution encourages and supports research collaborations at national and international levels.		4	5	6	7	8	9	10
	1) Availability of collaboration at the national level to encourage and support research	2				√			
	2) Availability of collaboration at the international level to encourage and support research	2					√		
	3) Availability of a budget to cover research endeavors	2				√			
	Observations: <i>The university has over 42 collaborative affiliations with national and international universities that state and encourage academic research between their faculty and students; evidence of such collaborative work is posted on the university's website. However, more activation of these collaborate affiliation should be undertaken</i>	$\alpha_{506} = 6$	$N_{506} = 7.333$						

I507	The academic staff are involved in research programs in cooperation with private corporations or public establishments; existing research projects sponsored by external enterprise.		4	5	6	7	8	9	10
	1) There are members of the academic staff involved in research programs.	2				√			
	2) There are research programs sponsored by external enterprise	2		√					
	Observations: <i>The university focuses more on applied research were most research or Capstone projects are funded by the private or public sectors</i>	α 507=4	N₅₀₇ = 6						
I508	Institution engagement and support of research; the institution provides the necessary research equipment and resources (financial, laboratories, and library).		4	5	6	7	8	9	10
		4				√			
	Observations: <i>Each faculty requests in its budget proposal a set budget for research. A certain percentage of the university's budget is allocated to research and equipment</i>	α 508= 4	N₅₀₈ = 7						
I509	Research activity outcomes, patents, publications and quality of the research (citation)		4	5	6	7	8	9	10
		4				√			
	Observations: Most members of the academia are engaged in research activities, leading to publication in refereed journals and proceedings of conferences	α 509= 4	N₅₀₉ = 7						
I510	The higher education institutions promote and sustain social and economic development. It is integrated within the national economic and social environment:		4	5	6	7	8	9	10
	1) the academic staff members are actively involved in community services initiatives	2						√	
	2) the academic staff members are involved in social development through research projects (social benefit of the research)	2						√	

	Observations: 1) Many scholarships have been offered to school teachers to pursue the Teaching Diploma Program. 2) Workshops for school counselors on student career guidance have been held. 3) Optometry Mobile Clinic have visited remote villages where Optics and Optometry students performed free eye examinations and wrote prescriptions when needed. 4) Support of the Internal Forces in computer and crime scene investigations.	$\alpha_{510} = 4$	$N_{510} = 9$						
I₅₁₁	The higher education institution plays and demonstrates human and social commitments through learning and activities:		4	5	6	7	8	9	10
	1) meet the needs of the national community which contributes to students' intellectual and technical skills' development	3					√		
	2) fulfill and promote social values of equity, inclusion and citizenship	3					√		
	Observations: 1) Many majors require the attainment of professional certificates in order to receive a credit of some courses. 2) An ethics course is a mandatory requirement for all students in all departments. A strict procedure on plagiarism and integrity of research is communicated and implemented through the academic programs.	$\alpha_{511} = 6$	$N_{511} = 8$						
	Total Coefficient $\Sigma \alpha_{ni}$ Score: $\frac{\Sigma \alpha_{ni} N_{ni}}{\Sigma \alpha_{ni}}$	50	$N_{500} = 7.34$						

Table 5.15 The openness and reputation aspects assessment

Codes	Indicators/Observations	Coef. α_{ni}	Evaluation Mark Nni						
			4	5	6	7	8	9	10
I ₆₀₁	The mission and the purpose of the institution include global dimensions which are considered and achieved through					√			
	1) Participation in international competitions	1				√			
	2) Participation in national competitions	1				√			
	3) Students' engagement in innovation or startup activities	2					√		
	4) Engagement in the development of international knowledge economy	1					√		
	5) Participation in new technology development and the transfer of knowledge	1					√		
	6) Recognition and dissemination of cultures of nations; the university's involvement in international cultural activities	1					√		
	Observations: <i>All majors in the various faculties are subjected to an academic evaluation process whereby for each major to meet the minimum requirement of high academic achievement, the students should be involved in national and international activities; earn international certifications upon completing certain courses or upon completing their degrees; and, are involved in innovative research projects that sometimes lead to publication, even at the Bachelor Level.</i>	$\alpha_{601} = 7$	N₆₀₁ = 7.714						
I ₆₀₂	The higher education institution takes part in academic development, and national and international co-operations.		4	5	6	7	8	9	10
	1) It encourages faculty mobility through exchange programs	1				√			
	2) It encourages student mobility through exchange programs	1					√		
	3) It cooperates with institutions and organizations towards educational development	1				√			
	4) It benchmarks its performance in the learning program, teaching approach and learning outcome against reputable higher education institutions of other countries.	2					√		
	5) It seeks affiliation with foreign higher education institutions	2						√	

	Observations: <i>The university currently has 42 affiliations with various universities around the world. These affiliations encourage exchange of students and faculty; it is to be noted that students exchange is more active than that of the faculty.</i> <i>New courses and majors are continually introduced as to keep up with the academic progress that is witnessed in the developed countries.</i> <i>The university's graduates pursuing higher education at these universities are able to attain great results; this indicates these graduates' level of learning at the Bachelor's Level is quite commendable</i>	$\alpha_{602} = 7$	$N_{601} = 8$						
I₆₀₃	Higher education institution cooperates in research activities with national and international education institutions or other related entities.		4	5	6	7	8	9	10
	1) Cooperation in research projects	2				√			
	2) Participation in the organization of international symposiums , colloquiums, conferences	2				√			
	3) Organization of research and innovation events	2				√			
	Observations: <i>Some departments have joined research programs with universities at the national level, while others have joined research activities at the international level. In addition, one or two conferences are held yearly whereby key guest speakers from international universities are hosted</i>	$\alpha_{603} = 6$	$N_{603} = 7$						
I₆₀₄	Higher education institutions takes into consideration the labor market's needs and the requested competencies and skills through:		4	5	6	7	8	9	10
	1) participation of employers' representatives in the design of academic programs	3					√		
	2) stakeholders' feedback on academic program reviews	3					√		

	Observations: <i>The university has introduced a cooperation system with enterprises. Board of Advisors of some disciplines such as that of engineering, computer sciences and business are created; they include academicians and experts representatives of the related enterprises as well as a graduate of the said discipline. This board meets four times a year; it's main objective is to advise the academic faculty on the latest needs of the market and hence the changes that are needed to be introduced into the curriculum. The proposed learning program improvement is reviewed, discussed and then recommended to the highest academic authority for approval.</i>	$\alpha_{604} = 6$	$N_{604} = 8$						
I₆₀₅	The higher education institution conducts follow-up survey concerning learning outcome performance through:		4	5	6	7	8	9	10
	1) employers' satisfaction	2					√		
	2) graduates' satisfaction with the program's learning outcomes	2					√		
	3) destination and employability of graduates	2				√			
	Observations: <i>Each year, the HR Director of business institutions are asked to fill out a questionnaire pertaining to their evaluation of the university's graduates' performance, and whether they would hire them at their institutes. Although few individuals answer, yet the comments received, in general, are quite positive; suggestions for improvements to be introduced to improve the graduates' level are taken seriously and are implemented when possible.</i> <i>In order to connect the academic program to the 'real market needs', students are required to do internships at known enterprises; the host institutes are required to write a short report on the student's tenure at their premises.</i> <i>Moreover, being a young university, it was considered as important to measure its graduates' quality against other graduates of internationally well-esteemed institutions.</i> <i>Many graduates of the university have pursued graduate study at institutions in Europe and US; they have fared well in every graduate school they have joined.</i>	$\alpha_{605} = 6$	$N_{605} = 7.666$						

	<i>The Faculty of Business and Economics has already published its annual assessment (2010 till 2015) on the university's website under accreditation and affiliation section.</i>								
I₆₀₆	The higher education institution seeks international external evaluation:		4	5	6	7	8	9	10
	2						√		
	1) institutional governance and accreditation								
	2) academic programs	2					√		
	3) professional national and international certifications	2					√		
	4) comprehensive exams	2			√				
	Observations: <i>The university has sought accreditation from recognized international bodies as to quality of management system and the quality of the study programs. It sought and received accreditation for its CCE Engineering Program, the Biomedical Engineering Program, and the Computer Sciences Program from The American Accreditation Board of Engineering and Technology (ABET); Accreditation for its business programs from the American Body: The International Assembly for Collegiate Business Education (IACBE).</i> <i>In addition, the university has ISO 17025 accreditation and the European GLP (Good Laboratory Practice) certification for its Toxicology laboratory. The university is currently under EVALAG assessment process (European body).</i> <i>To assess program learning outcomes, the university organizes Exist Exams to graduate students; they are designed to assess the students' retention of essential principles and concepts in their respective field of study. This exam could be considered as a local comprehensive exam.</i>	α₆₀₆ = 8	N₆₀₆ = 7.5						
	Total Coefficient $\Sigma \alpha_{ni}$ Score: $\frac{\Sigma \alpha_{ni} N_{ni}}{\Sigma \alpha_{ni}}$	40	— N ₆₀₀ = 7.65						

5.8.3: Assessment Results, Presentation, and Synthesis

The results of the quality assessment of each area and that of the institution are clearly presented in Tables 5.9 – 5.14 and Figures 5.3 till 5.9. They show that all areas have received an average mark between 7 and 8 over 10. Hence, the average of the quality level of the overall institution, taking into account the weight (coefficient) of each area, is 74.88 over 100, which is situated under Good Quality interval.

I101: Institution, mission, vision and purposes declaration and dissemination

I102: Mission, vision, and purposes revision

I103: Mission, vision, and purposes practicing through program activities

I104: Consistency of mission, vision, and purposes in environment preservation, and public health, and hygiene

I105: Consistency of mission, vision, and purposes in intellectual development

I106: Consistency of mission, vision, and purposes in the widening of the level of participation in H.E.

I107: Consistency of mission, vision, and purposes in safeguard of academic freedom

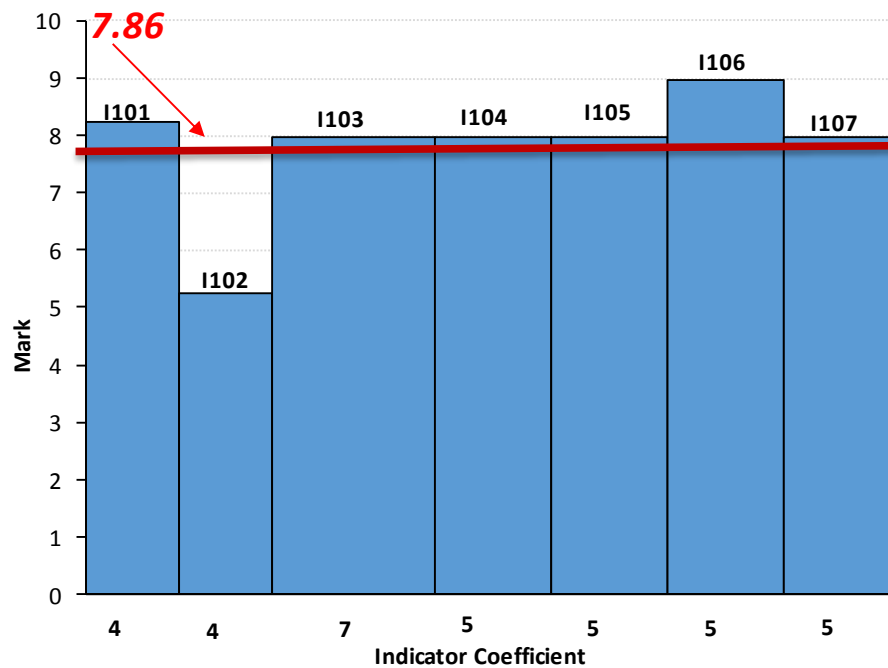
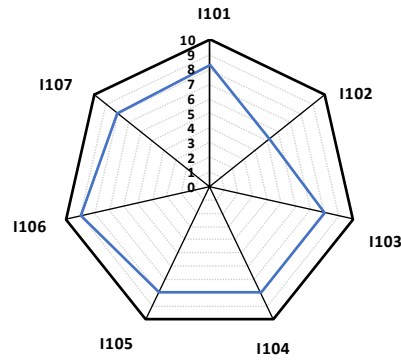


Figure 5.3 Assessment of the institution's mission, vision and purpose

- I201: Regulation, adoption, and transmission
- I202: The section included in the regulation clearly defined
- I203: Commitment to quality and continuous improvement
- I204: Internal regulation, adoption, and transmission
- I205: The section included in the in the internal regulation clearly defined
- I206: Accountability procedure and outcome clearly defined in the regulation
- I207: Board and committee meetin: report and decision documentation, and transmission
- I208: Safeguard information and data: technical and administrative procedures
- I209: Administrative staff competency development: plan and procedures
- I210: Students' records and process: student performance improvement
- I211: Quality and best practice promotion: practiced procedure
- I212: Strategic plans: availability, review, evaluation
- I213: Partipation opportunities of H.E. stakeholders representatives in governance bodies

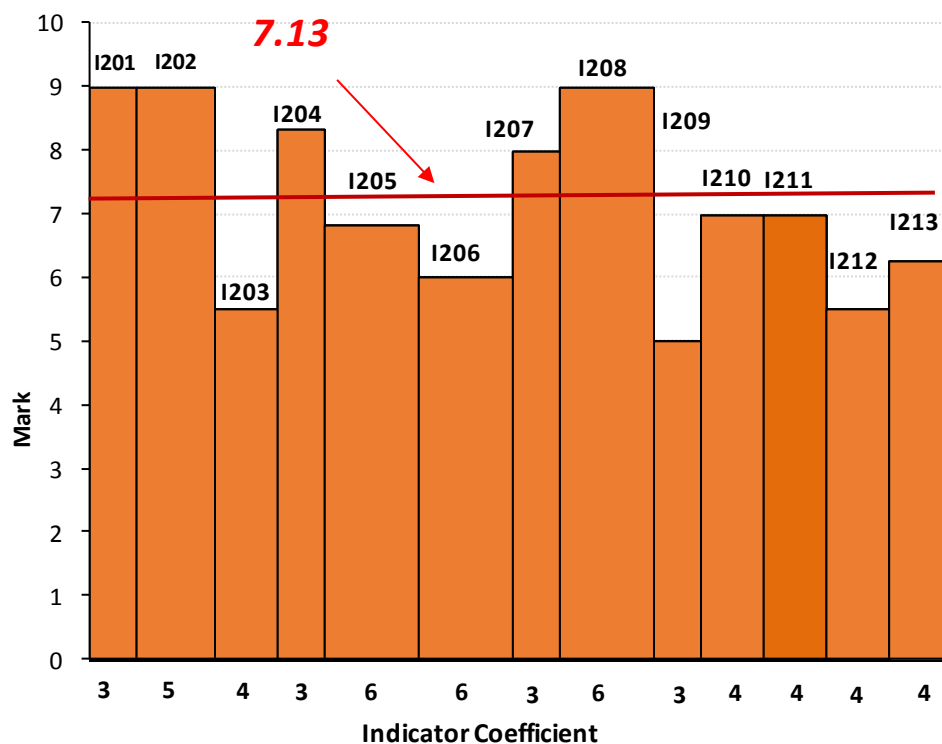
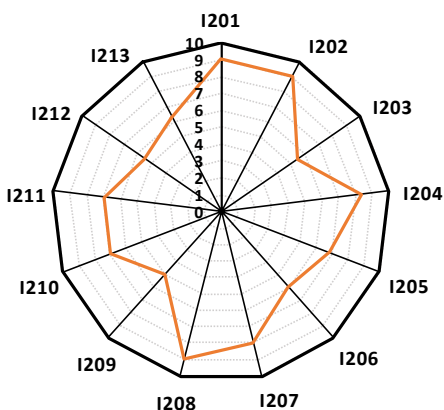


Figure 5.4 Assessment of governance and management

- I301: Appropriateness of the lecture hall and other used areas
- I302: Appropriateness of the lab and training areas
- I303: Libarary
- I304: Teaching space management
- I305: Appropriateness of the administrative offices
- I306: Appropriateness of the green area, parking and cafeteria
- I307: Conformity with safety and environment good practice
- I308: IT equipment in the campus compounds
- I309: Maintenance and logistic services
- I310: Students' services
- I311: Job fair event, contact with employers

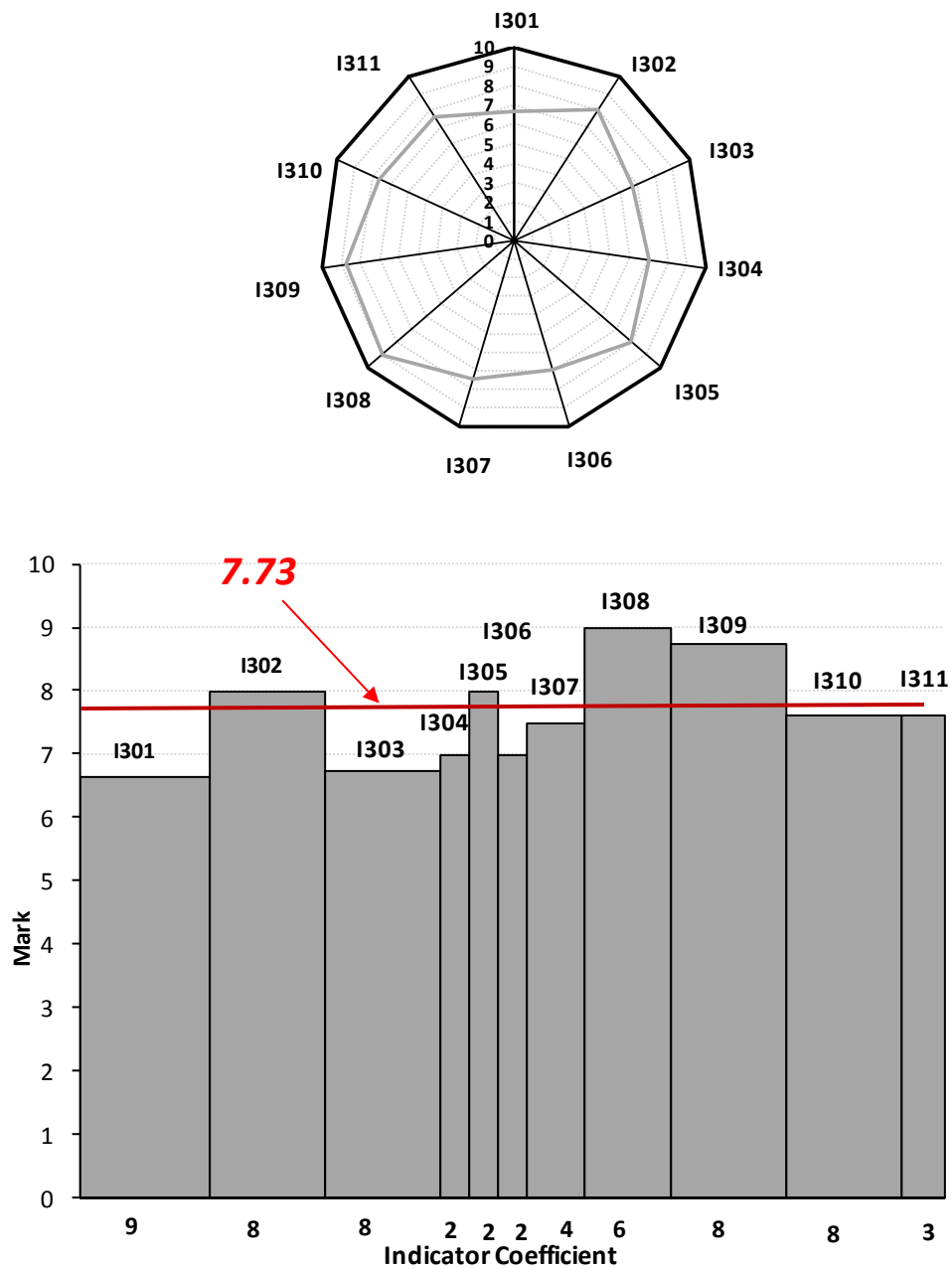


Figure 5.5 Assessment of physical facilities and environment supports

- I401: Admission requirement and procedures
- I402: Students Advising
- I403: Academic staff recruitment
- I404: Faculty evaluation
- I405: Academic staff activity requirements
- I406: Social insurance plan for the academic staff
- I407: Litigation case committee for the academic staff
- I408: survey of the all academic staff satisfaction
- I409: Academic programs
- I410: Teaching methodology and learning approaches
- I411: Practical teaching process and delivery style
- I412: Academic activity planning and reporting
- I413: Student learning experience and educational gain
- I414: Student assessment and exams' procedures
- I415: Learning program outcomes and its interaction with the labor market requirements

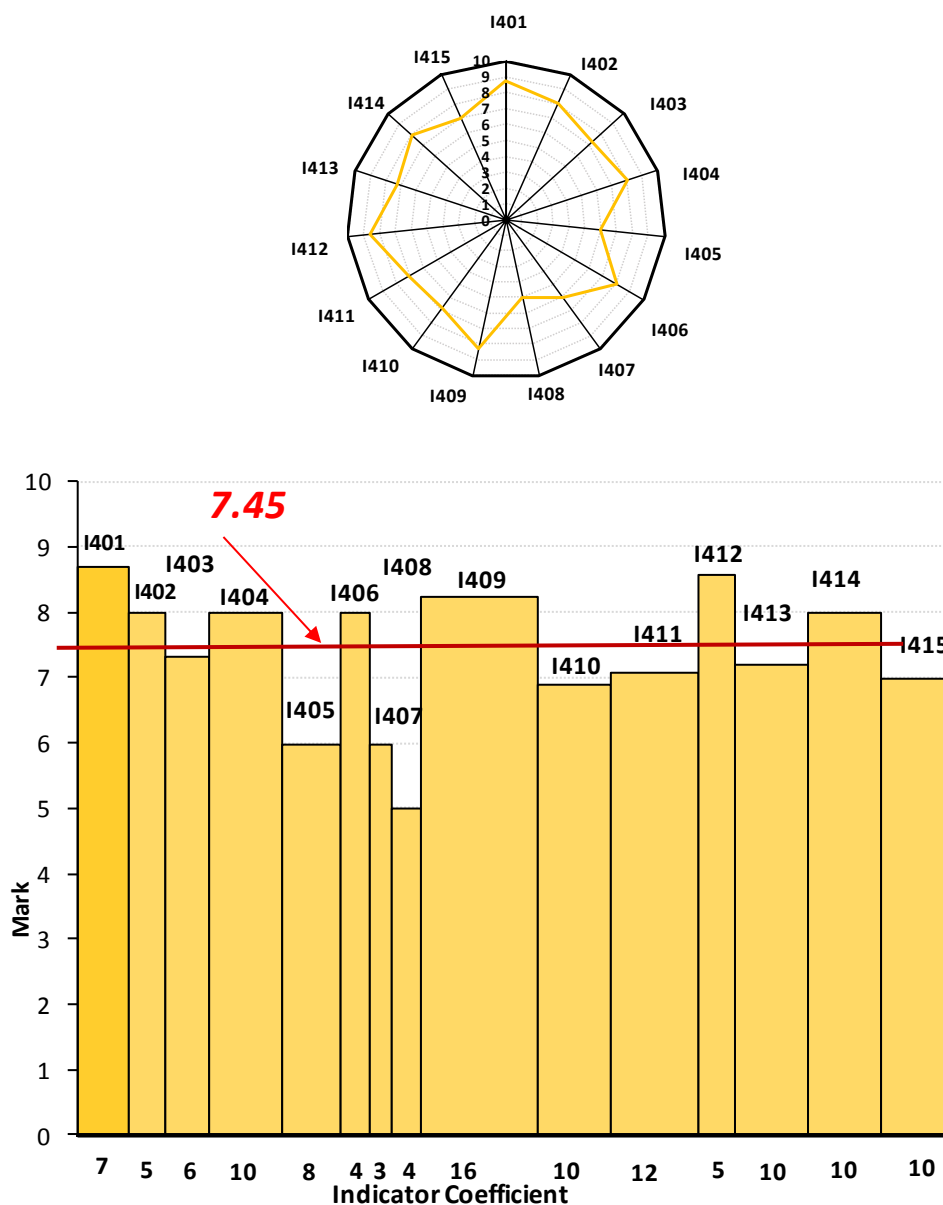


Figure 5.6 Assessment of educational dimensions and learning outcomes

- I501: Policy and plans for academic staff's professional development
- I502: appropriateness support for the academic development of the faculty
- I503: regularly program for reviewing and updating
- I504: Research activity policy
- I505: Academic staff participations: academic debates and international scientific conferences
- I506: Research collaboration supports
- I507: Academic staff involvement in research program cooperation
- I508: Institution engagement and support of research
- I509: Research activity outcomes
- I510: Social and economic development promotion and involvements
- I511: Human and social commitments of the institution through learning and activities

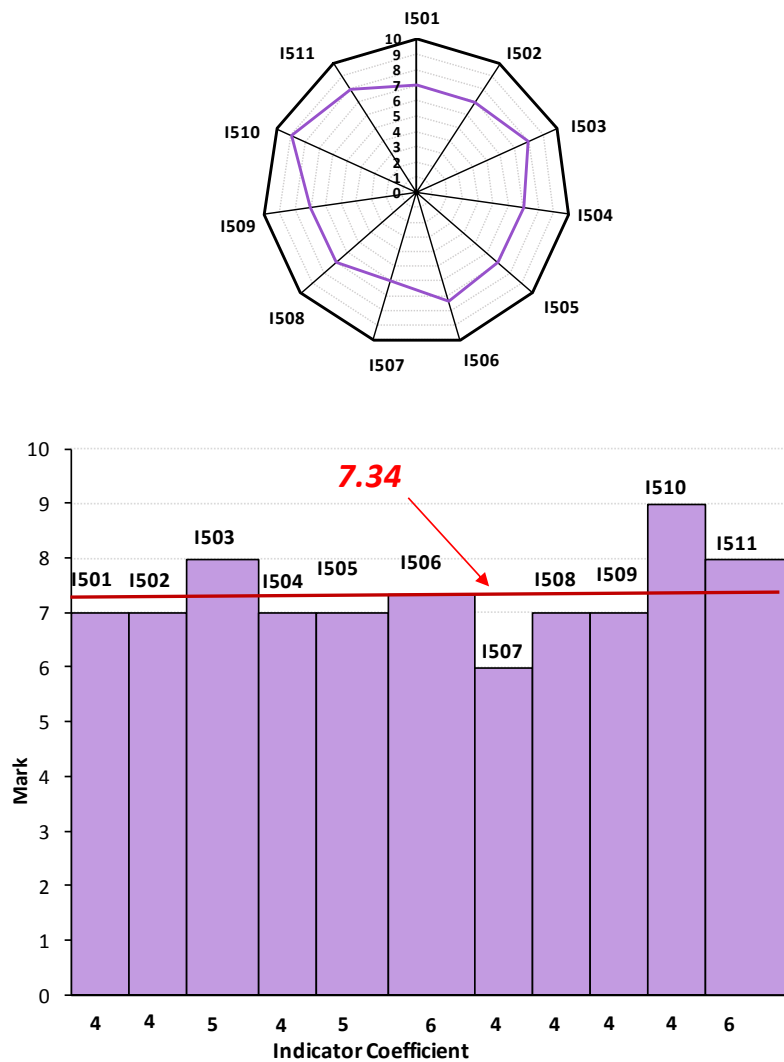


Figure 5.7 Assessment of the development and research aspects

I601: Global dimensions in the mission and purpose of the institution

I602: National international co-operations in academic development

I603: Co-operations in research activities with national and international institutions

I604: The taking into consideration the labor market's needs: participation in the academic program design and review

I605: Follow-up survey concerning learning outcome performance

I606: International external evaluation sought by the institution

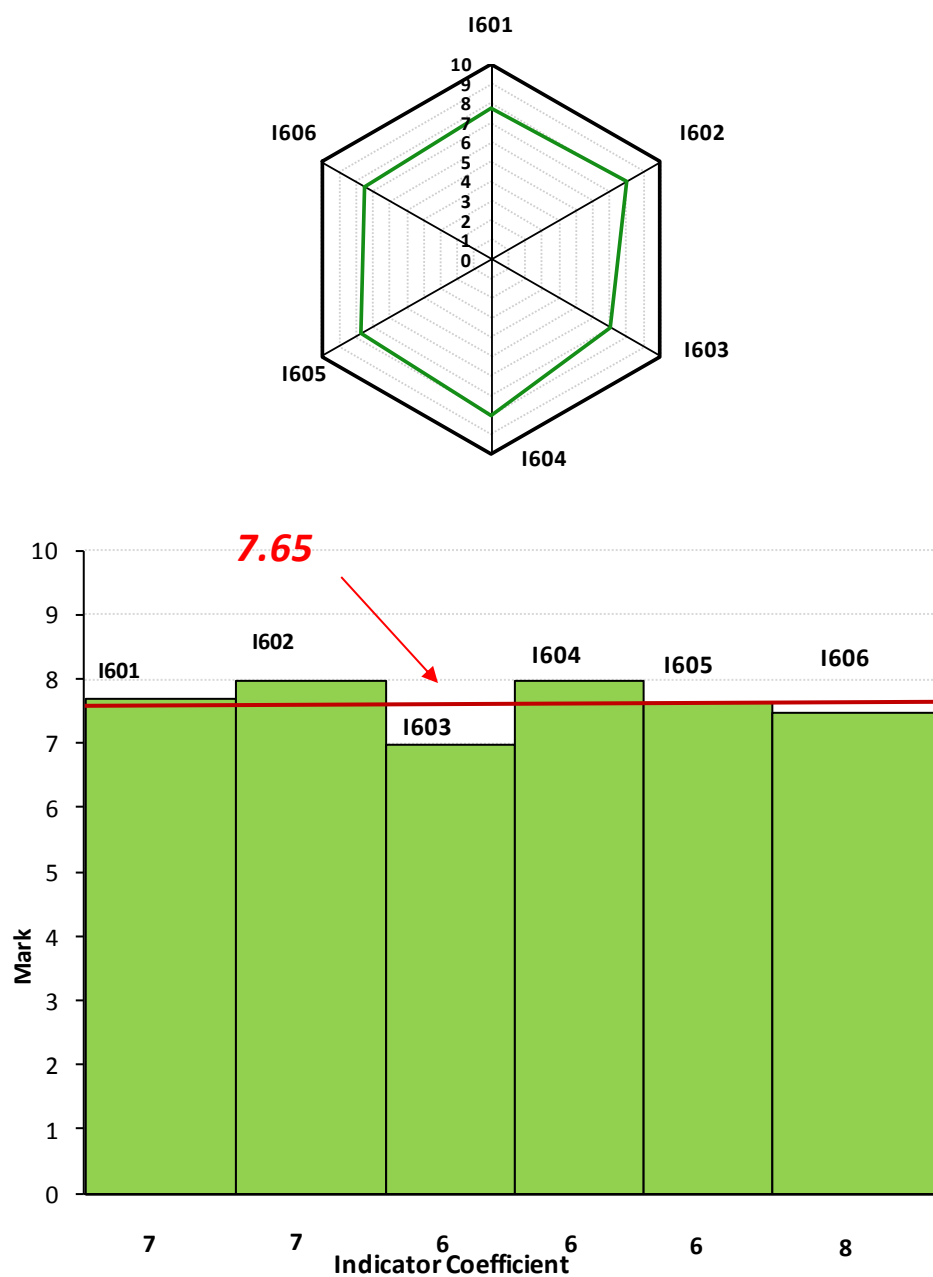


Figure 5.8 Assessment of the openness and reputation aspects

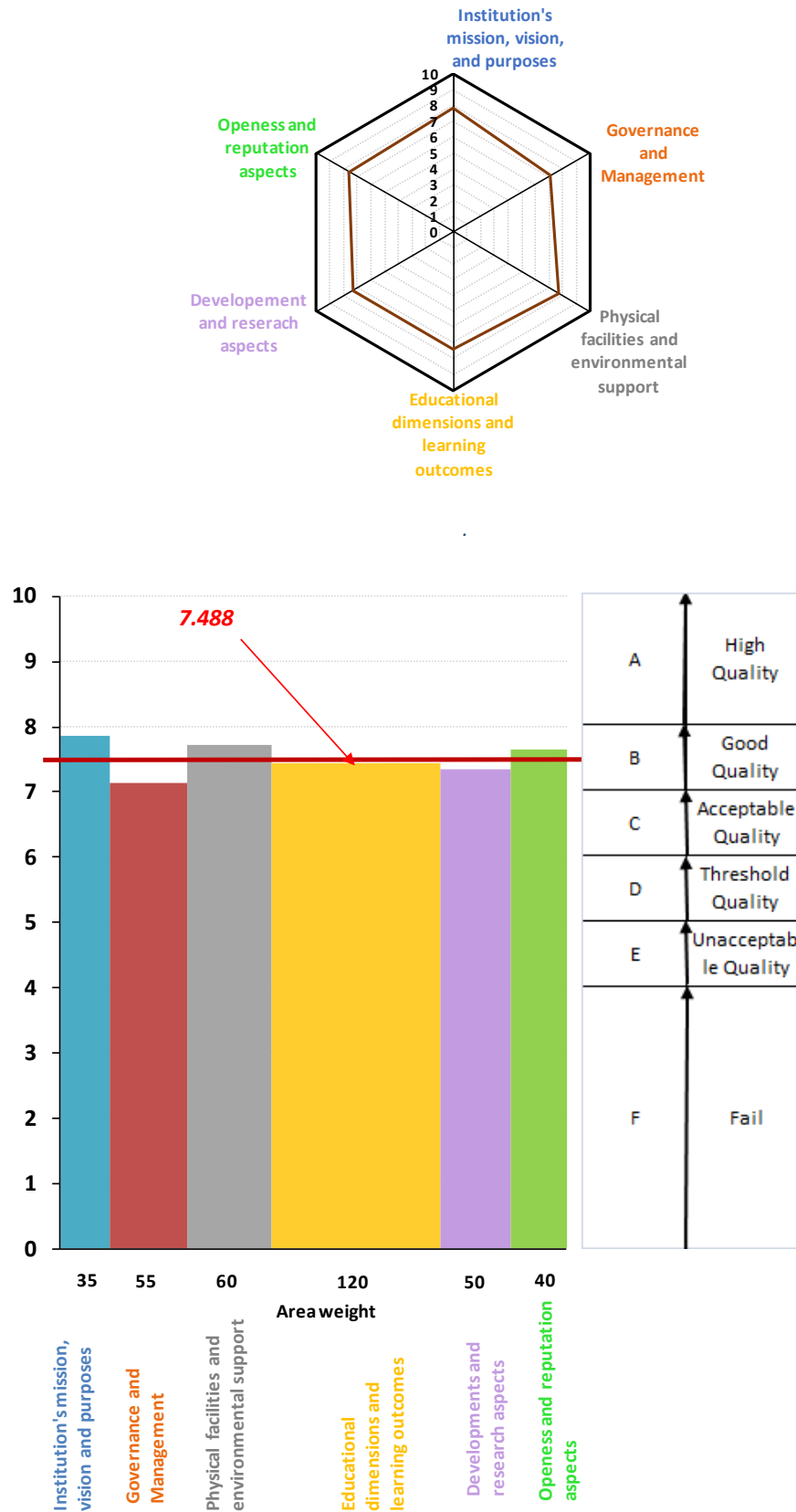


Figure 5.9 Quality level assessment of the six areas and overall university X quality assessment outcome

5.8.4: Observation Synthesis

The observation noted by the evaluation committee in the assessment indicators tables could be synthesized as the following and as seen in Table 5.16 and Figures 5.10, 5.11.

Table 5.16 Quality level assessment of the six areas and overall University X quality assessment outcome

Area	Area Weight	Relative area weight β_n	Average area assessment result \bar{N}_n	Area assessment contribution $\beta_n \bar{N}_n$	Relative area assessment contribution $\frac{\beta_n \bar{N}_n}{\sum \beta_n \bar{N}_n}$
Institution's mission, vision, and purposes	35	9.72%	7.86	7.63%	10.18%
Governance and Management	55	15.28%	7.13	10.89%	14.55%
physical facilities and environmental support	60	16.67%	7.73	12.83%	17.14%
Educational dimensions and learning outcomes	120	33.33%	7.45	24.83%	33.16%
Development and research aspects	50	13.89%	7.34	10.2%	13.62%
Openness and reputation aspects	40	11.11%	7.65	8.5%	11.35%
Total	360	100%			100%
Average overall university X quality assessment outcome over 10			7.488		
Total area assessment contributions $\sum \beta_n \bar{N}_n$				74.88%	

5.8.4.1: University's mission, vision, and purpose

The university has developed consistent mission, vision, and purposes which are declared and shared with the university's stakeholders. They include commitment to social values, fostering of social justice promotion, higher education dissemination, and citizenship education practice. Thus, many activities are planned for students to practice good citizenship principles and values. Also, many courses are designed to enhance students' critical thinking and to develop their personalities, competencies and skills.

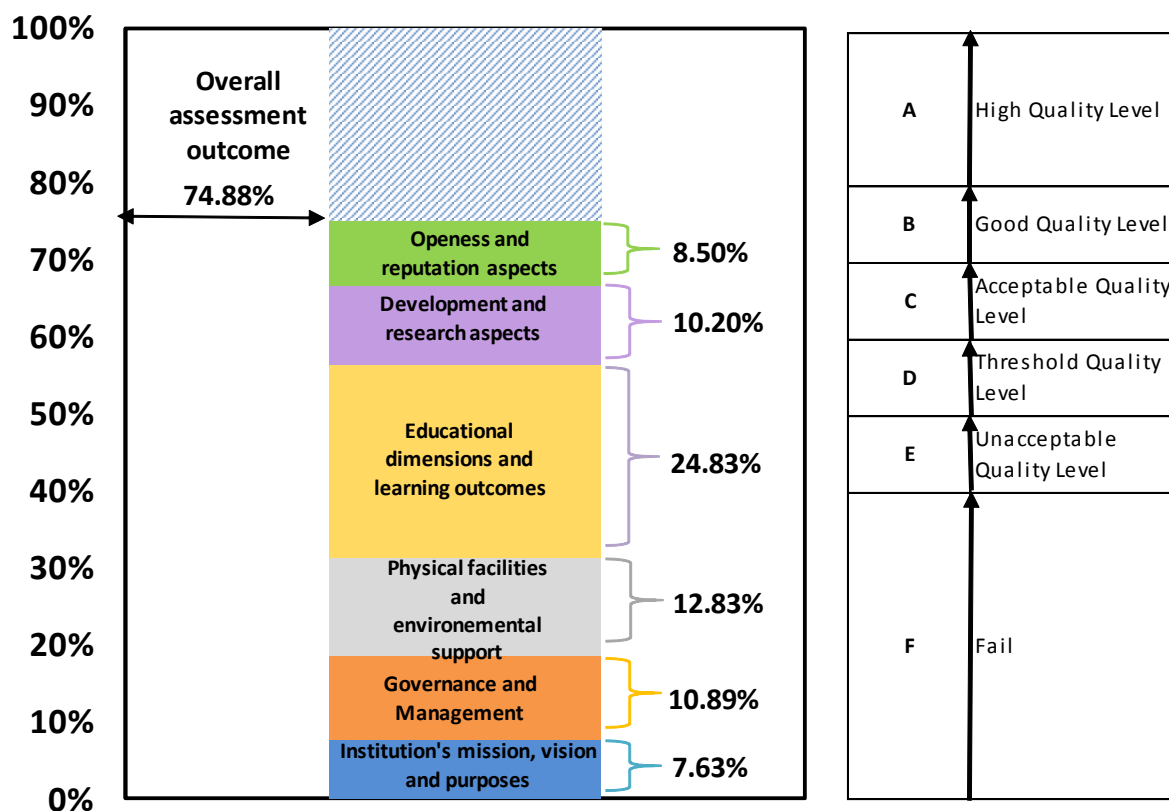


Figure 5.10 Contribution of each area in the cumulative overall assessment of University X

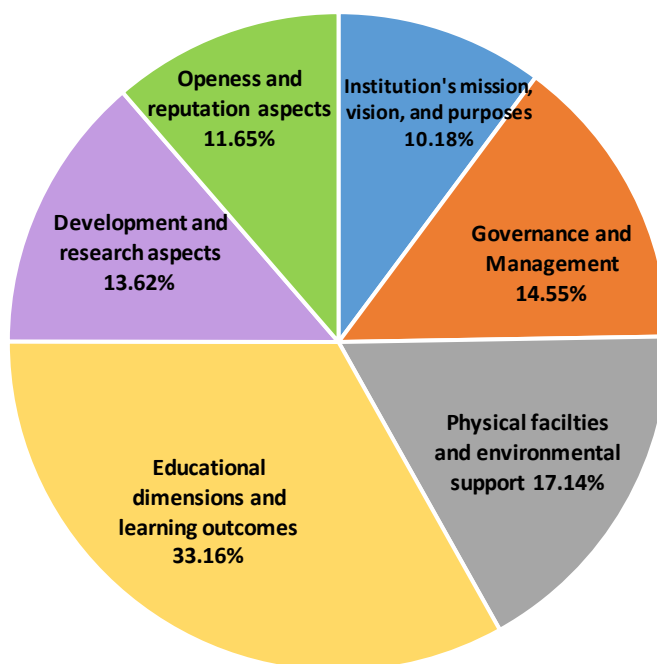


Figure 5.11 Relative contribution of each area in the overall assessment of University X

The university has adopted a policy that optimizes the ratio of education fees and quality learning; hence, the low tuition fees allow a substantial number of students to pursue higher education.

However, more effort is needed to be put into reviewing the university's mission, views and purposes as to make sure that they reflect the new technological progress which has direct effect on these components; as such, improvement in democratic and academic freedom environment is recommended.

5.8.4.2: Governance and management of the university

The university is governed through regulations adopted by the Board Council; these regulations cover many sections, including administrative and academic structures, the formation and responsibilities of all bodies and senior staff, in addition to the required qualifications and appointment procedures, internal regulations which define job descriptions , flowcharts of responsibilities and decision-making procedures, academic staff and students affairs and accountability procedures and process outcome.

Moreover, information technology has been largely used to follow all management and educational processes, and to safeguard their outcomes. Effective information system is implemented. Although the university has started preparation to set and implement quality and best practice procedures and to develop a strategic plan; however, the university should develop improvement qualifications and competency plan and procedure to be applied by all administrative staff; and, the accountability procedure and process should also be explicitly defined and periodically reviewed.

5.8.4.3: Physical facilities and environmental supports

The university has ensured the physical facilities and environmental support needed to accomplish and administrative and academic functions, such as administrative offices, classrooms, laboratories, library, and information technology system. Moreover, the university has ensured all the necessary logistic services and has made available many student services, in addition to pursuing a direct communication with the prospective employers; it organizes a job fair every year whereby hundreds of institutions' representatives participate.

The university should take many measures to establish more spacious lecture halls and to improve physical access to classes and the library.

5.8.4.4: Educational dimension and learning outcomes

The university has excused effort to define, clarify and share the admission requirements and procedures with the students as well as with all concerned staff and advisors. It has also implemented good student advisement system, an evaluation procedure and criteria of academic staff and social assurance plan for the academic staff.

The academic dimension has retained big interest from the university, particularly on academic programs' development and revision, practical teaching process and delivery style, academic activity planning and reporting, student learning experience and educational gain, student assessment and exams' procedures and on learning programs' outcomes and the program's interaction with the labor market and suitability to meet its requirements.

Some points have to be improved, and more effort is to be given to the collection of data on the university's graduates so as to advise students of the potential opportunities in each major and to revise academic programs; the university should publish and outline in adequate media services the available vacancies with academic opportunities. It should also revise the staff activity requirement in order to establish equilibrium between teaching load, extra-academic activities, and the available time for research activity.

The measures taken by the university concerning litigation case committee for academic staff should be completed by regulations text and appointment of committee's members. The teaching methodology and learning approaches should be clearly developed, specified, reviewed and improved in concentration with the academic staff. Moreover, survey on students' satisfaction as to the quality of the learning experience should be given more importance by the academic authority of the university.

5.8.4.5: Development and research aspects

A substantial improvement is observed in the development and research aspects of the university during the last five years; there are opportunities for most academic staff to be engaged in available professional development through pursuing higher degrees or research

activities and publications. The university encourages and supports the academic staff members to organize academic debates and to participate in international and professional conferences. Moreover, the university has 48 collaborative affiliations with national and international universities that state and encourage academic research between their faculty and students. However, more activities are to be undertaken between the university and the affiliated universities.

In the national social and economic development aspects, the university is actively involved in community services initiatives and in societal and national development of educative, health and security aspects. It also plays and demonstrates human and social commitments through the curriculum and activities (ethics courses, professional certificates, ...).

5.8.4.6: The openness and reputation aspects

The university is engaged and involved in national and international activities, such as competitions, innovation, and nation's culture dissemination. The numerous collaborative affiliations of the university with reputable international universities have encouraged the exchange of students and faculty and, many graduates have pursued and are pursuing higher education at these universities; a fact that University X considers as benchmarking its learning program. Some of the university's departments have also joined research programs and activities at the international levels.

The university has a policy of opening to the world of work; it has introduced a cooperation system with enterprises where representatives of employers are members of Board of Advisors of some disciplines, hence taking into consideration the labor market's needs and the requested competencies. It also conducts follow-up survey on the learning outcome performance through the exit exams and employers' and graduates' satisfaction and destination and employability of graduates. Moreover, the university has sought accreditation opening from recognized international bodies as to the quality of management system and the quality of the learning programs.

5.8.5: Conclusions of the Assessment Outcomes as Per the Proposed Model/Template

Figures 5.3 – 5.11 indicate the level of quality standards and criteria met by University X; they prove that higher education institution (University X) has exerted great efforts to implement a quality system. Hence, it has met most standards and criteria included in the developed template/model. However, there is some shade in the degree of conformity; the figures that represent histograms of different dimensions and elements within the assessed areas indicate some irregularities as to the quality level reflected in the given grades. In fact, irregularity is more denoted within the same area than that between areas. Indeed, all assessed areas received average marks on good level interval; there are even some indicators or sub-indicators that are judged as acceptable, threshold, or unacceptable quality level, and should be the subject of analysis, correction or improvement. The cumulative contribution of each area level to an overall assessment outcome of each area lead to an overall assessment outcome of the university in the good quality level (between 70% and 80% on a 100% scale). This result should not mean complete satisfaction on all university's functioning aspects; continuous improvement should be implemented in order to enhance the resultant quality level.

5.9 Summary of the Chapter

This chapter includes discussions on quality assurance initiatives and dimensions, as well as development and implementation of quality assurance assessment template/model in private higher education institution. The discussions, analysis and propositions are summarized herein:

- Various worldwide quality assurance initiatives were very active in the higher education sector reflected a commitment of the world wide organizations to assure the quality of global provision of higher education. Their objectives are to preserve the stakeholders' interests, obtain readable and transparent qualification, and to increase their international validity and comparability. Accordingly, higher education institutions and quality assurance agencies have been invited to “reexamine their assessment criteria and procedures” (Reinalda and Kulesza, 2006, p. 64).

- Various international initiatives and practices are developed in the quality assurance and the accreditation systems; the North American systems and the European systems have mainly wide dissemination at the international scale.
- To assess quality, formal standards and guidelines are developed and implemented. The developed standards focus on major academic and administrative areas; hence, links in the knowledge chain, research, higher education and innovation are strongly required (Reinalda, 2011). Emerging trends suggest that quality assurance and accreditation system focus “on the assessment of student learning as the essential manifestation of quality for all types of institutions” (Ewell, 2015, p1). The establishment of multiple levels of institutional recognition as an assessment outcome is also evoked.
- Analysis of quality dimensions in higher education implies that the relevant dimension is the improvement of the quality of student learning that should be on a par with quality learning outcomes; hence, higher education institutions should utilize their resources and implement effective educational practice to make the most of the students’ potentials and maximize their educational gain (Gibbs, 2010-a).
- Practicing higher education activities is a complex issue that includes managerial aspects and varied contextual, intellectual, individual and collective interaction. There are ‘input-presage’, ‘environment – processes’ and ‘output-product’ variables that interact with each other (Gibbs, 2010-a; Tran, 2015). In addition, there are impacting factors on quality of learning issues (research, society services, international cooperation, institution or programs labor market interactions).
- National quality assurance and accreditation system doesn’t exist in Lebanon, but is now claimed by many institutions and stakeholders; hence, many private higher education institutions have started external accreditation procedures (US, European...). As for the quality issue in higher education institutions in Lebanon, quality assurance template/model is proposed in which national context and international activities in the field are taken into consideration. Standards, criteria, and initiatives are developed for each area within the six assessment areas; different coefficients are affected by indicators. A quality scale has been established; the

judgment is based on quantitative evaluation scale and marks, justified by on-site observation and proofs.

This template/model is tested in a Lebanese private university (University X). The assessment has led to the determination of scores within each area, an average score for each area, and for the university as a whole. The results of this assessment have reflected many strong and weak aspects of the said university.

The template/model permits inspection of the quality level of different areas of quality dimensions in a higher education institution, including that of managerial and academic scale; the results permit the higher authority of the university to dispose histogram maps that detail the quality level of the different university compounds so as to analyze them and take corrective or improvement measures.

CHAPTER SIX

Chapter 6 : Summary of the Study and Conclusions

6.1 Summary of the Study:

This chapter is a summary of the undertaken study; it encompasses the main observations and evidences in light of the literature review, and the analysis and discussions presented throughout the study. It also includes recapitulation on the results obtained upon the testing of the developed template/model of quality assurance assessment in higher education in a Lebanese private university. This is followed by conclusions on the different aforementioned sections, limitations and prospective of this study.

6.1.1: Higher Education in New Global Contexts

In light of the literature review and the discussion undertaken in many sections on the development of higher education within global contexts, the following observations and evidences have come to light:

- i) Shift of the mission of higher education systems: The change in the structure of the labor market and economy, and them being a requirement for skilled human resources imply a shift in the role of the higher education institutions from being considered as elite institutions to being the main engine of the knowledge-based economy, and institutions that serve wide and diverse population. Thus, higher education institutions are required to meet varied expectations pertaining to the economy as to the program delivery and training for work as needed in the labor market (OECD, 2014- a; De Wit, 2010).
- ii) Internationalization, globalization and market mechanism trends: Higher education affected by these trends becomes a competitive sector, thus forcing the higher education institutions to compete for students and for funds under institutional autonomy and free environment (Marginson and Van der Wende, 2007; Basri and Class, 2014; Scott, 2014). But, higher education stakeholders, particularly students, should have adequate information about specificities and the

quality of the provided education and formation. The autonomy and the freedom should be regulated through quality assessment in order to optimize individual and social benefits of the higher education system. Moreover, there are trends of marketization of the higher education services and development of university entrepreneurialism whereby knowledge is seen as ‘tradable product’ and students as ‘customers’. Within these contexts, quality assurance objectives seek to ensure that academic provision meets the needs and the expectations of the ‘customers’ (See Sections 2.2.2 and 4.3.3) (Amaral, 2006). Hence, new terms have been promoted and associated to quality, such as, efficiency, utility and accountability; these could introduce new trends to the function and the mission of higher education institutions. However, this approach is considered inappropriate within the education sector context. In fact, there is a difference between a higher education institution service and that of production institution; the educational services signify a pedagogical action and interaction between instructors and students, enacted within an adequate environment. These services include, in addition to the understanding of knowledge and self-perfection, cultural approach and value commitment.

- iii) *Higher education massification and equity*: The mass demand of higher education has led to major transformations, deep restructuration and diversification of higher education systems. It was considered as a need to the knowledge economy, but in many cases, the academic standards have been violated (low quality level) (see Section 2.3.1); hence, a problem of quality assurance was posed. Though participation rates in higher education are higher, the same opportunities are not made available to students who are labeled among the disadvantaged population; international competitive race of ‘prestigious universities’ remain generally preserved to some social categories (Altbach et al., 2009; Usher, 2009). Thus, higher education institutions are required to reduce the cost of normalized quality of higher education. Accordingly, pedagogical approaches should be constructed and measures should be taken in order to develop an education system that has a large opportunity objective, where the teaching process and learning, methodology, the infrastructure and the technical equipment are optimized.

- iv) *The growth of the private higher education sector:* The rapid growth of the higher education participation has applied financial pressure on governments; hence, the growth of the private higher education sector. Debate has generated as to restructuring of a new social mission of the higher education system, which has a significant impact on the discussion of quality, equity, and new learning modes; consequently, quality has become a major preoccupation for the higher education authorities to ensure that the private higher education institutions meet quality standards and serve society.
- v) *Substantial changes in the role of higher education are introduced:* Higher education has become ‘the central economic resource of technological society’. Thus, changes in the functions and practices of higher education institutions are introduced; factors (e.g. Competitiveness, cross-border higher education provision, professional program oriented, advanced digital technology, ...) have significantly impacted the teaching methodologies, the learning approaches, and knowledge skills assessment (see Sections 2.2, 2.5, 2.10, 2.11). There is a shift from declarative knowledge (what teachers do) to functional knowledge (what students learn). The teaching and assessment approaches are now based on clear understanding of meaningful education outcomes; the teaching model prioritizes learning outcomes and student-centered pedagogical approach. Thus, studies are conducted to construct adequate curriculum and to develop new outcome standards which will assure the high quality of teaching and learning processes.
- vi) *The academic profession:* As the quality of teaching is considered an institutional responsibility, and that a relationship exists between the academic profession and the quality of learning, a well-qualified and competent academic staff has become the first requirement to achieve success in the higher education institutions. Hence, more attention is paid to policy development, mechanism, and process that enable the teaching staff to attain academic proficiency. Nevertheless, the academic profession is ‘under stress’; it suffers from many issues, particularly a decline in a real full-time professorate, which could affect some elements of the quality of the higher education (see Section 2.6.1).

- vii) Scientific and technological research: The knowledge economy direction that has resulted in a spectacular growth of scientific and technological research has propelled research-oriented universities to develop research interests in new fields that offer interesting industrial applications. The commercialization of new knowledge presents the academics with conceptual and ethical issues. Some research universities are pressured to comply with their mission to produce and spread knowledge which is considered as a public good (see Section 2.6.2).
- viii) The higher education institutions' ranking: Ranking among the higher education institutions is an important factor in the research environment. It is essentially based on research production. Ranking outcome is considered as a central prerequisite to obtain major grants or research projects. These requirements could affect small-sized institutions and the academic profession of their teaching staff, though high level of research does not assure good learning outcomes.
- ix) The technological revolutions: Digital technology that has deeply affected the teaching and learning processes reveal a revolution in pedagogical and managerial modes (Altbach et al., 2009; Guri-Rosenbilt, 2009). In fact, all pedagogical actors, including students, could be considered as knowledge sources in reciprocal mode; and, that the acquisition of competency conditions has changed by the use of high technologies (Giorgini, 2014; Roche, 2014). Moreover, complex systems or institution structures that operate in a ramified hierarchical and linear flow mode (source, destination, client, server ...) could be substituted by a cooperative and distributed modes which state that every element of the system could be a client and a server, a source and a destination. Cooperation and distributed mode represent network intelligence, the Internet mode, with an 'infinite' source of knowledge, bidirectional, instantaneous, traceable linkage and capitalized information.

These technological revolutions have become epistemological revolution, posing questions about the status of knowledge per se (Vignon, 2014). There is a global paradigm change that poses some questions as to the existing model applied in the traditional higher education systems. With the arrival of the Massive Open Online Courses (MOOC), formal knowledge acquisition can be gained apart from

teaching on campus at a predetermined time. Moreover, multi-sources can provide knowledge; this may considerably shift the primary core of the university added value that essentially come from teaching and research that is ‘co-localized’ in time and space, and which can introduce real change into the physical and pedagogical organization of the university, including the instructors’ and researchers’ job descriptions (Pasquier, 2014).

In sum, the technological, societal, economic and pedagogical evolutions deeply affect the meaning and essence of learning conditions, approaches and methodology. They also affect the role and mission of the higher education institutions; subsequently, the quality assurance and accreditation concepts and standards in higher education are affected when their roles and diversification of their types and agencies are increased.

6.1.2: The Higher Education Development in the Lebanese Contexts

6.1.2.1: The structure of higher education in Lebanon

The higher education in Lebanon includes both private and public sectors. The Lebanese University represents the academic institution in the public sector. The private sector, which includes numerous institutions, presents about two third of the total student enrolment at the higher education level. Different models or systems exist: American, European, Lebanese (adopted from the French system).... The founding entities of the private higher education institutions have various statuses: religious organizations, civil companies and social associations. All these entities and their associated higher education institutions declare a commitment to higher education dissemination with high quality of learning outcomes. But, in reality, learning outcomes could be very different from one higher education institution to another.

6.1.2.2: The Lebanese contexts

The parameters that influence the proliferation of the higher education institutions and their branches, and the existence of multi-higher education systems, are derived from religious,

political, developmental or financial aspects. In the last two decades, higher education in Lebanon witnessed considerable growth in the number of the private higher education institutions, but this does not necessary reflect internal qualitative equity nor does it confirm external efficacy and efficiency. In fact, this phenomenon has reflected many aspects of the Lebanese contexts, be it socio-economic, socio-cultural, or socio-political. However, we observe that the extent of the Lebanese University and the creation of some affordable private higher education institutions have opened opportunities to middle- and low-income population to pursue tertiary level of studies/education. Hence, higher education massification trend has resulted in important growth in the education levels of the Lebanese youths, particularly Lebanese girls, in most fields of specializations. Indeed, education is highly required and needed in Lebanon; many categories of population are implicated in the education sectors, making education a big and an important sector of economic, social, and cultural activities. Moreover, the social attitude of the Lebanese population pushes the students to continue their studies to attain high university degrees. In fact, in the absence of natural resources, the Lebanese population leans on human resources capital as one of the major economic aspects.

6.1.2.3: The aspects and indicators of the higher education system in Lebanon

The main aspects and indicators of the higher education system in Lebanon could be summarized as follows:

- i) The gross enrolment ratio (GER) is among the highest ratios in the region (about 40%).
- ii) Higher education opportunities are available for most Baccalaureate graduates; this phenomenon should not always be considered as positive evolution opportunities because, in the last decade, some low-credit-fees higher education institutions did not impose serious academic entrance requirement; in addition, easy exams have made it easier to graduate at the secondary level. These facts do not assure quality of higher education learning.
- iii) Despite the high gross enrollment ratio (GER) , the low ratio of graduate students indicates prolongation of higher education study duration; this could be due to the students' socio-economic situations, wrong pedagogical approach and/or to

students' potential and engagement deficiencies. There are mainly low pedagogical and functional performance of the higher education system and structure, especially, at the Lebanese University. We should note that most graduates seek job opportunities outside Lebanon; this indicates a serious brain drain and a regression of the economic situation.

- iv) Although there is a new legislative text that aims to harmonize some academic aspects (eg. Credit system), there is diversity of the adopted models of reference by the higher education institutions; this has resulted in differences in the administrative and academic process and methodology, and in some differences in the nature and the quality of learning.
- v) There exists a strong correlation between students' socio-economic level and their choice of a university and the quality of the professional (employment) conditions. The interaction of higher education with the labor market and economy is limited; there exists a serious unbalance between the offer and the demand volume (the number of graduates exceed the demand of employees).
- vi) The qualitative promotion of the higher education systems in Lebanon is a slow process due to socio-economic status, socio-political, socio-cultural and the religious structures.
- vii) Performed reform in higher education at high levels is limited; organizational policy of higher education is really absent in spite of some legislative texts that were passed in 1996 and 2014.
- viii) It is safe to conclude that the secondary and higher education systems are in a 'saturation' state, and most secondary education graduates, are enrolled in higher education institutions. Thus, the issue of the Lebanese higher education has passed the assurance of higher education to the assurance of the learning quality in quality assurance improvements and the quality assurance of the graduates of both the secondary and higher education levels. Moreover, great effort in quality assurance should be exerted at the institutional level as well as in program review when considering the new economic context at the national and international levels.

6.1.3: Quality and Quality Assurance in Higher Education

This section recapitulates the key perspectives that resulted in debates about quality and quality assurance in higher education and researcher's experience and analysis.

6.1.3.1: Quality concept definitions

The understanding of the quality concept in higher education has undergone much debate due to the following:

- No fully consensus on the exact objectives of higher education and/or on the part of each objective to be practiced in higher education institutions.
- Difficulties in grasping clear interaction and interrelation between the inputs, the learning process and the learning outcome in higher education.

Hence, multi-vision or meaning of quality and then multi-definitions of quality in higher education have been developed; thus, many identified aspects are considered, namely:

- Quality as excellence or exceptional
- Quality as perfection or consistency
- Quality as transformative
- Quality as value for money
- Quality as fitness for purpose

Moreover, two practice approaches are introduced to the definition of quality in higher education: quality as threshold and quality as enhancement or improvement. Quality in higher education has been also defined as a degree of conformance to a standard-conformance requirement.

Many of the quality definitions are recapitulated by Vlasceanu et al (2007, p. 70) as “a multi-dimensional, multi-level and dynamic concept that relates to the contextual settings of an educational model, to the institutional mission and objectives as well as to the specific standards within a given system, institution, program, or discipline”. It should, as stated by Van Ginkel and Rodrigues Dias (2007, p. 39) “embrace all institution functions and activities, staffing, students, buildings, faculties, equipment, services to the community and academic environments”. Quality is also viewed as stakeholder-relative concept through an evaluative

judgment by him/her, where assessment criteria are to be adapted to contexts and circumstances.

In higher education context, the relativity of quality is supported by the fact that a university can present particularities in their educative, academic and administrative operations and available resources, quality perception, and hence in the resulted priorities. The relativity of the quality means that quality should not be appreciated “only through the prism of standard, but being aware of and supportive of the initiative and innovation that satisfy emerging needs” (Chauvigné, 2007, p. 4).

The definition of quality in higher education has shifted from traditional system where quality is evaluated at institutional scale in terms of inputs and process, to progressive system where quality is defined in terms of outputs and learning outcomes. In fact, the conception of quality as presented is “used to clarify objectives or rationales of quality assurance” (Brockerhaff et al., 2015, p. 4).

6.1.3.2: Quality and quality assurance and mechanisms

The differences in quality concept and dimensions in higher education sector and other industrial or service sectors are discussed and analyzed. In non-educational service sector, the quality level of the service is linked to the physical presence or absence of various features, which is a quality indicator. For example, in the consumable services, the equipment and facilities are sought by the client for their comfort or pleasure; these do not constitute a tool for the services. The educational services, on the other hand, signify a pedagogical action and interaction between instructors and students, in an adequate institutional environment, and within academic and intellectual approaches. In a university, the equipment and facilities are required to permit, within an integrated learning system, the improvement of the teaching and learning processes.

Considering the complexity and the multi-dimensional aspects of the quality concept, there exist internal and external approaches to monitor quality in higher education, with indicators that focus on input or process or outcomes and are concerned with wider institutional quality, academic quality, research level and graduates' employability. A variety of mechanisms,

which refer to process assessment, are involved in practice quality approaches. Evaluation of the quality of learning outcomes is also a part of the educational quality process.

There is a close relationship between quality in higher education and standards issues. Hence, quality assurance model includes setting criteria and standards that provide detailed information on how institutions are to be judged. There exist various standards categories, namely, academic standards, standards of competence, service standards and organizational standards. Effectively, quality in higher education institutions has many dimensions, namely, mission and purposes, governance structure and administrative process, pedagogical and academic activities and outcomes. The dimensions could also be at individual level which implies student's engagement, approach to learning, learning outcome,; and, at organizational level which implies the link between the quality of teaching and learning and institutional characteristics, policies, and culture. Quality in higher education requires substantial institutional commitment to society, to the provision of physical facilities and pedagogical tools and supports, and to the implementation of improvement approaches.

Thus, to assess the quality assurance in higher education institutions, a wide framework of criteria and standards should be developed and complemented by a set of indicators. However, quality assurance and accreditation, which is currently used as a method of quality assurance, cannot be discussed without taking into account the national context of the higher education system.

6.1.4: Quality Assurance Practices

Various quality assurance initiatives and accreditation systems that are active in the higher education sector are presented and discussed. In order to develop a new template/model of quality assurance practice, the national context and the various international, regional, and national initiatives and practices, and previous conceptual quality analysis in this study are taken into consideration. Then, quality assurance dimensions and variables within the learning context are discussed.

6.1.4.1: Worldwide initiatives

Within competitive economic contexts and internationalization and globalization trends of higher education, initiatives of international organizations, particularly those of UNESCO, OECD, WB and GATS/WTO organizations, have focused on quality provision in cross-border higher education and on the existence of external quality assurance and recognition of qualification issues.

Recommendations, good practices and indicators for educational performance are developed; however, many activities focus on trade in educational services and the enhancement of ‘consumer’s’ protection in the higher education field within the context of internationalization trend. They also focus on quality of knowledge generated in universities as a critical competitiveness factor for most economic sectors; and, on the necessity to re-examine the assessment criteria and procedures that the higher education institutions and quality assurance agencies utilize. When comparing programs and qualifications, where the focus should not only be on input and process characteristics, but also on competency accumulation and on the quality of the learning outcomes (Reinalda and Kulesza, 2006; OECD, 2005; OECD, 2008; OECD, 2014-a).

6.1.4.2: International quality assurance and accreditation certification

Particular focus on accreditation of higher education in North America (US and Canada), and European quality assurance systems are discussed; the main characteristics of these approaches and systems of quality assurance could be summarized as follows:

- The methods used in quality assurance approaches include elements mainly used in accreditation systems that operate in most countries.
- In Canada, the quality assurance and control of higher education institutions is strongly supported and incited by the public authorities of regions and by the higher education institutions.

A significant quality assurance mechanism for program review (professional accreditation) is involved; this is considered as the strongest point in the Canadian quality assurance system

- Accreditation is the core of US quality assurance; the accreditation reviews are conducted by independent and non-governmental agencies. Accrediting agencies rely heavily on formal standards and guidelines to assess quality; they conduct reviews and use collected information to make decisions whether to accredit or not (assessment outcome does not include a grade or mark/ration indication). Also, the assessments are conducted through standards developed with a focus on major areas such as curriculum design, administrative good practice, and sufficient available resources. Statistics that show that satisfying performance has been achieved are also required. In program accreditation, standards are structured around the expected abilities of the graduates (competence-based approach) (El- Khawas, 2007). There is an emerging trend to revise the US accreditation system in order to focus explicitly on the assessment of the student's learning outcomes that should be considered as center of quality assurance; and, to establish multiple levels of institutional recognition as per the outcome of an accreditation review (Ewell, 2015) (see Section 5.3.1.2).
- The quality assurance in the EU is highly impacted by the new approaches, challenges and trends; such as, the globalization and internationalization of higher education. Curriculum is reviewed and teaching methods are reformed as to students' centered learning approach and continuous assessment and flexible learning path mechanisms; hence, the Bologna reform focuses more on the students and the learning outcomes. Moreover, it considers that links in the knowledge chain (learning, research, and innovation) are strongly required. The impacts of such reform on the quality assurance in the European higher education area is illustrated by the development of a set of standards and guidelines for quality assurance (ESG) that cover many academic and managerial areas.

6.1.4.3: Quality assurance and standards

Quality as multi-dimensional issue encompasses institutional and developmental quality culture environment where all elements and actors should be engaged in educational enhancement activities. Literature studies and discussions have implied that the relevant dimension is the improvement of the quality of student learning that should be on a par with quality learning outcomes.

Quality in higher education is a relative concept and reveals student educational enhancement gain. Indeed, it is important to distinguish context, or presage dimensions, from effective practical educational quality. The relativity aspect of the quality concept may be also seen in the relativity of the higher education purposes as viewed by ‘customers’ or as reflected by institutional missions. Intellectual behaviour and competency transformation of the students is a relevant judgment of the quality of teaching and learning. Educational effectiveness judgment should focus on evidence of educational gain and the students’ knowledge and skills. Hence, quality standards should encompass a combination of quality criteria that cover many categories of elements or variables that intervene in all steps of its functioning and its development.

Practicing higher education activities is a complex issue that includes managerial aspects and various contextual, intellectual, individual and collective interactions. There are ‘input-presage’ variables such as resources, quality of students and academic staff, and ‘environment-process’ variables such as class size, contact hours, quality of teaching, research environment, curriculum and assessment characteristics, approach to studying, and student support and services. There are also ‘out-product’ variables such as student performance, employability and graduate destination. Moreover, other elements in higher education institutions’ activities could impact the quality of learning, such as governance, research, international cooperation, institution or program labor market interaction.

6.2 Quality Practices: Template/Model of Quality Assurance Assessment:

The various variables and elements of quality and the quality assurance concepts that are presented, discussed and analyzed in this study, combined with lessons learned from international quality assurance practices and the national efforts have been taken into consideration in developing a template/model of quality assurance assessment.

Six areas of quality dimensions are considered in this model, namely

1. Institution's mission, vision and purpose
2. Governance and management
3. Physical facilities and environmental support
4. Educational dimensions and learning outcomes
5. Development and innovation
6. Openness and reputation

Standards, criteria, and indicators are developed for each area. Different coefficients are affected by indicators, and a grade between 0 and 10 is to be attributed, by the assessing team, to each indicator; this grade indicates the percentage of requirement met. Then, an average score is determined for each area and for the institution as a whole. The areas, standards, and indicators that are included in this template/model are not exclusive; they could be adapted to the institution's context or to the assessment purposes. The assessment outcome is represented by a letter level that labels the quality level. The template/model is used to assess the quality assurance in a private Lebanese university (University X); an example of the attained results is given in the following Figures 6.1 and 6.2

- I401: Admission requirement and procedures
- I402: Students Advising
- I403: Academic staff recruitment
- I404: Faculty evaluation
- I405: Academic staff activity requirements
- I406: Social insurance plan for the academic staff
- I407: Litigation case committee for the academic staff
- I408: survey of the all academic staff satisfaction
- I409: Academic programs
- I410: Teaching methodology and learning approaches
- I411: Practical teaching process and delivery style
- I412: Academic activity planning and reporting
- I413: Student learning experience and educational gain
- I414: Student assessment and exams' procedures
- I415: Learning program outcomes and its interaction with the labor market requirements

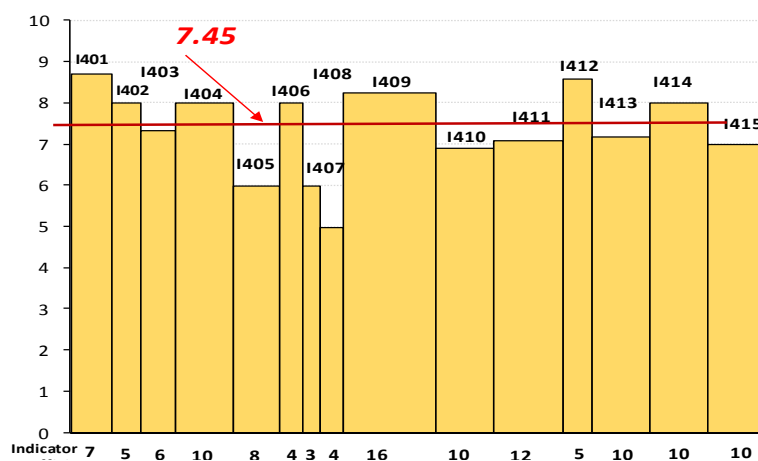
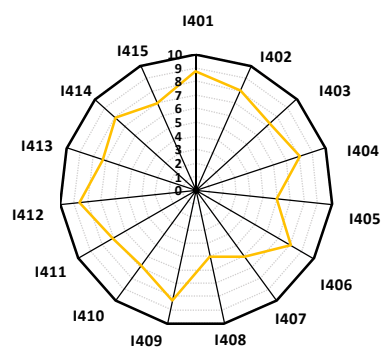


Figure 6.1 Assessment of educational dimensions and learning outcomes

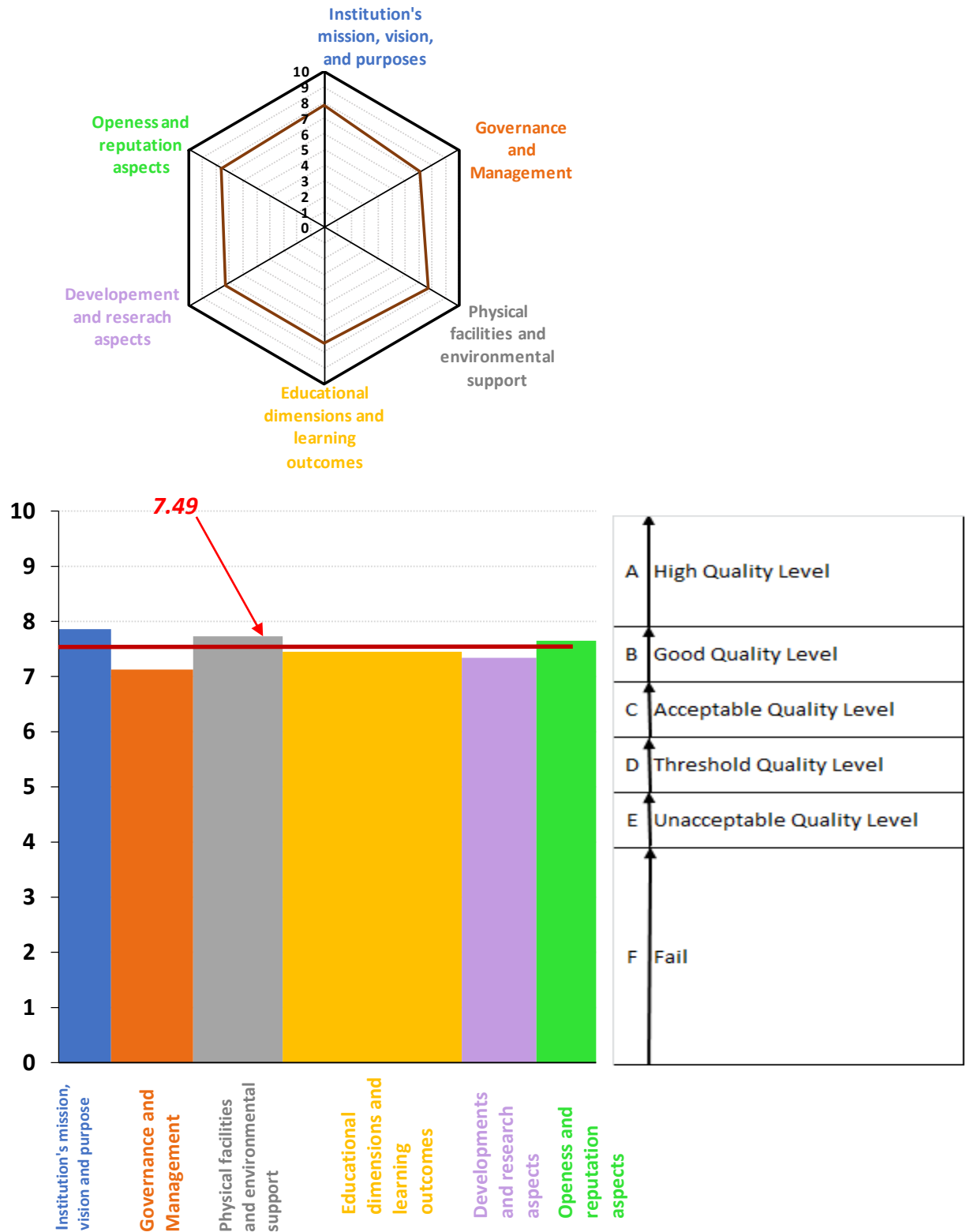


Figure 6.2 Quality level assessment of the six areas and overall university X quality assessment outcome

An assessment group was chosen by the high authority of said university, in coordination with the author, to undertake quality assessment (self-assessment) of the university. Before the assessment operation, the group examined the indicators and planned the different assessment steps; these included visiting the different university unites, meeting with the staff, examining presented evidence, evaluating, and reporting. The results of the assessment analysis have led to the following observations:

- 1- The university has developed consistent mission, vision and purpose that include commitment to social values that foster promotion of social justice and dissemination of higher education by optimizing the rate of education fees and quality learning. However, more effort is needed in order to review the mission, vision and purposes in the context of the new technological progress and globalization and internationalization trends. Moreover, more effort and measures should be undertaken to improve the environment of the democratic and the academic freedom (see Table 5.10 and Figure 5.3).
- 2- The university is governed by regulations which cover overall administrative and academic structures, bodies and functions. There are internal regulations which define job description and flowchart of responsibilities and decision procedures. Moreover, effective information system is implemented whereby all management processes could be followed, and educational outcomes and students' data are safeguarded. However, the accountability procedures and process should be explicitly defined and periodically reviewed. The university should also develop a plan and procedure of qualification and competency improvement which concerns the administrative staff (see Table 5.11 and Figure 5.4).
- 3- The university has ensured the best physical facilities and environment support (including the logistic services) required to attain a good academic and administrative operation. However, the university should take measures to construct more spacious lecture halls and classrooms, and to improve physical access to existing classrooms and library (see Table 5.12 and Figure 5.5).
- 4- The academic dimensions have retained big interest from the university's authority, such as admission requirements, student advisement, academic programs, teaching process and delivery style, student assessment and learning outcomes. However, the

teaching methodology and learning approaches should be clearly developed, specified, reviewed and improved, in consultation with the academic staff and experts in the field of education. Moreover, students' satisfaction survey as to the quality of the learning experience should be given more importance by the academic authority of the university (see Table 5.13 and Figure 5.6).

- 5- The university demonstrates substantial improvement in the development and research aspects; the opportunities of professional development of the academic staff have increased through research activities and the plans to pursue higher degrees, and through the many collaborative affiliation agreements with reputable international universities. However, these agreements should be more activated by the university's authorities (see Table 5.14 and Figure 5.7).
- 6- The university is actively involved in community services initiatives at different levels, be it educational, health, and/or cultural. It demonstrates human and social commitments through learning content and activities (ethics courses, professional certifications...). These practices should be considered as points of strength of the university (see Table 5.14 and Figure 5.7).
- 7- The university is involved in national and international competitions and cultural dissemination activities. Students and faculty exchange ideas and do joined research projects with reputable universities; this could be considered as benchmarking of the university's learning program at international level (see Table 5.14 and Figure 5.7).
- 8- The university has a policy of openness to the labor market. In order to take into consideration the labor market's needs and the required competencies and skills, it has implemented a cooperation system with the enterprise, whereby representatives of employers are members of the Board of Advisors of many disciplines. However, the university should conduct regular follow-up programs as to the learning outcome performance through comprehensive exit exams, employers' and graduates' satisfaction, and destination and employability surveys (see Table 5.15 and Figure 5.8).
- 9- The university has been accredited on some academic programs from recognized international bodies; it seeks accreditation as to the quality of its institutional management system (see Table 5.15 and Figure 5.8).

The assessment results prove that higher education institution (University X) has exerted great efforts to implement a quality system. Hence, it has met most standards and criteria included in the developed template/model. There is some shade in the degree of conformity; the figures that represent histograms of different dimensions and elements within the assessed areas indicate some irregularities as to the quality level reflected in the given grades. In fact, irregularity is more denoted within the same area than that between areas. Indeed, all assessed areas received average marks on good level interval; there are even some indicators or sub-indicators that are judged as acceptable, threshold, or unacceptable quality level, and should be the subject of analysis, correction or improvement. The cumulative contribution of each area level to an overall assessment outcome of each area lead to an overall assessment outcome of the university in the good quality level (between 70% and 80% on a 100% scale), but, the template/model's results should not replace qualitative observations and analysis. This result should not mean complete satisfaction on all university's functioning aspects; continuous improvement should be implemented in order to enhance the resultant quality level.

6.3 Conclusion:

In this study, questions were asked and issues about the quality of the higher education provision are analyzed and discussed; this has led to the proposition of a template/model of quality assessment. The main conclusions extracted from these analyses and discussions and from quality practice studies could be synthesized as follows:

6.3.1: Higher Education Transformation, Knowledge-based Economy and Quality

a) The higher education institutions have become the main engines of knowledge-based economy; they are required to meet various expectations pertaining to the economy as to the skilled human resources. However, the new economic role should not dominate the cultural and human development roles of the higher education institutions should not be screened by this new role. Note that these aspects have been included in the template/model assessment criteria.

- b) The higher education institutions are affected by the internationalization, globalization and market mechanisms trends. Higher education has become a competitive sector where university entrepreneurialism is developed. This environment requires quality assessment mechanism to regulate the education provision and to optimize individual and social benefits of the higher education systems.
- c) The need of knowledge economy and the mass demand for higher education (the higher education institutions serve wide and diverse population), has led to major transformation of the higher education systems; this impacted, in many cases, the academic standards which in turn brought to light quality assurance problems.
- d) As response to financial pressure on governments, higher education massification and a rapid growth in higher education participants resulted; the role of the private higher education sector increased accompanied with rapid growth in new institutions being established and in the number of enrolled students. Within this context, higher education institutions are required to reduce and optimize the cost of normalized learning quality, which generates epistemological discussion of quality, equity, and new learning modes.
- e) Higher education institutions have become the central economic resource of technological society; hence, they had to introduce significant changes to their functions and practices. This change has impacted the teaching methodology and the learning approaches and assessment. There is a shift from declarative knowledge to functional knowledge. Programs and learning approaches are now based on clear understanding of meaningful education outcomes; hence, educators and academicians are to develop standards that assure high quality of the learning outcomes.
- f) There is an evident relationship between the academic profession and the quality of learning; hence, well-qualified and competent academic staff has become the first requirement for the higher education institutions to attain success. Accordingly, more attention is paid to policy development, mechanism and process that enable the teaching staff to attain academic proficiency. But, the requirement aspect is not enough to attain its global mission success; the higher education institutions should also focus on other

aspects, such as managerial, academic aspects (including research), and openness aspects, etc....

g) Advanced scientific and technological research has become among the first requirements of knowledge economy; such research propels higher education institutions, particularly, the research-oriented universities, to focus on new research fields offering interesting industrial applications. The new discovered knowledge has become an exclusive and commercialized product; hence, conceptual and ethical issues are posed by academia which considers knowledge as a public good. In this context, we can also mention the emergence of the publication market, with domination of the commercial aspect of many scientific journals and great publishers.

h) Many bodies have included quality assurance within the ranking scale among the higher education institutions; this ranking, which is essentially based on research production, has become an important factor in the research environment and a prerequisite condition to obtain major grants or undertake major research projects. This consideration could affect small-sized institutions and the academic profession of these institutions' teaching staff. Note that the criterion adopted in ranking, have pushed many higher education institutions, in the developed countries, to form a consortium in order to 'artificially' cumulate research outcomes and HR potential production; they have also resulted in having many higher education institutions in few developed countries dominate the list of the top-ranking institutions.

i) The technological revolution has deeply impacted the pedagogical and managerial modes in higher education; they have become epistemological issue on the status of knowledge per se. There is a global paradigm change that poses questions as to the existing model applied in the traditional higher education systems.

In summary, the economic and societal transformation and the technological evolution have revealed pedagogical and institutional transformation in higher education systems; the meaning and essence of learning conditions and approaches have been affected as well as the role and mission of higher education institutions and subsequently, the quality assurance and accreditation concepts and standards in higher education.

6.3.2: *Quality Concept and Quality Assurance in Higher Education*

a) The understanding of the quality concept in higher education has undergone much debate, which reveal multi-definitions of quality in higher education. The definitions attribute to quality adjectives as follows: Quality in higher education is

- i) multi-dimensional;
- ii) multi-level; and,
- iii) dynamic concept related to the development and continuous improvement process and the creation of organizational quality culture.
- iv) relative concept relate to:
 - Contextual setting of an educational model
 - Institutional mission and objectives
 - Specific standards within a given system
 - Stakeholders perception, evaluation, and judgment

Within the higher education context,

- The context of quality concept implies that assessment should be adapted to context and circumstances.
- The specificity of standards implies that focus is to be given to some quality dimensions related to institution, program, discipline and stakeholders, such as student gain and learning outcomes.

The relativity of quality is supported by the fact that each institution can be particularly represented in its educative, academic, and administrative operation and available resources, quality perception and in the resulted priorities. For example, national specificities, particularly national development needs, are to take into consideration, when developing standards, criteria, and indicators relative to many aspects in the mission, vision and purpose, learning outcomes, research, social commitment, openness and interaction with the labor market. Institutional model and context are also to take into consideration, when developing standard, criteria and indicators relative to governance, student admission, tuition and cost, research activity dimension, full-timer academic staff members...

b) Practicing higher education activities is a complex issue that includes managerial aspects and varied contextual, intellectual, individual and collective interactions. Many variables are involved and interact at input, process and output levels of the learning steps. The quality of learning is also impacted by other elements in higher education institutions activities, as governance, research, international co-operations, interaction with the labor market and the commitment towards the society.

c) To assess the quality in higher education institutions, a wide framework of criteria and standards is developed and is complemented by a set of indicators, which provide detailed information on how institutions are to be judged. Many worldwide initiatives and international bodies have developed quality assurance systems that include elements mainly used in accreditation systems and which focus on academic program review and many academic and managerial areas. However, an accreditation system, which is currently used as a method of quality assurance, should not be adopted as standardized package, without taking into account the national context of the higher education system. Hence, in order to develop a template/model of quality assurance practice, the national and institutional contexts, various international, regional and national initiatives and practices, conceptual analysis, and several quality dimensions and variables are taken into consideration. It was the case when assessment areas were categorized, when standards, criteria and indicators were developed, and when the coefficient was affected to each area and each indicator.

6.3.3: The Proposed Template/Model of Quality Assessment

Many reasons are presented as motives to develop a contextual template/model of quality assessment. In the proposed template/model, six areas of quality dimensions are considered.

1. Institution's mission, vision, and purpose
2. Governance and management
3. Physical facilities and environmental supports
4. Educational dimensions and learning outcomes
5. Development and research
6. Openness and reputation

Standards, criteria, and indicators are developed for each area; different coefficients are affected by indicators; quality scale is established; and the attributed grades should indicate the requirements met.

The assessment leads to average score determination for each area and for the institution as a whole and to histograms of grades presentations. The template/model is used to assess the quality in a Lebanese private university; the results of the assessment show many strong and weak aspects.

6.3.4: Main Characteristics of the Proposed Template/Model of Quality Assurance.

The main characteristics of this template/model are stated herein:

- A package that includes standards, criteria, indicators, and sub-indicators in areas, and given weights (coefficients) of their effects on quality system operations.
- Flexibility in areas, dimensions, and elements chosen to be inspected. The weight (coefficient) affected to each is determined, depending on the higher education institution's context, role and function. The assessment team is not limited by fixed (or coagulated) procedures or evaluation plan.
- Quality scale is adopted and applied in gradual assessment outcome scale, and gradual assessment steps.
- The assessment outcome presentation, which maps the effective quality level of different areas, dimensions and elements affecting the higher education institution's mission, role and function, helps and assists the university board and senior staff in taking adequate measures and decisions to improve the level of quality. Although we should insist on the fact that the quality assessment process itself is a way to change the mindset of the stakeholders, mainly, academic and administrative staff and students, in favor of continuous improvement and the emergence of quality culture.

6.3.5: Applicability and Effectiveness of the Proposed Template/Model

The template/model permits inspection of the quality level of different areas of quality dimension in a higher education institution, including that of managerial and academic scale; the results permit the higher authority of the university to dispose histogram maps that detail the quality level of the different university compounds so as to analyse them and take corrective or improvement measures.

In this template/model, in addition to the aforementioned areas, the evaluation bodies or the higher education institutions themselves, could, if deemed necessary, develop several additional areas; they could also revise elements, dimensions, or coefficient repartition between areas or within an area. Nevertheless, for comparative reasons, it is recommended that the model's/ template's overall structure remain as is.

It became clear from our discussion with the assessment committee that the proposed template/model is not a complicated assessment tool. It guides the assessment team members, within an organized frame, to seek quality level in many dimensions of the higher education institution's operation and function. The committee insisted that this assessment process itself, has positive effects on the environment of cooperation at all levels of staff responsibility and function. The objectivity of the judgment is assured through quantitative evaluation scale and marks, which should be justified by on-site observations and proofs. However, it is evident that improvement of this first version is required, particularly in introducing an implicit scale that sets the frame within which marks are to be determined.

This cost-friendly template/model could be considered as an important, practical tool for the higher education institutions, particularly for the 'young ones' to evaluate the quality level of their different components. It could be considered a national assessment step that precedes the acquisition of the international accreditation. Moreover, it could be extended to develop programs and faculty accreditation.

Due to different reasons, the others cannot obtain authorization to test this template/model in other than this Lebanese private university; it would have been of more importance were this template/model tested in many other private Lebanese universities in order to obtain quality state comparison between them that could help governmental higher education authority to

have effective detailed information on the quality assurance practice and commitment of higher education institutions, and then to introduce regulations, improvements and modifications to successfully manage quality in this sector.

Appendix A: A list of regulations, laws, and decrees relative to the Lebanese University (public higher education sector)

Decree/Law #	Date	Subject
# 6267	October 20, 1951	Creation de “L’Ecole Normale Supérieure” in the Lebanese University; 1 st public higher education institution; amended by legislative Decree # 25, February 6, 1953
# 1883	,1959	Création au sein de L’UL des Facultés des Lettres; des sciences et des droits et de L’Institute de Sociologie
Law #75	December 26, 1967	Organization of the Lebanese University; amended by a legislative decrees: N° 49, June 6, 1977, N° 122, June 30, 1977, N° 132, September 16, 1983, and by Law # 66, March 4, 2009
Law #6	February 23, 1970	Organization of Faculty staff (activity & teaching) in Lebanese University (known as the Full-time Law)
# 14246	April 14, 1970	Regulation of financial functioning in Lebanese University
Law # 12	May 13, 1981	Disposition relative to Lebanese University regulations
# 9305	October 21, 1974	Creation of the Faculty of Engineering (opened in 1980)
# 9306	October 21, 1974	Creation of the Faculty of Agriculture (opened in 1987)
# 900	August 4, 1983	General disposition of Doctorate diploma in the Lebanese University
# 1658	September 5, 1991	Organization of Lebanese University Council
# 14840	June 28, 2005	Adoption of new teaching system in Lebanese University
# 74	February 22, 2007	Creation of three schools of doctorate in Lebanese University; amended by Decree #10128, March 22, 2013
# 2225	June 11, 2009	General rules of semester –system in Lebanese University

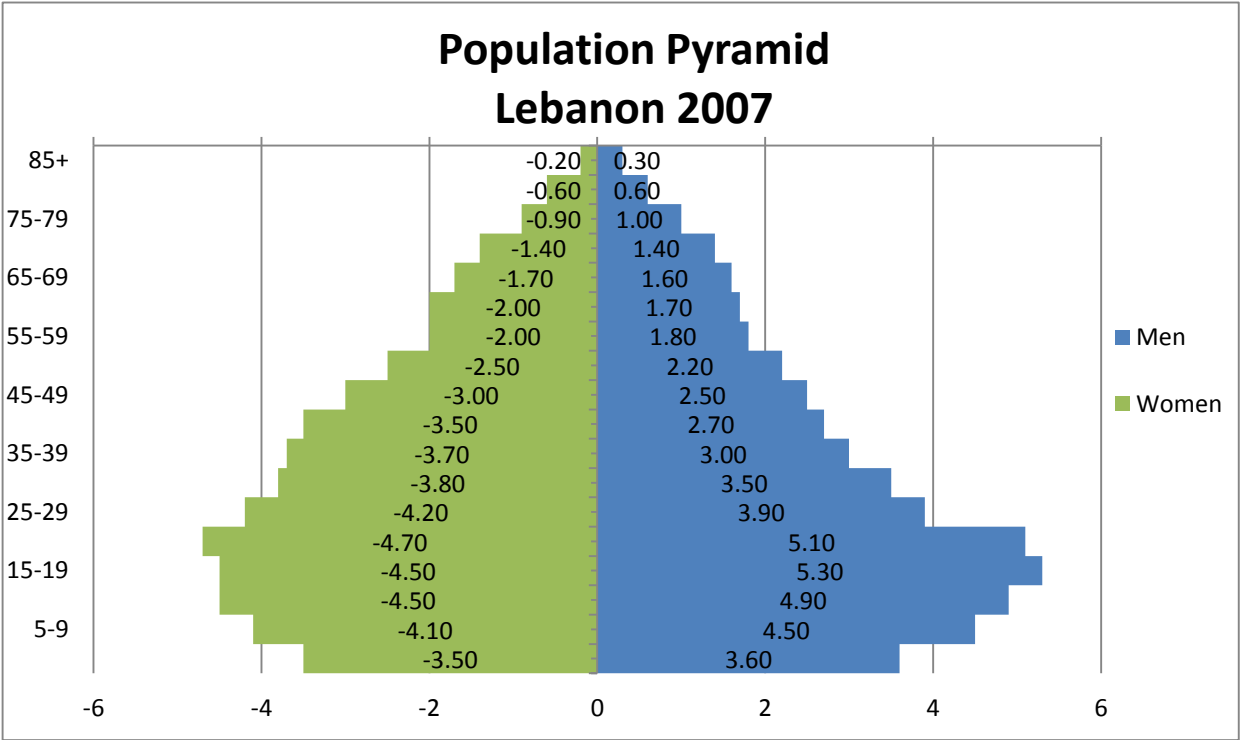
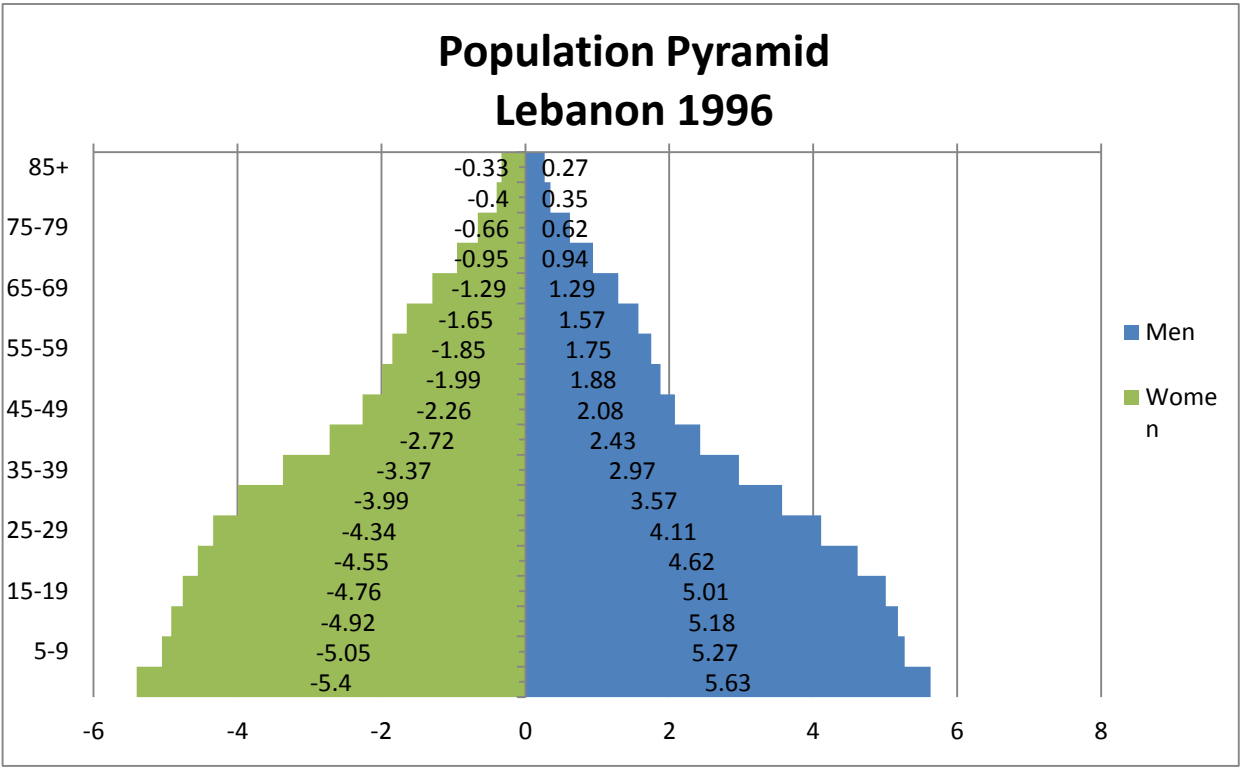
Source: Official Journal and Guide of Regulatory Texts Organizing the Lebanese University; published by the Lebanese university, 2013.

Appendix B: A list of regulatory texts (law, decree, ministerial decisions) relative to private higher education sector in Lebanon

Decree/Law/Decision #	Date	Subject
# 1527	June 15, 1959	Organization of “Colloquium” examination; amended by Decree # 1274, June 3, 1991
Law # (not mentioned)	December 26, 1961	Organization of private higher education sector; amended by Law #36, November 25, 1963
# 9355	April 28, 1962	Organization of Equivalence Committee and main rules to apply in equivalence decision process
# 16676	June 18, 1964	Interior regulation of Higher Education Council
# 2642	September 21, 1965	Organization of law studies in private institutions
Law # 83	December 28, 1967	Creation of Higher Council of Universities (Consultative Council)
Ministerial Decision # 6/20	March 21, 1980	Equivalence of diploma received from private university in Lebanon
Law # 18	July 24, 1981	Enrolment conditions in higher education institutions
# 8864	July 26, 1996	Criteria to create university/institute of technology
# 8869	July 26, 1996	Higher Education Equivalence Committee
# 9274	October 7, 1996	Criteria, condition and specification required to create private higher education institution or create faculty or institute in existing institution
# 2321	February 1, 2000	Equivalence of International Baccalaureate by Lebanese Official Baccalaureate and the criteria to license this learning level in higher education institutions
Law # 19	May 24, 2000	Equivalence of Freshman Diploma by Lebanese Official Baccalaureate
Law # 285	April 30, 2014	General disposition of higher education and organization of private higher education

Source: Official Journal, General Directory of Higher Education – Ministry of Education and Higher Education)

Appendix C:



Appendix D: Gross Enrolment Ratio (GER)

“UNESCO defines GER⁵⁰ as the total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school year.” “It indicates the capacity of the education system to enroll students of a particular age group” (Altbach et al., 2009, p. 193). However, it can also include the over-aged, the under-aged enrolment, and the international students

⁵¹“A high GER generally indicates a high degree of participation, whether the pupils belong to the official age group or not. A GER value approaching or exceeding 100% indicates that a country is, in principle, able to accommodate all its school-age population, but it does not indicate the proportion already enrolled. The achievement of a GER of 100% is therefore a necessary but not sufficient condition for enrolling all eligible children in school. When the GER exceeds 90% for a particular level of education, the aggregate number of places for pupils is approaching the number required for universal access of the official age group. However, this is a meaningful interpretation only if one can expect the under-aged and over-aged enrolment to decline in the future to free places for pupils from the expected age group.” (Ibid)

“GER at each level of education should be based on total enrolment in all types of schools and education institutions, including public, private and all other institutions that provide organized educational programs. In terms of limitations, it is important to note that GER can exceed 100% due to the inclusion of over-aged and under-aged pupils/students because of early or late entrants, and grade repetition. In this case, a rigorous interpretation of GER needs additional information to assess the extent of repetition, late entrants, etc.” (UNESCO Institute for Statistics Glossary, <http://www.uis.unesco.org/glossary/>)

Another indicator that is associated with GER expresses the net enrolment rate (NER), which requires more information about enrolment number of pupils in the limited age group.

Based on available data of *Administration Centrale de la Statistique – 2005*, Abourjeilli (2009, p. 226), considers Lebanese population in 2005 to be about 3.8 million with growth ratio equal to 1.3%. Thus, the 20 – 24 age group population represents 9.9 % of the overall population. The percentage that is considered in this chapter: about 11.8% is effectively not very different from the above considered data if the calculation of the age group population is readjusted to correspond to the 19 – 24 age group. Palestinian and Syrian refugees, which represent more than 10% of the resident population in 2005, must be also taken into account.

⁵⁰ A way to look at participation statistics which is common in international comparative statistics; it is basically “a statistics of convenience which is used because of the ease with which it can be calculated rather than because of its accuracy as a measure of participation” (Usher, 2009, p. 4)

⁵¹ “As a statistics, it is of continuing importance because of the original theory of ‘massification’ articulated by Martin Trow in 1974” (Usher, 2009, p. 4) Following Trow’s conception (2007, p. 244) the Higher Education Systems are classified into three categories as follows:

- Elite System with GERs (0 – 15%)
- Mass System with GERs (16 – 50%)
- Universal System with GERs (over 50%)

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