Athens Institute for Education and Research
ATINER

ATINER's Conference Paper Series
MDT2020-2718

The Implementation of the Quality Process in Higher Education: A Critical Approach

Said Al Ghawiel
PhD Student
Lille University
France

An Introduction to
ATINER's Conference Paper Series

Conference papers are research/policy papers written and presented by academics at one of ATINER's academic events. ATINER's association started to publish this conference paper series in 2012. All published conference papers go through an initial peer review aiming at disseminating and improving the ideas expressed in each work. Authors welcome comments.

Dr. Gregory T. Papanikos
President
Athens Institute for Education and Research

The Implementation of the Quality Process in Higher Education: A Critical Approach

Said Al Ghawiel

Abstract

The education system is currently an economic concern, with regard to the efficiency of the system. From this point of view, the education system is seen as a societal project that has to meet a range of both financial and scientific obligations. On the one hand, designing an education system is a task for which pedagogical and scientific specialists are responsible. On the other hand, the involvement of various socio-economic actors has become essential insofar as it encourages carrying out the fairest possible evaluation of the education system's performance. Several researchers, including Golberg and Cole (2002), specify that "more recently, education leaders have begun to organize the potential for Total Quality Management applied to educational organization". Research into this subject has shown the level of interest in addressing the issue of the efficiency of the education system. These studies have, in particular, highlighted the benefits of a quality assurance approach in higher education. However, other researchers emphasise the limitations of this approach to the extent that it can hinder the personal development of individuals.

Keywords: *quality assurance, higher education, university management, educational organizations, efficiency, assessment*

Contemporary Developments in the Concept of Quality

The quality assurance approach was initially developed in industrial trade sectors. This concept was first applied in the world of business, economics and production. Its varied uses mean that "the notion of quality appears abstract and its sense differs depending on the political, sociological or economic context" (Alazzaoui, 2005: p. 13). This concept has actually undergone several evolutions since the start of the 20th century, which entails a wide range of definitions. It is worth noting that the best-known authors on an academic level are Crosby, Juran, Ishikawa and Deming, who are all engineers by training regarding quality assurance. Therefore, it can be seen that the concept of quality was first discovered in the field of engineering sciences. Its subsequent use in management sciences made it possible to define its epistemological aspects and to facilitate its use in social sciences and, more specifically, in education sciences. However, understanding quality in the context of education and teaching requires examining its definition in engineering sciences and questioning how applicable it is in the context of human and social sciences. Several meanings can be elaborated and chosen depending on the fields of research and their authors. Crosby (1979) defined quality as being "conformance to requirements". This definition indicates that quality is thus thought of according to objective standards and the principle of least waste. As for him, Juran et al. (1988) categorises quality as being "Quality is fitness for use". According to Juran, quality is the focus of the producer's work with a view to satisfying client wishes. For Ishikawa (1985), quality is therefore client satisfaction. In addition, the ultimate objective of quality would be to satisfy client requirements. According to Deming (1986), "quality is a process of continuous quality development". From this perspective, students enrolled at a university or an institution of higher education, are considered "clients". Students can be thought of as such because they pay fees in order to receive an education. As a result, they expect a certain level of quality in the services provided by the university, seen as the service provider. However, there are two very different models that contrast with regard to the aims of education and quality. One is focused on a pragmatic approach of connecting economic needs and educational programmes and postulates that the education system is strongly dependent on the political and economic sphere. In this first model, the logic of quality and evaluation leads to strong coherence between the two. The other, based on a very different philosophical stance, suggests that education is free from approaches to the commodification of education with a view to encouraging the development of individuals to ultimately achieve the ideal type of citizen advocated by the Age of Enlightenment. In this second case, the balance of approaches recommending quality becomes more problematic, as the indicators that are normally used generally refer to the first model. On this basis, to what extent can we consider a quality assurance approach that makes it possible to examine this contrast dialectically?

Foundations and Principles of "Total Quality Management"

The philosophy of total quality management is based on a collection of basic principles that are believed to help an organisation improve its development. Several authors have tried to determine the principles of quality management. Table 1 shows the development stages of total quality management. These are important steps, but a debate surrounding these appears to have started in 1990. The concept of total quality has evolved in line with the trend towards a quality approach that gradually established. This movement can be divided into eight historical periods. It began with an initial expression of interest and continued through to the stage of strategic quality management, which nowadays represents the advanced phase of global quality management. In this respect, Abed, Mayeur, and Ourak (2013, p. 211) maintain that "although the concept of quality evolved significantly in the 1950s from quality control to quality management, and more particularly in the industrial sector, it was at the end of the 1990s that the concept began to develop in a university and research environment".

Table 1. *The Chronology of Quality Development*

Pre-1900	Quality as an integral element of craftsmanship
1900-1920	Quality control by foremen
1920-1940	Inspection-based quality control
1940-1960	Statistical process control
1960-1980	Quality assurance total quality control (the quality department)
1980-1990	Total Quality Management (TQM)
1990-2000	TQM, the culture of continuous improvement
2000-present	Organization-wide Quality Management

Source: based on Sallis (2002, p. 9).

According to Eggins (2014) and Sallis (2002), the general principles of quality as defined by Deming (1986), Crosby (1979) and Juran et al. (1988), can be summarised in Table 2.

Table 2. *Principles of Total Quality*

	Principle of quality according to Deming	Principle of quality according to Crosby	Principle of quality according to Juran
1	Creating a goal of continuous improvement	Involving management	Identifying who the clients are
2	Adopting a new philosophy	Quality improvement teams	Determining the needs of these clients
3	Retrospectively ending dependence on inspection	Measuring quality	Translating these needs into our language
4	Bringing an end to the practice of purchasing based solely on prices	Evaluating the cost of non-quality	Developing a product capable of responding to these needs
5	Constantly and continuously improving	Being aware of quality requirements	Optimising product features to respond to both our needs and those of the clients
6	Establishing ongoing training	Corrective actions	Developing a process capable of producing the product

7	Encouraging leadership	"Zero defect" planning	Optimising the process
8	Eradicating doubt	Training managers and supervisors	Demonstrating that the process can produce the product in optimal working conditions
9	Doing away with barriers between departments	"Zero defects" day	Transferring the process to operations
10	Eliminating slogans, exhortations and objectives for staff	Defining objectives	
11	Eliminating management by objectives	Eliminating the causes of errors	
12	Encouraging staff to take pride in their work	Recognition	
13	Establishing a dynamic programme of staff education and improvement	Quality committee	
14	Everyone is responsible for contributing to change	Start again and always improve	

Source: based on Sallis (2002).

Total Quality Management was regarded as mostly effective and it developed in various original ways. As early as the middle of the last century, a series of international awards were offered to successful organizations and employees who innovated successfully in the field of quality. These awards played an important role in the promotion of that new philosophy and TQM was constantly growing in managerial organizations.

Table 3 shows the types of quality according to different models but is primarily based on the *European Foundation for Quality Management* (EFQM) model of excellence, which we are going to expand on.

Table 3. *Top Quality Management Awards*

	JAPANESE QUALITY AWARD (Deming Prize) 1950	**AMERICAN QUALITY AWARD (M. Baldrige Award) 1987**	**EUROPEAN QUALITY (AWARD EFQM) 1992**
Year of establishment Subject of evaluation	Policy operations education information management analyzing standardization statistical methods involvement of quality circles.	Role of the managerial staff system performance measurement and customer satisfaction-oriented management employee satisfaction and involvement results.	Leadership policy and strategy employees partnerships and resources processes results in relation to customers employees and the community key results of operation.

*Source:*Eggins (2014, pp. 60-61).

These general principles of quality are supposedly applicable to all areas and sectors of economic development. However, Sallis (2002, p. 37) adapts the application of these general principles in education through a collection of principles. This collection is divided into two categories (Tamimi, 2005, cited by

Kahtani and Al Muhailbi, 2013): the first category concerns principles to follow and the second category concerns those to avoid. The first category consists of seven main principles:

- ✓ Setting a constant objective, namely continuous improvement
- ✓ Adopting a new philosophy in view of access to TQM (Total Quality Management)
- ✓ Ongoing and constant development of production systems and services
- ✓ Training
- ✓ Leadership
- ✓ Developing a dynamic and focused programme for education and training
- ✓ Developing a structure, department or team responsible for implementing the approach

The second category includes points to avoid, as follows:

- ✓ Focusing on the principle of inspection as a method of evaluating quality
- ✓ Limiting evaluation to a single parameter (cost)
- ✓ Being a "prisoner of fear"
- ✓ Creating barriers between departments and teams
- ✓ Increasing discussions, recommendations and warnings
- ✓ Establishing working standards based on quantitative aspects
- ✓ Preventing collaborators from showing the quality of their work by increasing obstacles
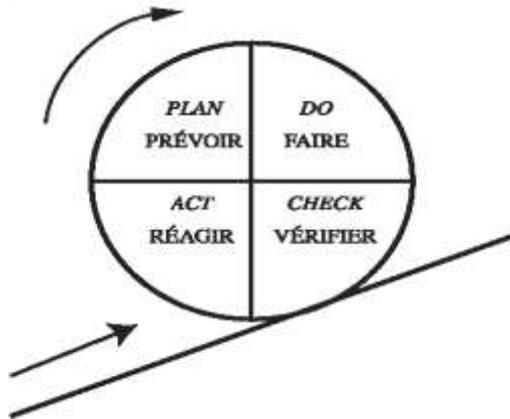
Quality Tools

Several tools can be used to determine quality:

The Deming Cycle (PDCA): applying the principle of continuous improvement

PDCA (see Figure 1) is a continuous improvement or problem-solving process, which is illustrated by the Deming cycle. The different stages of applying the continuous improvement process according to Deming (1986). The Deming cycle explains that quality improvement is a process based on a philosophical approach considering plan, do, check and action as a circular model. In fact, plan consists of properly defining the problem to identify solutions; this first step is completed by a plan of actions to be taken including resources and actors. The second step consists in applying the plan by implementing the actions defined above. The third step, involves checking the effectiveness of the actions taken. This can be done through measurements, indicators and observations. A deadline can be defined depending on the nature of the action. Modifications should be carried out, by returning to stage P if necessary, when actions appear to be ineffective. The last step, but not the

least, helps to finalise the process to ensure the sustainability of results from the actions taken. In most cases, this involves drawing up or updating documents, such as procedures, processes, good practice guides and forms. It is also a case of identifying improvements and returning to stage P to implement them.

Figure 1. *PDCA*

Source: Based on Weill (2009).

Quality Circles as Communication Tools

According to Grauvogel (1989, p. 24), "A quality circle is a normal working group that meets regularly with the support of a team leader to look for and analyse work-related problems and then implement solutions and monitor the results". The quality circle is a total quality management tool that aims:

- To share information
- To improve the quality of work
- To encourage the understanding of objectives and mutual recognition

The quality circle functions under specific conditions:

- A real desire for improvement and therefore a sense of responsibilities
- A trusting work environment and therefore transparency in the actions taken
- Demonstration of critical thinking

The quality circle can take several forms. It can be:

- Specific to a work unit or across multiple areas
- Permanent or temporary
- Initiated by line management

In this way, quality circles appear to be indispensable managerial tools for achieving the quality objectives set by the organization. However, the Deming cycle is designed as a high-quality tool thanks to the range of functionalities it offers. In the same vein, Sokovic et al. (2010) point out that "The PDCA cycle (Deming's cycle) is more than just a quality tool. The PDCA cycle is a fundamental concept of continuous improvement processes embedded in the organization's culture. It is simple to understand and should be used by a large number of people in the company. The most important aspect of PDCA lies in the "act" stage after the completion of a project when the cycle starts again for the further improvement" (Sokovic et al., 2010, p. 483).

Thus, the quality circles and the specific Deming's cycle are performance management implements. In fact, quality circles solve problems linked to quality at work, productivity, cost reduction, safety, etc. Consequently, overall performance naturally improves by leading to tangible and intangible benefits for the entire organization (Cracker, Charney, & Chiu, 1986).

In that respect, Bernasconi (1994, p. 2) adds that "Quality brings a positive vision of human beings that can be summarised in two observations:

- Total quality is the opposite of scientific management: here, the worker at his workplace is considered as a human being with a mind and the capacity to come up with improvements, as well as being logical and skilled.
- Total quality is a management method based on the fundamental principles of confidence in the human being and faith in an individual's ongoing development process".

If this performance-enhancing approach works so well in managerial organisations, then it can be fully adapted to educational structures and in particular to higher education. Sénéchal et al. (2013) totally follow this promising perspective: "in France, this approach is supposed to be applied at all levels of higher education governance, and in particular at the strategic level insured by the main director for higher education and vocational integration (DGESIP)" (Sénéchal et al., 2013).

Quality in Higher Education

The Concept of Quality

The concept of quality, as it was explained during the UNESCO Conference on Education held in October 1998, is defined as follows: "Quality in higher education is a multidimensional concept, which should embrace all its functions, and activities: teaching and academic programmes, research and scholarship, staffing, students, buildings, facilities, equipment, services to the community and the academic environment. Internal self-evaluation and external review, conducted openly by independent specialists, if possible with international expertise, are vital for enhancing quality" (Unesco, 1998, pp. 7-8). Some fifteen

years later, Duykaerts and Malmedy (2014, p. 143) refer more or less to the same definition, providing a few additional elements: "Quality in education is a multidimensional concept, which must embody all functions and activities of teaching, such as academic and teaching programmes, scientific research, students, buildings, facilities and services, providing social services, internal self-assessment and defining standards in comparison with the quality adopted on a global level". In addition, "the improvement in the quality of teaching and research becomes an increasingly large concern for all actors involved, especially after the efforts made on a quantitative level to develop the offer and diversify training plans". This is because the human being is actually always looking for new forms of training and, above all, high-quality training.

In 1993, Harvey and Green (cited by Harvey and Mason, 1995) put forward five notions of quality, which are still largely accepted, but have, however, been revisited several times:

- ✓ Quality as perfection sees quality as a consistent or flawless outcome.
- ✓ Quality as fitness for purpose sees quality in terms of fulfilling a customer's requirements, needs or desires.
- ✓ Quality as value for money sees quality in terms of return on investment.
- ✓ Quality as transformation is a classic notion of quality that sees it in terms of change from one state to another.
- ✓ Quality issues in higher education are also closely related to issues of standards.

However, these five definitions of quality risk confining education to a system of supply and demand and forgetting that human beings are people. This means that it is highly important to examine the implementation of this quality.

This is all the more true as States invest to finance universities, which requires a strong expectation of a "return on investment" because the funding is public and comes from taxpayers' taxes. The State therefore has the will to control spending because it is accountable to its citizens. From this perspective, the adoption of a quality approach may be seen as a means of measuring the performance of the education system and controlling the use of the budget allocated.

The questions that then arise are the following: Is the quality approach still a performance tool or is it becoming a control tool? What about the applicability of this approach in universities today?

Implementing Quality in Higher Education

According to many researchers, applying a system of quality assurance in higher education institutions stems from the need to address several challenges, both on a national and global level. According to Lapostolle and Mabilon-Bonfils, (2018, p. 59), "The contemporary economic approach to education developed over the course of the 1950s. Although there is a scientific consensus on the decisive role of training and education in the development process, the economy of education, a discipline that has recently made contributions to education sciences,

analyses in part the macroeconomic relationship between economics and education, as well as individual decision-making elements with regard to education and training".

However, quality assurance should not only respond to political and economic challenges, at the risk of "dehumanising" education. For Croché (2012, p. 96), "from the 1980s, accountability procedures were implemented with increasingly considerable concern for the quality of teaching systems. The growing accessibility of higher education and the increase in the number of universities and international exchanges has led to the need to develop quality assurance mechanisms". Furthermore, for Gorga (2012, p. 219), "quality assurance has become a tool of action in its own right, used both by universities and by political leaders". According to Grauvogel (1989, p. 18), "while certainly crucial, the economic aspect should not be the only one to be taken into account when restimulating competitiveness by improving quality". Grauvogel also adds that "the human factor is therefore an important aspect in improving quality".

This human factor is essential because this is what determines the quality of education so as not to be confined to an entrepreneurial system of supply and demand. Pierronnet (2018, p.37) highlights that "these institutional and management entrepreneurs in particularly play a proactive role in adopting practices that lead to universities being deemed 'entrepreneurial' from a perspective of their strategic goals, as well as their means of management".

However, quality cannot be restricted to a single field of action because it is a multidisciplinary concept. In addition, according to Eggins (2014, p. 167), "quality is essentially a multi-faceted concept because of the many sources, centres and stakeholders involved who are attempting to define 'the' illusionary quality. Secondly, quality is often used for several logical reasons, although responsibility has the upper hand over improvement. Thirdly, the self-determination of responsibility is largely a consequence of the change in the relationship between institutions of higher education and the government, as the institutions are gaining increased autonomy in some respects, while the government maintains a distant approach in which external evaluations have become important tools featured in the implied hypothesis that an "evaluating state" will produce higher quality higher education".

According to De Gaulejac (2009, p. 85), "the ideal of quality and the means of achieving it given in a number of writings form a 'magic' formula: Quality = Excellence = Success = Progress = Performance = Commitment = Satisfying needs = Empowerment = Recognition = Quality etc. These various terms are used repeatedly as if their meaning is obvious. These terms form a circular discourse due to their interlinked definitions. Each term is defined in reference to others and vice-versa. Examining the main 'key concepts' is therefore useful for understanding the challenges of the approach". Furthermore, according to Gorga (2012, p. 223), the rationale for introducing the quality assurance approach differs depending on the country. Therefore, according to Gorga, "while actions in the United States are initiated for the purpose of quality by the universities themselves in a bid to protect themselves in an increasingly competitive environment, in Europe, it is the national governments who drive the movement in higher

education. In fact, in the 1980s in Western Europe, the results of the democratisation of higher education were emphasised all the more because they were accompanied by socio-economic developments that required an increasingly educated workforce. The number of students is rising faster than public budgets". According to Gorga (2012, pp. 228-229), "there are advantages to using quality in higher education as its use is an analytical structure that refers to an activity focused in a rational manner and that is used as an interpretive framework for actors' conduct. These are 'structures of meaning'".

The same author shows in Table 5 that the specific nature of each of these uses is created by particular combinations of actors, the aspects of higher education that are prioritised and the preferred methods for testing quality.

Table 5. *Using Quality Standards in Higher Education*

Type of Use	Actors	Focus	Preferred method	Purpose
Academic quality	University lecturers	Academic work (teaching and research)	Peer assessment	Cognitive
Teaching quality	University lecturers, specialists in education sciences	Teaching and learning	Pedagogical analysis	
Political quality	State and regional actors	Operation of university systems	Accreditation, academic audit	Strategic
Management quality	Higher education institutions	Institutional operation of the institutions	Evaluation audit	
Quality of socio-economic relevance	Graduates	Teaching and learning	Graduate surveys (aimed at programmes)	Legitimising
Consumerist quality	Students	Teaching and learning	Satisfaction survey (aimed at courses)	

Source: Based on Gorga (2012).

According to Eggins (2014, p. 59), "In Europe, the major award is the EFQM Award which both companies and universities compete for. It can be argued that this may be the direction for the improvement of quality management in higher education institutions". In addition, Eggins explains that the aim of the EFQM model is this to ensure so-called "organisational excellence" (Eggins, 2014, pp. 60-61). It is based on eight fundamental principles presented in Table 6. In order to implement quality in higher education, various concepts have been defined and described in Table 6.

Table 6. *Fundamental Concepts of EFQM*

No	Concept	Description
1	Adding Value for Customers	Excellent organisations consistently add value for customers by understanding, anticipating and fulfilling needs, expectations and opportunities.
2	Creating a Sustainable Future	Excellent organisations have a positive impact on the world around them by enhancing their performance whilst simultaneously advancing the economic, environmental and social conditions within the communities they touch.
3	Developing Organizational Capability	Excellent organisations enhance their capabilities by effectively managing change within and beyond the organizational boundaries.
4	Harnessing Creativity & Innovation	Excellent organisations generate increased value and levels of performance through continual improvement and systematic innovation by harnessing the creativity of their stakeholders.
5	Leading with Vision, Inspiration & Integrity	Excellent organisations have leaders who shape the future and make it happen, acting as role models for its values and ethics.
6	Managing with Agility	Excellent organisations are widely recognized for their ability to identify and respond effectively and efficiently to opportunities and threats.
7	Succeeding through the Talent of People	Excellent organisations value their people and create a culture of empowerment for the achievement of both organizational and personal goals.
8	Sustaining Outstanding Results	Excellent organisations achieve sustained outstanding results that meet both the short and long term needs of all their stakeholders, within the context of their operating environment.

Source: Egging (2014, pp. 60-61).

The *European Foundation for Quality Management* (EFQM) excellence model acknowledges that the needs of stakeholders are taken into consideration through the process that details the operation of the organisation. Therefore, improvement of processes is at the heart of all organisational development and it is through these processes that individual talents have increased capacity, which then results in better performance. This indicates the importance of human resources as both an essential element of management and its central position in the continuous improvement process within institutions. This also means that improving performance can only be achieved by involving actors in the continuous improvement process. The EFQM excellence model (see Figure 6) was revised in

1999 and updated slightly in 2003. According to Trebucq (2010, p. 3), the creation of an excellence model in the United States responds more specifically to the demands of the socio-economic context. Compared to the European model, the author highlights significant differences. He notes that the American model has a stronger focus on financial results, while the European model opts for a more society-focused direction.

Figure 2. *EFQM Excellence Model*
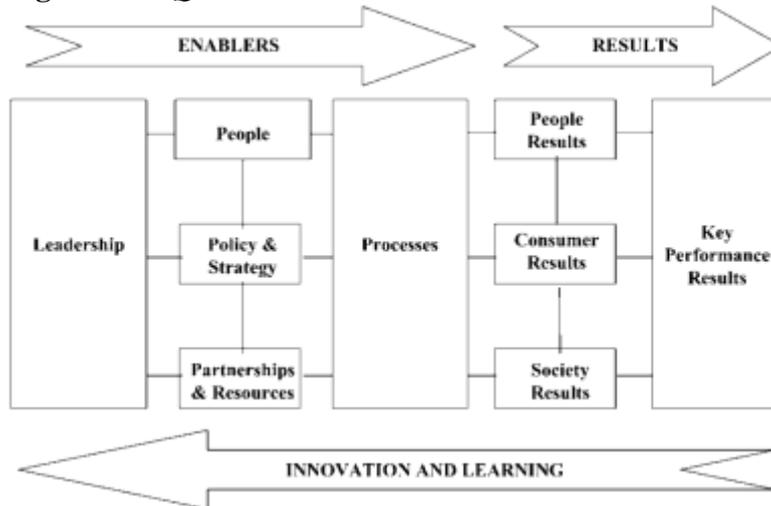
Source: Trebucq, 2010.

The Bologna Process: The Founding Principles for Reform in Higher Education in Europe

It became clear that a set of structural and fundamental reforms was inevitable once American and Japanese universities dominated the international rankings of universities and became the reference point for students from around the world, including for many European students. According to Ghouati (2019, p. 319), "On an international level, the 'quality assurance' approach in higher education had a prominent place because of the major role it is given in the knowledge economy".

The knowledge economy, an intermediary between education and the quality of education, brings what is important in reforming higher education to question, particularly in current European politics. In fact, according to Fallon (2012, p. 61), "The Bologna process and the organisation of competition within a global market of higher education is gradually imposing standardisation and evaluation measures in relation to managing institutes". It is a programme of reforms that aim to consolidate education systems in Europe with a goal of creating a unified European standard for higher education. According to Gérard and Voin (2013, p. 64), "Through the Bologna process and the creation of a European community equipped with comparable higher education systems, the EU wanted to increase student mobility in order to improve 'the productivity of the most qualified individuals'".

Djemai (2013, p. 178) indicates that "The Bologna process is a commitment to building a European Higher Education Area (EHEA) (29 countries in June 1999). In order to achieve the objectives targeted by the Bologna process, the institutes defined the strategic axes of this reform around three points:

- ✓ The personalised path for each student makes it possible to now focus education on the student and not on the teacher.
- ✓ For each of the university cycles (bachelor's, master's and doctoral studies), mobility and employability provide greater clarity on the job market.
- ✓ Autonomy of universities, who become primary actors, leading to new management methods".

This system represents an important development in the structure of European education in order to build and create a framework for university education so as to follow students' skills development. On the one hand, in Perellon's (2005) study focusing on the "Comparative approach of quality assurance policies of European higher education systems", the author comments: "In light of progressive elements, it seems important to us to reaffirm that, despite the undeniable merging of ideals, there is no 'European model' of quality assurance in higher education to date. The Bologna process emphasises the need for collaboration and agreement between countries and its efforts are undertaken with this in mind. However, there continue to be differences in approaches" (Perellon, 2005, p. 78). This suggests that there is a political commitment to cooperation based on the relatively large economic difference between pedagogical and educational approaches. Perellon (2005, p. 79) also cites the analysis by van Damme et al. (2003, p. 9): "the development of accreditation in higher education is, in many regards, an indicator of strong trends that underpin the new context of quality assurance and the risks that this brings". Perellon (2005, p. 79), cited by van Damme, Hijden, and Campbell (2003, p. 9) acknowledges the fact that "accreditation is the "trend of its time" and that it reflects a new social and political context for higher education. The key point of his reflection is in the recognition that, from this point on, existing procedures related to quality assurance can no longer be used as tools to manage the system or as tools for recognising qualifications or courses. Once again, this point recalls that accreditation is based on a summative perspective of controlling/regulating higher education systems and only very few have to do with the aim of formative improvement of pedagogical practice or the management of universities".

The Challenges of Applying the Total Quality Process in Higher Education

Interest in the application of total quality management has recently risen in the education system because it concerns one of the principal pillars of performance.

Dill (2003, p. 348) concentrates on the following elements: "accreditation systems are focused on the quality of inputs at the university, rather than the essential processes and the products, efforts to regulate the responsibilities of

lecturers, credit and ranking systems that evaluate academic quality based on the distinction of the lecturing staff and the university and funding systems for grants linked to conventional standards of university productivity". It appears that the emphasis that accreditation systems put on inputs only weakens the balance for obtaining good outputs adapted to the work environment, through the processes that show the effectiveness and efficiency of the education system. This indicates the presence of a managerial approach that is lacking a truly relevant evaluation purpose.

According toOelkers and Reusser (2008, pp. 229-230), the "redirection" of management, no longer based on input, but on output, is a paradigm change to the extent that in German-speaking countries, the systematic orientation of education towards results and evaluation results is only a weak tradition. By way of an alternative model to the traditional direction of the system by means of directives and regulations, we often turn to a simplified model of "input-process-output" (see Table 7). In view of failures or shortcomings that result from a direction focused solely on input, expert opinion supports setting performance and quality standards as additional steering parameters, but not as the only approach.

In addition, "redirection" towards output states that results come from the principle that every education system is the product of its evolution throughout history and that, despite a clear trend towards globalisation, it is still largely shaped by the specific national culture.

Table 7. *The Three Pillars for Managing and Ensuring the Quality of the Education*

INPUT Managed through objectives and resources	**PROCESS** Managed through the quality of teaching and learning processes	**OUTPUT** Managed through results and feedback
Study plans and coherent teaching methods that are based on standards	Clearly defined and internalised expectations from teaching staff and students	Performance evaluation tests based on educational standards, taking into account several aspects and structured according to a number of skill levels
Faculty members that are motivated and well trained	An obvious interest in academic teaching and different disciplines, positive learning attitude	Assessment of the quality of academic work thanks to internal and external evaluation methods
Structure of academic system and school equipment or resources	Standards of teaching quality and academic environment (e.g. cognitive stimulation, managing a class, pupil focus, quality of specific disciplinary expertise and pedagogical interaction)	Feedback mechanism that is suitable for meeting standards and the progress achieved, aimed at pupils, their parents and school administrators
Effective scenarios and tools		

for continued training for teachers and for pedagogical development		

Source: Oelkers & Reusser, 2008.

Despite the development of a quality assurance process that can be found all over the world, not all actors in the university environment seem to have the same vision. Nowadays, there are two different perspectives in the approach to this process. These two opposing perspectives, one based in economics and the other more based in sociology and philosophy, each include strengths and limitations. Therefore, can the performance of a country's education system be measured solely through its economic success? What about its social and cultural development?

From an economics-focused perspective, it is a question of establishing a high-performance management model that will allow unlimited investment in the individual in the workplace. The latter has to work exceptionally hard to generate wealth. To achieve considerable, convincing and profitable results, work has to be organised with a level of managerial care. This new state of mind strives for increased productivity. However, this approach is not exclusive to the world of business. Nowadays it is found in education and in university environments, which could lead to the privatisation of education (De Gaulejac, 2005, p. 217). From this perspective, the universities are considered as service providers. The management approach considers that at the end of their education, students should be ready for employment and have the skills allowing them to work and participate in increasing production.

Following the same thread of ideas, it is also worth highlighting the French approach that promises "school success" (De Gaulejac, 2005, p. 218). The objectives are 100% focused on pupil success by guiding them to obtain a diploma or qualification that enables them to work (De Gaulejac, 2005, p. 218). From this point of view, a managerial approach is adopted to achieve the main goal of establishing a productive education system (De Gaulejac 2005, p. 219). A productive education system refers to "good management", which means managers should establish: "a collection of techniques aimed at finding a way of operating that makes the best use of financial, physical and human resources to guarantee the sustainability of the company" (Bouilloud &Lecuyer, 1994, cited by De Gaulejac 2005, p. 46).

In comparison to this economics-based approach is a more philosophical and sociological approach that proposes a different direction for the end goals of education. Some authors therefore choose to give consideration to the place that the subject, i.e., human beings, should occupy with regard to their social and political dimension. These philosophical and sociological approaches challenge economic liberalism, Anglo-Saxon pragmatism and utilitarianism (Grandjean, 2008). Grandjean (2008) highlights the absence of a relational dimension in the management approaches that are largely based on technical aspects. In this context, applying the quality approach keeps workers under pressure in order to achieve higher levels of productivity. Non-compliance with procedures that are in

place can then lead to penalties that tend to increase the level of work-related stress among actors and foster a poor work environment.

Henriet (1993, p. 125) pays particular attention to the fact that "Time management centred on production is no longer effective. Decisions made from processes of modelling and rationality do not always respond to the environment's requirements and, above all, do not identify what is needed in terms of stakeholders. Doing this while adopting a fully managerial approach means that consideration must be given to another vitally important aspect: the human factor". In our opinion, this aspect is essential because it determines the value of education and maintains the balance of the system.

De Gaulejac and Hanique (2015, p. 145) propose the following analysis that "evaluation of work is no longer based on quality as defined by professional values, but rather on carrying out profitability-related objectives. Actors are no longer looking for the acknowledgement that is the basis of self-esteem in assessments from their peers, but rather in the measurement indicators formulated by higher management. Employees no longer define the meaning of work by their professional abilities, but according to how they relate to the company. The value of work is broken down to understand the financial make-up of the activity".

International economic change has clearly played a role in the constant acceleration of these developments and quality has become a key goal in a world where competition and profitability have been turned into methods to rise to economic, social and even political challenges. The education system is a prime example of this. It appears that it would be better for us to adopt a social approach for employees of organisations, while also making use of optimal modern techniques.

Conclusion

With regard to the development of quality in higher education, we have endeavoured to provide a comparison of two models. The first, which is focused on a primarily economic logic, is supported by managerial models that are imported from the manufacturing sector. This model is combined with the application of a collection of tools and techniques that are aimed at encouraging greater productivity in a system in response to economic requirements. In contrast, the second model, which is underpinned by a philosophical and sociological perspective, takes into consideration not only economic factors, but also the human aspect of workplace activity in its socio-historic context.

Rodriguez (2016, p. 18; cited by Mok, 1999) specifies that: "the rare items of evidence proving the advantages of the new type of management in education do not necessarily represent an argument in favour of 'marketing' education, because this has harmful consequences on people's socio-cultural development. When we place a lot of emphasis on market principles and economic paradigms, education can fail in its noble mission of contributing to the development and well-being of human beings". As a consequence of this, quality management should not be the only regulation put in place in higher education because, according to Dill and

Maarja (2010, p. 255), total quality management does not represent a management approach that can be easily applied to higher education institutions, especially as the academic culture of these organisations is very strong and resistant to the ideas, principles and practices of TQM. Resistance to TQM terminology is the first stage of this. Terms such as client, product, empowerment strategy or even total quality management or restructuring cannot easily be replicated by higher education institutes.

Furthermore, Rodriguez (2016, p. 27) adds that "the appearance of a new form of management or new public management as a way to incorporate governance models, types of organisation and technologies in the private sector has been considered an option for lessening the current impact on higher education, particularly concerning reductions in government funding. However, the imposition of a concept created in a different context has triggered more problems than solutions, including disruption to established practices and the permanent erosion of academic freedom and autonomy. There is no doubt that these changes cannot be fully reversed".

Based on this, we can then wonder how one can now conceive the optimal quality assurance approach that allows examining this contrast dialectically. The idea of entrepreneurship could possibly reconcile these two contradictory approaches by focusing on the individual, who is considered an actor in his choices and by participating in an education system that sets its ambitions on the quality of learning and the success of its students.

It seems to us that it is better to adopt a posture of compromise, far removed from ideology, because we need a management approach that can be easily applied to higher education institutions without harming human values. Our article here has attempted to show the contributions but also the limits of the notion of applying quality in higher education, which is the subject of our doctoral study.

References

Abed, M., Mayeur A., and Ourak M. (2013). *Le système d'information comme vecteur de l'amélioration continue de la qualité: cas de l'université de Valenciennes, in Démarche qualité dans l'enseignement supérieur: notions, processus, mise en œuvre*, [The information system as a vector of continuousqualityimprovement: The case of the University of Valenciennes] sous la direction de Hervé Cellier, Ali Koudria et Abdallah Loucif, Paris: éditions L'Harmattan.

Alazzaoui M., (2005) *Gestion de la qualité totale*. [*Total quality management*] Amman: Scientifique pour la publication et la diffusion.

Bernasconi M., (1994) *Le management de la qualité totale: une perspective philosophique et humaniste.* [*Total Quality Management: A Philosophical and Humanistic Perspective*] Research Document, Alpes Maritimes, (49). CERAM.

Cracker O., Charney C. & Chiu. (1986). *Quality circles a guide to participation and productivity*. New York : Methuen Publications.

Croché S., (2012). Qualité & critères de vérité en enseignement. [*Quality and criteria of truth in teaching*] In : Charlier J-E Croché S & Leclercq B., *Contrôler la qualité dans l'enseignement supérieur*. Louvain-la-Neuve: Harmattan-Academia.

Crosby PB (1979) *Quality is Free*. London: McGraw Hill.

Damme, Van, Hijden, P. van der & Campbell, C. (2003). International Quality Assurance and Recognition of Qualifications in Tertiary Education in Europe. Conférencelors du Forum OECD/Norway Forum on Trade in Educational Services. Managing the internationalisation of post-secondary education. Trondheim, 3-4 novembre 2003.

De Gaulejac V (2005) *La société malade de la gestion.* [The Sick Management Society]. Paris: éditions du seuil.

De Gaulejac V (2009). *La société malade de la gestion*. [The Sick Management Society]. Paris: éditions du seuil.

De Gaulejac V., &Hanique F., (2015) *Le capitalisme paradoxant: un système qui rend fou. [Capitalismeparadoxes: a system that drives you crazy]*. Paris: Éditions du Seuil.

Deming WE., (1986) *Out of the Crisis.* Cambridge: Cambridge University Press.

Dill D & Maarja B., (Eds) (2010) Quality Assurance in Higher education: Trends in Regulation, Translation and Transformation. (Translated by Mohamed Ibrahim, 2014 - 9114). Egypt: Arab Thought House.

Dill D (2003). Le paradoxe de la qualité académique: implications pour les universités et les politiques publiques. [*The Paradox of Academic Quality: Implications for Universities and Public Policy*] *Revue des sciences de l'éducation*, Vol. XXIX, no 2.

Djemai. M., (2013) Mécanismes et outils de mise en œuvre de l'évaluation des systèmes d'enseignement supérieur, in *Démarche qualité dans l'enseignement supérieur: notions, processus, mise en œuvre*, [*Mechanisms and tools for implementing the evaluation of highereducationsystems, in Qualityapproach in Higher Education: concepts, process, implementation*]sous la direction de Hervé Cellier, Ali Koudria et Abdallah Loucif, éditions Le Harmattan.

Duykaerts C and Malmedy M, (2014) Démarches qualité et évaluation externe de la qualité: mais que vise donc exactement l'Agence pour l'évaluation de la qualité de l'enseignement supérieur? [*Quality procedures and external quality assessment: what exactly is the Agency for the Quality Assessment of Higher Education aiming for?*] In: Fallon C et Leclercq B., Leurres de la qualité dans l'enseignement supérieur? Variations internationales sur un thème ambigu. [*Lures of Quality in Higher Education? International Variations on an AmbiguousTheme*]. Louvain-la-Neuve : L''Harmattan/Academia.

Eggins H (2014). *Drivers and Barriers to Achieving Quality in Higher Education*. The Netherlands: Sense Publishers.

Fallon C (2012) Décoder les nouveaux instruments de gestion de l'enseignement supérieur. *[Decoding new management tools for highereducation]*. In: Charlier J-E, Croché S & Leclercq B., *Contrôler la qualité dans l'enseignement supérieur*. Louvain-la-Neuve: Harmattan-Academia.

Gérard M & Voin M., (2013). La mobilité étudiante & ses conséquences pour l'internationalisation du marché du travail. [*Student mobility and its consequences for the internationalization of the labor market*]. *Reflets et perspectives de la vie économique*, tome lii (4), 61-79.

Ghouati A., (2019). *L'enseignement supérieur en Algérie. Entre contraintes politiques et défis socio-économiques.* [*Higher education in Algeria. Between political constraints and socio-economic challenges*]. Paris: éditionsPétra.

Golberg JS, Cole BR (2002) Quality management in education: building excellence and equity in student performance. ASQ, *the Global Voice of Quality* 9: 4. Available at: http://asq.org/pub/qmj/past/vol9_issue4/goldberg.html.

Gorga A (2012) Usage de la qualité dans l'enseignement supérieur [*Use of quality in higher education*] In : Charlier J-E Croché S & Leclercq B., *Contrôler la qualité dans l'enseignement supérieur.* Louvain-la-Neuve : Harmattan-Academia.

Grandjean C., (2008). Une approche critique de la démarche qualité dans les institutions

sanitaires, sociales et médico-sociale. [*A critical approach to the quality approach in health, social and medico-social institutions*]. Le portail de la psychanalyse francophone. Available at : https://www.oedipe.org/actualites/grandjean.

Grauvogel J-M., (1989) *Le management de la qualité.* [*Quality management*]. Paris: Hermès.

Harvey L & Mason S., (1995) The Role of Professional Bodies in Higher education Quality Monitoring. Birmingham: *QHE.*

Henriet B., (1993). *Leadership et management.* [*Leadership and management*]. Paris: Editions Liaisons.

Ishikawa K. (1985). *What is Total Quality Control? The Japanese Way*. Englewood Cliffs, NJ: Prentice-Hall.

Juran, et al., (Eds.) (1988). *Juran's Quality Control Handbook*. New York: McGraw-Hill.

Kahtani A & Al Muhailbi. (2013). Les mécanismes de l'application des principes de Deming dans l'administration de la faculté de l'éducation de l'Etat du Kuweit pour l'obtention de l'accréditation académique. [*Mechanisms for applying the Deming principles in the administration of the Kuwait State School of Education to obtain academic accreditation*] *le journal international de recherche enéducation, université des EmiratsArabesUnis, n°33*, (version original enarabe).

Lapostolle G &Mabilon-Bonfils B., (2018) *Fiches de sciences de l'éducation.* [*Fiches de sciences of education*]. Paris : Ellipses copyright 2e édition.

Mok K. H., (1999). The cost of managerialism: The implications for the "McDonaldisation" of higher education in Hong Kong. *Journal of Higher Education Policy and Management. 32 Education and Management*, 21(1), 117-127.

Oelkers J &Reusser K., (2008). Développer la qualité établir des standards – gérer la différence. [*Develop quality set standards - handle the difference*]. Consulté le 25/08/2019.

Perellon J-F., (2005) Approche comparée de politiques d'assurance-qualité des systèmes d'enseignement supérieur européens. *[Comparative approach of quality assurance policies of European higher education systems].L'éducation en débats: analyse comparée, Vol 3.*

Pierronnet R., (2018). L'assurance qualité, révélateur d'universités entrepreneuriales à la française. *[Quality assurance, revealing entrepreneurial universities in the French]. Projectics* 19(1), 23-40.

Rodríguez M., (2016). New Managerialism in Higher Education DOI: 10.13140/RG.2.1.4342.3128.

Sallis E (2002) *Total Quality Management in High Education*. London: Kogan.

Sokovic M & al., (2010) Quality Improvement Methodologies - PDCA Cycle, RADAR Matrix, DMAIC. Journal of Achievements in Materials And Manufacturing Engineering, Vol 43, issue 1, November.

Sénéchal O. & al. (2013) Qualité et enseignement supérieur: application des principes du BalancedScorecard (BSC) à un master. *[Quality and higher education: application of principles of Balanced Scorecard (BSC) at a master's].*Available at: https://hal.archi ves-ouvertes.fr/hal-00823133/document.

Tamimi F (2005) *L'efficacité de l'utilisation du système de management de la qualité, ISO 2001 dans le développement aux unités administratives du ministère de l'Education en Jordanie, du point de vue des travailleurs et degré de satisfaction du système.[The efficiency of the use of the quality management system, ISO 2001 in development to the administrative units of the Ministry of Education in Jordan, from the point of view of the workers and degree of satisfaction of the system].*PhD Thesis non publiée, Université des études supérieures Oman, Jordanie.

Trebucq S (2010) Les capitaux immatériels dans le modèle d'excellence EFQM version

2003: une étude exploratoire qualitative et quantitative. [*Intangible assets in the EFQM model of excellence version 2003: a qualitative and quantitative exploratory study]*. Available at: https://halshs.archives-ouvertes.fr/halshs-00526447/document

UNESCO (1998). *World Declaration on Higher Education for the Twenty-first Century: Vision and Action and Framework for Priority Action for Change and Development in Higher Education*, 9 October 1998, 16 p.

Weill M (2009). *Le management de la qualité*. [Quality management]. Paris: La Découverte.