

# *Employing the TQM: Manage the Quality in Higher Education*

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**Abstract:** This paper explores that although the quality is a slipper concept due to its abstract definition, specifying the scope of quality and identifying practical tools have become the most urgent task. Based on the effectiveness of quality in higher education, Total Quality Management has become a vital management tool to propel the current industry. However, there are three difficulties in applying the Total Quality Management (TQM) in the field of education: TQM methodology has much resistance among educators in higher education (HE) due to initially employing in the business world. Next, it is also uneasy to fulfil the expectations of each stakeholder because of different people holding different meanings. The last is that the mechanisms among education and business market are distinguishing on account of the complexity of the market. Despite their having three difficulties in the process of employing TQM, this approach currently has been improved in HE through the following methods, like value-added, continuous development, and assessment, respectively. However, it is evitable to acknowledge several benefits and overcome some limitations within TQM operations.

## 1. Introduction

Quality has been a compelling buzzword in the business sector for a long time. Indeed, the issue of quality has been at the top of the educational debate in Western countries, and quality management has been a primary task higher in education institutions (HEIs) for quite a long time [1]. However, quality like 'justice', 'liberty', 'freedom' or 'equality' is a slippery concept; moreover, it means different meanings to different stakeholders [2]. The same person might interpret "quality" differently at different times, which gives rise to issues of "whose quality?". There are various interested parties in higher education, including teaching and non-teaching staff, students, employers, government and its funding agencies, validators, accreditors, auditors, and assessors [3]. Each of the stakeholders has different perspectives influenced by their priorities and attitudes towards higher education.

An apparent decrease in the quality of higher education is a common concern in the field of education. To some extent, a lack of academic support in educational institutions' infrastructure

believes to be the main reason for poor results among students of low quality [4]. This issue has become more pronounced in an increasing number of educational institutions. “Higher education for the masses and a growing climate of increased accountability are frequently cited as rationales for a greater emphasis on quality.” [5]. Another factor includes students as customers with higher expectations and diversity, whose demands for delivery, flexibility, and competitive levels have increased both within and outside the country [6]. The role of HE in promoting national economic growth makes the need to ensure the quality of higher education even more urgent.

Total Quality Management has become a vital management tool to propel the current industry. It is a methodology that has successfully applied to many large corporations. The objectives of TQM are to satisfy customers, engage employees, and promote the continuous improvement of organizations’ quality; it is not just a system, but a philosophy [7]. TQM is a style of management that has been used for many years now and is gradually gaining attention in the United States [8]. Some colleges have begun to re-examine the process of education, and the principals of TQM applied in the educational arena [4]. In other words, several authors have introduced the principals of TQM into each aspect of academia and recognized that the values of TQM are more comfortable with HE than many current systems [8,9]. Horine’s version of TQM aims to improve employee empowerment, customer satisfaction, teamwork, and philosophy alternation [10]. These factors require that HE adopt quality assurance schemes that are consistent and transparent. Dr. W. Edwards Deming is generally recognized as “the father of quality.” To provide a guide to how to manage for quality, he proposed the famous 14 points, the connection between education and quality management principle, and urged that “improvement of education, and the management of education, involve submission of the same beliefs that must be used for the enhancement of any practice, manufacturing or service” [7].

## **2. The Difficulties in Managing Quality in Education Arena**

Quality plays an increasingly important role in all aspects of education. The conceptualization of quality has grown and become a popular buzzword in the field of business. Corporations employ formal quality framework and management tools. They clearly define who their customers are, how to improve service and quality and define the best outcomes. However, defining and managing quality in Higher Education has proved to be a challenging task. For many educators, especially in HEIs, there has no distinct concept of quality, customer, and service, leading to decreasing teaching and learning quality among students and staff. Thus, we should first analyze why it is so hard to manage quality in HE. The literature reveals that there are three main reasons.

### **2.1. The Resistance to TQM in Education**

According to the word of W. Edwards Deming (1993), the philosophy of quality could be applied to an educational scenario [11]. Deming’s job is not merely about productivity and quality control, but also how to change this concept’s essence so that people can reach an agreement [2]. However, when educators consider the principles of TQM, they state that this model is only suitable for-profit organizations [4]. Indeed, we have to admit that the TQM model has been a great success in the business world. However, Total Quality Management can also be employed at universities, elementary and secondary schools, as well as service institutions [1]. The founder of TQM, Deming, proposed a framework that can integrate multiform education, such as cooperative learning, practical teaching, and academic management [4]. The most apparent problem is that some keywords, like ‘learning’ and ‘curriculum,’ cannot be found in Deming’s 14 principles [1]. The best approach seems to be that these words should be translated into more business terms; for example, as teachers as

employers, students as employees, and knowledge being as the product [1]. Nevertheless, it is not easy to introduce the TQM system into HEIs and persuade them to acknowledge it, and the definition of quality remains uncertain.

## **2.2. Different Meanings to Different Stakeholders in Quality**

The second reason why quality is challenging to control in HE is that “quality” has different meanings for external and internal stakeholders. Quality is quite ambiguous and disputable term in education [12]. The diverse interpretations of quality can be grouped into five interrelated categories: quality as “exceptional,” as “perfection (or consistency),” as “fitness for purpose,” as “value for money,” and as “transformative” [2]. These categories, in fact, continuously systematize higher education and assist individuals to think about quality in different ways. Then, we will raise the question of ‘whose quality?’ There is a diversity of stakeholders in higher education, including students, employers, teaching and non-teaching staff, government and its funding agencies, accreditors, validators, auditors, and assessors [3]. Each of the stakeholders has a different perspective influenced by their priorities and attitudes towards higher education. Historically, external stakeholders have focused on the quality assurance process, which refers to achieving a transformation in quality through the whole organization’s approach, involving the highest level of commitment and subsequently comprehensive reeducation to all personnel in HE [13]. Those interested parties require HEIs to make full use of resources and demonstrate responsible action during professional practices and accountability, here referring to these as quality “As”: accountability, audit, and assessment [6]. Many countries have set up multinational organizations with accountability for Quality Management within HEIs. Nowadays, in England, the accountability of quality assurance has been implemented by the Quality Audit Agency (QAA), which replaced the Higher Education Quality Council (HEQC) in 1997. Therefore, the responsibility of external stakeholders is to measure and evaluate quality assurance procedures in HEIs. The QAA is concerned with the effectiveness and reliability of procedures regarding academic standards and managing quality [6].

Avdjieva and Wilson propose that HEIs still need to become learning organizations, where internal stakeholders also are accountable for explaining and evaluating the quality of teaching and learning provided [6]. Here, the emphasis is on not just the quality assurance, but on quality enhancement, where targets are to improve actual teaching quality through more imaginative measures [14]. Quality enhancement involves four “Es”: empowerment, enthusiasm, expertise, and excellence [15]. The internal stakeholders might employ mechanisms like self-evaluation and student feedback to raise quality [6]. This methodology has the potential to provide an integrated way to cover the quality viewpoints of both external and internal stakeholders. However, there are still many limitations to the process of entirely adopting TQM in HE. Attention on quality in the industry chiefly focuses on the customer, but there remains a debate about who the customer truly is in higher education [16]. Moreover, even if one could persuade these stakeholders to acknowledge the TQM model in higher education, educational markets, and products also are not simple to understand, and need to be considered.

## **2.3. The Complexity of Educational Market**

The third reason why management quality in HE is not accessible is the complexity of educational products. Recent policy discourses seem to position students within the field of public service reform based on the market, and it widely recognizes that “education is now regarded primarily from an economic point of view” [17]. One function of the market is to provide customers with specific information about the connection between quality and the price of products [18]. The question comes

up, hence, whether the market mechanism can provide information to different stakeholders, including the education industry [18]. Any product in real life needs to process inputs through a series of production systems. These systems can be viewed as interdependent networks, the actual process of using resources for turning inputs into outputs, where they work together and strive to achieve their objectives [11, 19]. Specifically, the inputs in the higher education system are students, teachers, administrative personnel, physical facilities, and financial resources; the processes include activities of teaching, learning, administration; the outputs involve in tangible and intangible outcomes and value addition through examination results, employment, earnings, and satisfaction [19]. If the expected output in HE is seen as transforming into enhanced capabilities and knowledge embodied among students, including the enhanced capacity for further learning, then the system model fits so long as all three system components are recognized [11]. Therefore, the perspectives of the economy have a tight relationship with market, buyer, and value, to the extent which effects complexity regarding managing quality.

### **3. Evaluating the Current Approach**

#### **3.1.Theoretical Framework: TQM Models in Higher Education**

Although some progress under some research and debates has made, it still no consensus on how best to manage quality within higher education. Many countries and business departments have tried to issue several awards and models to enhance the product quality, and lastly, the TQM is the most useful tool. Total Quality Management is generally defined as: “a management approach of an organization, catered on quality, based on the participation of all its members and aimed at long run resources through continuous client satisfaction and benefits to all members of the organization and society” [20]. The TQM is a management philosophy whose principle has been applied to the industry over ten years; however, its application in the service industry, particularly Higher Education Institutions, still belongs to a new conceptualization, framed at new reality and began to realize HEIs are profitable institution [21]. TQM methodology, if implemented appropriately, it can be used to mitigate uneasiness and strengthen confidence in educational organizations. TQM, hence, makes changes in management easier.

To be able to fully use the Total Quality Management to control and management quality in HEIs will adopt from the following three approaches, value-added, continuous development, and assessment, respectively. Firstly, according to Goldstein et al. (2000), they propose that this form of performance indicator is called as ‘a value-added measure,’ which, through utilizing the data set up from the past to make a goal for each entrant, comparisons between students’ intake achievements and their performance on completion of curriculum [18]. Value-added measures would truly support students’ learning process and not merely as the measurement of it [1]. Secondly, what TQM does is to constitute present quality and strengthen during the process of continuous development [2]. There are five components for this continuity, including honesty, shared vision, patience, commitment, and TQM theory, respectively [8]. Therefore, TQM, as a methodology, stands for an enduring transformation in institutions’ focusing from short-term stopgap to long-term quality improvement, and stresses on continuous innovation, improvement, and change, and produces high-quality products and services in the end [1]. Thirdly, institutional self-assessment and assessment are increasingly indispensable in education, which is also imperative aspects of the culture of continuous development. During the process of assessment themselves, the educational institutions need to considered judgments for their behavior and utilize these data as improving future service quality [1]. The targets of quality assessment were that guaranteeing public funds provided could increase

available educational quality, informing the public of the relevant education information; and provide perception to enhance education in quality. However, we have to acknowledge that these three aspects of Total Quality Management still have some limitations.

### **3.2. Benefits of TQM to Higher Education Institutions**

Regarding the benefits of controlling and managing educational quality, the application of a TQM philosophy in higher education has the potential to meet the requirements of almost all stakeholders to reach the peak of performance, support market-based needs, sustain their competitive advantages and achieve institutional efficiency [11]. Here, the efficiency might result in educational cost-savings and enhancement of customer satisfaction [22]. The potential benefits of TQM in Higher Education can also include enhancements in staff spirit and commitment, continuous improvement, emphasis on the importance of interdisciplinary teams and the combination of academics and executives, and lastly, the promotion of consistency, accountability, and engagement within the University [23]. However, experimental research shows that TQM can result in a competitive disadvantage. For example, due to the inadequacy of crucial resources, TQM cannot assure competitive benefits and can result in business failure [18, 24]. Furthermore, most HEIs around the world, face several tides of challenges: the absence of financial resources, lower job satisfaction among workers, growing needs for technology and recruitment, and various body [2]. Such research findings suggest that HEIs face challenges in enhancing their general capabilities using TQM.

Meeting these challenges is very important if universities are to remain competitive, and to enable their survival and continuity [2]. Therefore, it is crucial to employ the TQM methodology in institutions, and subsequently through increase production capacity and standards, decrease production costs, and assurance quality [2]. Whereas Al-Alawi contends that the rising quality negatively correlates with increasing productivity, and many administrative organizations would behave hesitation when adopting the TQM philosophy and paying costs, thus leading to poor management, service, and products, ultimately failure to satisfying the customer [2]. Except for the mentioned three means when employing the TQM theory, like value-added, continuous development, and quality assessment, there are another three conventional approaches in higher education. Firstly train employees, cultivating service philosophy, and support the autonomy of students' choices; and then respect employees, identify the working group, and impose staff to responsible action; lastly, focus on the service agreement, and assure compliance at specific key assessment point within the broad educational process [23]. Therefore, whatever the former three methods or these three, as long as train the staff member involved in the execution process and adequately educate them, the weakness of TQM theory, that is mainly higher education quality, could be improved and enhanced.

To sum up, the overall benefits of TQM also can be considered from these two perspectives. For the group of students, they can steadily achieve improvement of scores, that is, the enhancement of grades performance, which would prove the effectiveness of quality standards, the rationality of benchmark targets for TQM, and match students' expectations. Another one is that behavior performance is growing alteration and betterment in line with the hint of available data. However, there was no sufficient empirical data to demonstrate that the adoption of TQM must tune with following competition benefits [4]. Despite a massive number of articles in the business and education press, total quality still is an ambiguous concept [25]. The outcomes of TQM remain in doubt, so there remains a requirement to verify its claims experimentally and in a generalized means [4]. All in all, the employability of TQM has a positive correlation with attaining a competitive position.

### 3.3.Challenges in Implementing of TQM in Institutions

Adopting total quality management in higher education is a tough task and cannot be done overnight. Considering the challenges of controlling quality in Higher Education, and because they face a variety of challenges, educators should learn to employ and interpret some basic strategies to enhance the quality [26]. The literature illustrates three barriers at length. The first barrier is that some of the traditions and the academic culture of higher education differ from those of industrial organizations [4, 23]. Quality control and management is not an academic approach that can be easily applied to HEIs, mainly because the academic culture of universities is intensive and generate resistance to its conceptualization, principle, and practice [23]. The fundamental reason is that TQM terminology was produced initially in industry and business sectors and subsequently adapted in the field of education, making it less convincing and resonant. According to Massy, in implementing and developing this philosophy, the most significant barrier is from professors and educationists who contend that TQM is just another business-directed model [4]. Thus, it would be essential to modify the terminology of TQM to make it appropriate for and acceptable in academia.

Additionally, external pressures are also impeding other institutions in attempting TQM. Despite high-quality scenarios having proposed, these initiatives are sometimes overwhelmed and drowned out by others [27]. There is a demand to guarantee that quality remains an integral part of strategic planning, despite enormous pressure to do otherwise [1]. Here a strategic plan could help to bridge the gap among staff in understanding and communicating the institutions' mission, for example, where their institution is going and how it will be different in the future [1]. Thus, if TQM is a strategic part of an institution and has a suitable supervision mechanism, educational quality can maintain a high profile [1, 23]. That makes quality hard to be overlooked and raises the chance of being taken seriously.

The last challenge is the fears coming from senior managers and staff. For example, to make TQM work, the HEI must make long-term investments in senior managers, who should support and promote it [27]. The problem might be the senior managers themselves. They anticipate achieving the promising outcomes promised by the TQM philosophy, but those directors remain unwilling to support and modify it wholeheartedly. If senior executives revert to primitive management modes, many quality initiatives could face the setback [1]. The severe consequence is that if senior executives are unwilling to champion total quality management, there is again nobody who advocates it. These environments may result in or even cause staff anxiety if senior managers fear that their suggestions and actions might go wrong [1]. Furthermore, these fears from staff are not merely from senior leaders but include others' fears – those with differing tasks, unknown things, making mistakes, and distrust deriving from others [4]. Staff cannot work their best unless they perceive that they are trusted, and their thoughts are heard. Therefore, when undergoing a quality revolution, it is vital to expel fear, and if TQM is to be established in institutions, it is essential to take this message seriously [28].

## 4. Conclusion

Regarding how to effectively control educational quality has become a current debate. There are several quality management practices and references on industrial quality systems, which is TQM methodology, to in Higher Education Institutions. It has illustrated the difficulty in defining quality with HE and complexity in measuring and managing the quality of education due to each stakeholder holding different expectations to the outputs of educational quality. Although there exists this complexity, control and management educational quality in HEIs still are taken seriously and striving

forward to enhance quality management practice through several extensive efforts and alternative perspectives on quality in HE, or through a comparison with industrial quality systems.

However, these actions taken seem to be separate. The earlier approach is an adjusted industrial model highlighting on administrative and service functions [6]. The current status is the critics on the industrial model have begun to commit themselves to improve the quality of core products in teaching and learning [7]. Thus, the primary task is to achieve coordination with these two actions on quality. Although there have the complexity and benefits of implement to introduce the TQM into higher education, however, it acknowledges that some professional terminologies, initially fitting into the industry world, still have been lack of extensive modified. Moreover, many countries and industries have attempted various quality models to control it. Leaders and staff should have confidence in employing this approach and endeavor to make the TQM more academic so that students as customers could be provided with better quality and service [5]. That said, the voice of the academic and their ideas of what higher education should be still dominated by and quality tools such as TQM are necessary and inevitable outcomes of marketization.

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