

Quality Assurance System in Higher Education

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Abstract *In the present era of information technology, issues like quality, access for all, lifelong and continuous learning, incorporation of different sociocultural groups, worldwide competition and seeking of funding highlight the political and institutional educational strategies. The design of the policies and strategies require the cooperation of global associations, the state, foundations and different stakeholders. The evaluation of the quality of education is essential. However, the diversity of educational institutions makes it difficult to establish unified quality assurance processes. The purpose of this article is to propose a system for the evaluation of quality in higher educational institutions.*

Key words Higher education, evaluation, effectiveness, total quality management

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1. Introduction

The improvements and the advancements in education and learning, the changes in economy and in management, the extensive use of data and telecommunications in the globalized environment, create new conditions and open doors for the improvement of personal satisfaction and the people's quality of life. Human resources are an essential element for the survival and advancement of society. Therefore, the redefinition of training and education in order to react to new social needs is obligatory, guaranteeing equivalent chances to all individuals in order to enter the labor market and establish their position.

In order to achieve this equality in the working environment, research should be conducted. Taking into account the outcomes and the findings of the research, strategies must be suggested and designed in regards to the decision-making process, settlement of complaints, internal monitoring, assessment of understudies and assessment of the educational programs by all stakeholders. In order to design processes and strategies that guarantee quality in all aspects of a higher education institution, (i.e. order of entry and acceptance, training of human resources etc.) procedures should be implemented in order to confirm their usefulness.

The assessment of the quality of education is very important. This can be investigated through different types of control, for example, assessment, monitoring and reporting. However, given the differing characteristics of educational institutions it is hard to establish unified quality assurance processes. The existing literature revealed that in higher education, quality is established by adopting the Total Quality Management framework (TQM).

The purpose of this research is to contribute in the development of a standard system for the evaluation of higher educational institutions. However, it goes without saying that this framework can and should be used in every college, with the suitable alterations according to their needs and special features.

2. Literature review

2.1. TQM in Higher Education

The meaning of educational quality changes according to the stakeholders and their perspective. For example, for funding agencies quality is measured by the performance of the investment. For the understudies, quality is related to the likelihood of acquiring an advantage and developing their skills for

future employment. Additionally, for the academic and administrative staff, quality implies that they can do their work with recognition and appreciation.

Miles and Snow (1984) believe that an organizational change can be used only if the individuals embrace the change. Senge (1990) argues that the TQM ought not to concentrate only on understudies, but also on the teaching and administrative staff. As indicated by Lewis and Smith (1994) appreciation of human resources included the staff of the educational organization and the understudies, creating an environment of incentives for TQM. Al Sadi (2002) in a research at the Open University of Jordan reported that the integration and cooperation between the stakeholders is a fundamental variable in the effectiveness and adequacy of teaching methods and tools. Gallagher and Smith (2002) whose research took place in American Universities argued that for adults, transformative learning and the improvement of critical thinking need to become the cornerstones in order to shape the TQM in the educational process of human resources advancement. These cornerstones respond to consumer loyalty, improvement in the analysis of facts and respect for individuals.

Cruikshank (2003) states that the principals of TQM in higher education and their implementation are essential in order to address the needs of the social associates, employers' bodies, managers' bodies and the contributors. One of the foundations of quality is devotion and it requires considerable authoritative change. Konidari and Abernot (2006) stated that the implementation of the TQM framework in education requires major organizational changes from the educators. Eagle and Brennan (2007) present the fundamental standards of TQM in higher education, they believe that they satisfy the customers (understudies), they urge employees to be responsible for the quality of their work and they promote feedback. Continuous improvement is a typical objective of all stakeholders included in the educational procedure. The management and dissemination of data and learning about the quality of service which is provided to customers (understudies) and additionally to all partners is the first step to enhance the effectiveness and performance.

Gao Yan (2007) in his research concluded that the usage of TQM has the potential to set up a system for qualitative feedback and assessment to enhance the teaching methods in accordance with the principals of adult training.

The principals of TQM applied in an educational institution of higher education for the development of human resources, should be implemented in the classroom. More particularly these principals include:

- a. Identification of gaps or overlaps (i.e. sufficiency and experiential exercises).
- b. Detailed description of the educational environment (infrastructure, timetable).
- c. Elimination of overlaps and filling the gaps by creating educational activities, including the

previously stated principals.

This model requires continuous feedback from the understudies as to alter both the content and the processes of the system as indicated by the collected comments.

On the other hand, the opponents of this perspective (Morley 2001) argue that the implementation of such a methodology prompts the degradation of higher education and it damages the relationship of teachers- learners.

It is valuable to adopt an approach which combines the two perspectives in order to reap the fruits regarding the orientation to the complainant, but also rejecting the simplistic sense (Eagle and Brennan, 2007). According to the above, we come to the conclusion that the critical points related to the TQM are:

- TQM and its principals should be adopted by everyone.
- The satisfaction of every potential "customer".
- The organizational changes must occur in all aspects of the educational organization.
- Establishment of continuous feedback.
- The administration of human resources should focus on the development and acknowledgement

of the staff's work.

The philosophy of higher education in combination with the principals of the TQM creates an effective educational tool. The implementation of TQM improves the learning procedures and highlights the collaborative learning. Higher education should focus on progressive courses that enhance the critical thinking of individuals in order for them to face future issues (Boyd and Associates, 1980). Learning has

been defined in different ways (Merriam and Caffarella, 1991) but all researchers agree that it includes the change of attitudes and behaviors.

The likeness between the TQM and the Higher Education can be summed up to:

- Acceptance of the value and skills of every understudy (higher education) or worker (TQM).
- Interested parts are considered as “clients”.
- Both make changes that focus on improving the system.
- Decentralization in decision-making, as the power is shared.
- Pursuing change through standard and systematic procedures intended to improve all stakeholders.

stakeholders.

- Focus on critical thinking and problem solving both at individual and collective level.
- Continuous improvement through the development of lifelong learning.

The implementation of constant improvement is crucial in TQM: client driven systems, customer centric methods, nonstop development, continuous innovation, quality design in products and services, change always and everywhere, secure access to the workplace, persistent utilization of time etc. (Bowles and Hammond, 1991).

Venkantraman (2006) values the importance of creating a TQM system that comprises of five components in order to meet the particularities and needs of higher education. These components are:

- a. Establishment of partnership between all stakeholders.
- b. Focus on satisfying the desires and expectations of understudies and all stakeholders.
- c. Training focused on innovation management for continuous change and improvement.
- d. Creating bridges between internal and external partners.
- e. Management of human resources must develop, respect and reward staff so it is adjusted to the objectives of the educational institution.

objectives of the educational institution.

Bierema (1996) concluded in his research that the use of TQM classroom is served by:

- Abilities and skills transferred and enhanced by the trainers.
- Knowledge of the content.
- Active learning to increase participation and cooperation of understudies.
- Evaluation and continuous feedback.
- The concern towards the improvement of the learning process and the understudies.

Another factor to consider for the evaluation in higher education is the duration of studies and certification. The duration varies from a year to 16-17 months, shown by a telephone survey conducted in 30 American and English institutions (Thonhauser, 2008). Duration is not influenced by the type and size of the institution, the expenses, the definition of the product and the client. Furthermore, it was found that time diminishes when the educators have planning, organization and quality management, if the consultation and training of staff is an internal procedure and the administration supports the implementation of TQM. Every one of these perceptions highlights that ISO 9000 cannot be a panacea for every educational organization. In spite of developing concern, the literature review (Thonhauser, 2008) shows that the standard ISO 9000 has inclusive application in both public and private institutions.

Guaranteeing a base level of quality for higher education in Greece has been assigned to the Quality Assurance Agency in Academic Education. Its purpose is to support higher education institutions by creating procedures and techniques to improve the quality of work, ensuring straightforwardness of strategies, updating the State and institutions for contemporary international improvements and trends in the field of education and by the advancement of research on significant issues. The Agency utilizes and assesses particular information from the operation of educational institutions, for example, the quality of curricula, teaching methods and techniques, research and other services. However, it does not propose methodologies and tools in order to improve the universities' departments.

3. Purpose of the proposal and methodology

The process to guarantee the quality in education needs suitable organizational changes in the organization's operation in order to meet particular necessities and requirements in making and implementing decisions. Furthermore, it must have specific purpose in order to monitor the procedures, and support and utilize the human resources properly. Feedback is essential and the satisfaction of all

stakeholders must be a critical objective. Therefore, it is considered necessary to recognize every critical point in the implementation of a system for the evaluation of undergraduate/postgraduate/doctoral studies – in order to ensure the quality and effectiveness of education. Some of these points are:

- a. Understudies: advantage from high quality academic education and administrative services, improvement of professional and personal skills with eyes to the labor market.
- b. Employers and businesses: Evaluation of learners according to their needs.
- c. Employees in educational organization (educational, research and administrative staff): Respect and recognition of their work and contribution.
- d. Funding organizations: Successful venture/investment.
- e. Authorities/State: Empowerment of social cohesion.

An implementation of a framework which stems from these points and principals will provide a systematic approach in educational, research and administrative operation of an educational institution of higher education.

A multi-methodological approach (both quantitative and qualitative research) is suggested for the design of the system. Qualitative research can record the decisions' implementation at the whole organizational structure of the university; it can determine the different operations and services, the quality of the results and record the fulfillment of every one of those included in the instructive procedure.

The interview is chosen as a research tool because personal and social experiences, observations, perceptions, attitudes, thoughts, ideas and behaviors will be explored in order to recognize every single aspect in the implementation of a system for evaluation and focus on the quality and effectiveness of the educational institution (Kvale, 1996; Cohen *et al.*, 2008). Structured interview is chosen in order to prevent the collection and processing of large amounts of information.

Questionnaires will be distributed to all focus groups. The questionnaires will include semi-structured questions and their succession will explore a number of aspects. The format will be open-ended in order for the participants to add comments if they think that they are necessary.

This sort of survey is used when rich individual information is required utilizing a more qualitative verbal methodology (Cohen *et al.*, 2008).

3.1. Sample

The sample size depends on the degree of heterogeneity which it represents (Bailey 1978). Taking into account a representative set of the common features of the wider population, it will be separated into the following groups:

- Students.
- Educators/Researchers.
- Administrative staff.
- Professional and social organizations.

The sampling strategy is random selection and in all the groups the randomization will be guaranteed by the draw's procedure. Prior to the draw all the parties will be requested whether they want to participate in the research.

3.2. Axis of the Research

The axis around which the questions of interviews and questionnaires are created and developed are:

1st Curriculum

In this stage, all groups of the sample (students, educators/researchers, administrative staff, professional and social organizations) will be included. The questions will attempt to:

- Evaluate the suitability of the staff in connection to the curriculum.
- Reflect the adequacy of existing infrastructure and resources.
- Determine whether the curriculum is consistent with the institution's goals and current social and professional prerequisites.
- Determine whether the perspectives of different stakeholders have been considered in setting up the curriculum.

- Determine the level of the curriculum's cohesion.
- Follow up the effectiveness of graduates.

2nd Research

This stage will include two groups of the sample (students, educators/researchers). The questions will attempt to:

- Record the possibility for collaboration of the university with the local community and the social partners.
- Evaluate the level of degree of scientific activity (articles, reports, references etc.).
- Record the interest and participation in research programs.
- Evaluate the hygiene, wellbeing and safety at work, teaching and research.
- Test and monitor the effectiveness of the research project (i.e. participation in national and global projects, counseling presence in public and private institutions etc.).
- Establish the degree of institutionalized cooperation with foreign educational institutions.
- Record the quantity of publications in refereed conferences or journals.
- Determine the research objectives at the departmental level.

3rd Teaching

This stage will include two groups of the sample (students, administrative staff). The questions will attempt to:

- Record the ratio of educators/students.
- Record the level of satisfaction.
- Determine whether teaching strategies integrate and follow the principles of adult education.
- Evaluate the suitability and accessibility of teaching material (level of integration of recent scientific breakthroughs and professional practices).
- Reveal the level of cooperation and participation between educators - understudies and how this relationship evolves during the duration of the studies and the program.
- Assess the adequacy of intermittent assessment, feedback and monitoring of student performance.
- Determine the versatility of academic staff and understudies.
- Establish the degree of integration of research's results in education and courses.
- Capture the level of involvement of undergraduate students in research and fieldwork.
- Make a quantitative and qualitative evaluation of dissertations.

4th Other Services

This stage will include two groups of the sample (students, educators/researchers, administrative staff). The questions will attempt to:

- Reflect the level of organization in the registry and secretary section, in the implementation of the Board's decisions and in guiding the students.
- Determine if there is asynchronous interactive distance learning and if it is used appropriately (platform functionality, utilization of understudies and academic staff).
- Evaluate the adequacy of IT infrastructure (hardware, software, network access etc.).
- Determine the library's usefulness (loaning processes, connection to different libraries, electronic journals etc.).
- Record the activities with educational, social, administrative bodies and financial/ productive organizations and businesses, which raise public awareness on issues related to the objectives of the department.

4. Conclusions

Designing and implementing a framework which evaluates the quality of higher education is essential as, worldwide, the educational programs are created in order to improve the employment opportunities

and economic integration in the society. The way to achieve this reality is to focus on education and improve its quality. A unified framework would help towards this direction and it could become a useful tool for all stakeholders regarding the field of education and its extensions to all aspects of life.

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