THE IMPLEMENTATION OF TOTAL QUALITY MANAGEMENT-BASED ONLINE LEARNING AT EDUCATIONAL INSTITUTIONS

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**Abstract:** This study uses a qualitative descriptive approach that describes thoroughly Total Quality Management in the implementation of online learning development in educational institutions. It reveals that the function of TQM in increasing the satisfaction of all users is very necessary and plays a role in providing better service. The role of the institution as a public educational institution does not only to provide educational facilities and infrastructure but standard operating procedures and quality control for learning must also exist and must be carried out by all users. In this case, users in learning are not only students but also lecturers, administrators, and assessors who also play important roles and contribute during the learning and teaching process.

**Keywords:** Quality Management; Quality Learning; Standard Online Learning; User Service.

## **INTRODUCTION**

The community's need for online learning cannot be avoided. Almost all schools and colleges use online learning. Especially during the time of the spread of COVID-19, the demand for online learning has increased significantly. This proves that online learning is a solution to replace offline learning (Al-Kahtani, 2022). Online learning during the Covid-19 period provides a new experience for educational institutions in serving users or customers (Maqableh & Alia, 2021). Currently, all educational institutions, especially universities, continue to use online learning as another learning option.

In the post-covid-19 recovery period, to be precise in early 2022, the implementation of offline lectures has been permitted, but the community's need for online lectures is still high. It is proven that several universities in Surakarta are still implementing online lectures with certain methods such as flipped learning or mixed learning or hybrid learning. Where in certain circumstances students can come to class to meet the lecturer. In other cases, they can stay at home while doing online lectures (Staddon, 2022).

There are various ways and efforts to continue to carry out online lectures. In college, for example, Moodle-based learning is very effective (Makruf et al., 2022). In secondary schools, online learning using social media and interactive learning also has a positive impact on students (Nugroho et al., 2021). In addition, online learning using other methods such as mobile phones can improve student pedagogy (Zulaiha & Triana, 2021). This is done as an institution's obligation to serve assessors, administrators, lecturers, or teachers and students. Educational institutions

are required to work creatively and innovatively. The five stakeholders work with one goal, namely carrying out the teaching and learning process in a professional manner.

Total Quality Management or commonly called TQM is a bound system that aims to satisfy customers. This is a system adapted from corporate management (Plenert, 1996). In educational institutions, this does not mean placing schools or universities as profit-oriented companies. TQM in educational institutions places all elements inside as customers. They need maximum service and their voices as service users are expected to be an evaluation material for the development of education in higher education (Hota et al., 2020).

Quality is the overall characteristics or characteristics of products and services related to their emphasis on meeting certain needs (Feigenbaum, 1991). According to (Patel, 1994), the components of a quality system include (1) customer quality, namely whether service quality can provide customers with what they want, which is measured by the use of services, such as customer satisfaction or customer complaints; (2) professional quality, namely whether the service is able customer needs that are defined professionally, and whether the procedures and professional standards can be trusted to produce the desired product or service; (3) process quality, design, and operation of service processes using resources in the most efficient way to meet customer needs. This aspired quality requires the involvement of all parties in the organization and even demands a culture change. This is known as Total Quality Management (TQM).

Total Quality Management (TQM) in higher education is manifested in interactions between teachers and students in the classroom or conformity with accreditation or assessment standards. The structured system can create a learning organization. It is time for higher education organizations to apply the principles of TQM because they can benefit from the innovations found through TQM practices. The difficulty of implementing TQM in various higher education institutions is due to the staff not being able to understand how the key elements of TQM such as statistical process control, student involvement, teamwork, and so on can be used in lectures in the classroom (Emulti et al., 1996). In a holistic approach, TQM is a framework that supports service management. According to (Ho & Wearn, 1996) and (Woon, 2000), the framework includes (1) leadership and quality culture, (2) commitment, (3) full involvement, (4) use of information and analysis, (5) strategic planning, (6) human resource development and human resource management through education and training, (7) ownership of the problems encountered, (8) process quality management, (9) recognition and appreciation, (10) quality and operating results, (11) precautions, (12) teamwork, and (13) customer focus and customer satisfaction.

In higher education, this TQM philosophy will also help increase morale, reduce costs, improve organizational performance, and respond to the needs of its customers. For this reason,

organizational effectiveness is needed, employee participation in problem-solving and decision-making, effective communication of senior staff and subordinates, broad education and training, good design in recognizing and rewarding employees to motivate employees, quality-oriented vision, benchmarking as a tool in continuous improvement to realize students who care, are knowledgeable, and can serve the community, as well as support from leaders (Elmuti et al., 1996).

However, TQM is not the only tool to achieve improvement and perfection. Several research reports say that TQM programs result in improvements in quality, productivity, and competition in only 20 - 30 % of companies that implement them (Radovilsky et al., 1996; Schonberger, 1992). TQM is still seen as a philosophy that is difficult to achieve, especially in Indonesia where the culture is still far from being willing to provide the best for customers, and there are still various inconsistencies in the rules, especially regarding higher education organizations. Barriers to the application of TQM in higher education organizations are often related to idealistic missions, lack of agreement in the meaning and application of quality, academic freedom, and maturity, and administrative abilities (Dahiya & Bhatia, 2013). As an illustration of how TQM has not been The following is an example of the results of data analysis that can be collected by the author.

In our everyday sense, the word service or service is associated with the relationship between the seller and the buyer, where in this case the seller is the one who gives while the buyer is the one who asks. According to (Zaidi & Ahmad, 2020), service quality has 5 dimensions, namely as follows.

- 1) Tangibles (Physical), are physical facilities, equipment, and appearance of employees in serving consumers.
- 2) Reliability, is the company's ability to provide correct, timely, and reliable services.
- 3) Responsiveness (Attention), is a willingness to help consumers and provide fast service.
- 4) Assurance, is the willingness and readiness of employees to provide services.
- 5) Empathy, is a sense of caring, personal attention given to consumers.

Total Quality Management (TQM), which has been discussed above, is indeed a philosophy and methodology that helps organizations including educational service providers to manage change. The essence of TQM is culture change. This change aims to meet the needs and expectations of customers, both internal customers which include educative and non-educational staff as well as primary external customers which include students or students, secondary external customers which include parents, scholarship providers, and company owners, as well as tertiary external customers (Taskov & Mitreva, 2015). which includes the labor market, government, and society at large. The needs and expectations of all customers in the education business will be realized if the satisfaction of service providers who are also internal customers

and managers and all staff can be achieved. And all this will be achieved if mutual trust can be realized between managers who in this case are managers of the education services business and employees, namely teachers and non-educational staff.

Application of Total Quality Management Concepts in Higher Education Organizations is no quality control, which is quality control after the production process (after-the-event process). However, TQM always focuses on customer satisfaction and maintains quality control from the start. This also applies to the education sector (Drăgan et al., 2014). Problems in the education sector that can be solved by TQM include curriculum problems, the use of existing resources economically, how to control increased costs, the use of technology and learning, cooperative relationships with other sectors, and those related to government regulations.

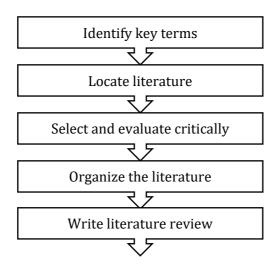
To implement TQM in educational institutions, first, review the main purpose of the institution implementing TQM. The main goal of educational institutions that apply the TQM philosophy is to meet the needs and desires of their customers. A good organization must create and maintain close customer relationships (Taskov & Mitreva, 2015). Quality must be adjusted to the needs and expectations of customers. Total Quality Management should be able to implement the university's vision and mission through online learning (Rifa'i et al., 2021). Quality is what customers want and expect, both internal customers (ie all parties in the educational environment) and external (ie all parties who are outside the educational environment but are very influential in the education service industry, such as the community), and not what considered by educational institutions as the best.

From the above explanation, online learning has the potential to run not according to teaching standards in educational institutions. Theoretically, this research is important to do to show the importance of quality control in learning. Quality control will produce ideal learning without harming the users. Practically, this research changes people's view of online learning perspective. Many people think that online learning only focuses on teachers and students, even though many parties should play a role in the implementation of online learning. Total Quality Management emphasizes that many parties play an important role in this learning, therefore this study will explain how the implementation of total quality management-based learning.

## **METHOD**

This study uses a qualitative descriptive approach. This study describes people or objects in detail in the form of narrative writing (Cresswell, 2012). In this case, this research describes the research object or research variable comprehensively. The development of TQM-based online learning is the object of research that is summarized from various sources such as credible and up-to-date academic writings. This means that the results of the review will produce an up-to-date analysis that can be implemented at this time. The literature review used is a journal or book

related to online learning and total quality management. Technically, the researcher performs an important procedure (Cresswell, 2012). First, the researcher identified research variables as materials in the search for literature sources. Second, the researcher searched the relevant material base as a research topic. Third, review the material base critically and thoroughly. Fourth, the researcher designs the literature by selecting various relevant sources. Fifth, the researcher writes a literature review as a summary of the research report. Chart 1 below are five ways of conducting a literature review.



**Figure 1.** Conducting a literature review (Cresswell, 2012)

The chart above shows the research procedures that researchers conduct in the literature review. First, the researcher breaks down the title into several research variables. They are project studies that consist of several keywords. Second, researchers search for relevant literature based on keywords that have been found. To make this research more objective and valuable, the researcher sought relevant articles from reputable national and international journals published in the last five years. Third, the researcher scans the article and selects the articles that are relevant to the research topic. Fourth, the researcher uses a systematic approach in summarizing the sources of information to develop the research. Finally, the researcher develops literature research by writing thematically and then concluding a statement from the scanned review based on the research variables.

## **DISCUSSION**

## Role of Online Learning Users

Institutions play a role in providing everything that supports lectures, both tangible and intangible. This facility must assist lecturers, students, administrators, and assessors in carrying

out lectures. In online learning, institutions are required to provide certain flexible and accountable applications (Triana & Zulaiha, 2022). In addition, the institution also must make learning regulations so that online learning can run professionally. In this case, online learning is not just giving assignments to students or direct communication, but there must be an interaction between lecturers and students, feedback, discussion, and so on. This activity is then recorded and reported by the administrator periodically. The data recorded in the application also needs to be monitored by the assessor as a learning monitoring activity to find out whether online learning is by standards or not.

The role of the administrator in online learning is to manage the distribution of the teaching schedule. The distribution of the ideal schedule is very important so that lecturers can teach according to the right proportions (Bravo et al., 2022). Lecturers would be better off teaching not too much for one day. Likewise students, they ideally study not too much in one day. The division of the schedule like this must be based on psychological and health aspects. It is expected that lecturers and students can play a role in learning healthily and comfortably.

The role of the lecturer or teacher as an extension of the educational institution is very important. They are required to be able to make online lectures like offline lectures (Triana & Nugroho, 2021). Creative teaching is needed to make students more active. In this learning, lecturers are expected to be able to improve students' motoric and pedagogical abilities even though lecturers cannot control students directly (Nugroho et al., 2022).

The role of students as learning subjects is to actively participate in learning. In online lectures, they are expected to actively discuss and collaborate. This is also a big challenge for them to stay in the online class for some time. they also contribute to providing feedback on the online learning experience. This feedback will later be used as material for the improvement and development of future learning services (Karahan & Mete, 2014). Their contribution is considered to have a very large portion because it represents the entire student population in educational institutions.

The role of the assessor is to help the institution monitor the performance of lecturers. Assessors as higher education assistants control the performance of lecturers by looking at certain aspects that have been formulated by the institution (Karahan & Mete, 2014; Todorut, 2013). They monitor and provide feedback to lecturers or teachers to teach according to the correct procedure. In addition, they are tasked with evaluating the efficacy of the application in serving learning and teaching activities.

## TQM on Online Learning System

The implementation of Total Quality Management does not escape the obstacles experienced in online learning, especially in the education sector. The implementation of TQM is

a tough job and it takes a long time to make a cultural change for quality improvement. TQM requires leadership and is a tremendous challenge and change in the world of education. TQM requires a long time and the obedience of senior staff or managers in its implementation. Fear of new methods or ways is a major obstacle in implementing the TQM philosophy. Fear of ignorance, fear of doing things differently, fear of trusting others, fear of making mistakes, and so on. The entire staff will not be able to give their best if they are not trusted and not listened to. TQM cannot be separated from the strategic plan used to achieve the organization's mission.

Because of the various difficulties and obstacles in implementing TQM, several important things must be considered in applying this philosophy to educational institutions. According to (Sohel-Uz-Zaman & Anjalin, 2016), the most important can to implement TQM in educational institutions are as follows.

# 1) Responsibility and support (commitment)

The commitment in question is the commitment from the educational institution's leadership, which is communicated to all parties. So that there is a commitment from all parties in the organization or educational institution.

# 2) Education and training (education and training)

The education and training are not only for implementing employees or the administration section but for all parties or all staff, both educative and non-educational staff. Educators and this training are aimed at readiness to face changes and improvements.

## 3) Application and practice

As a philosophy, TQM will provide benefits when practiced or implemented. without any such implementation or practice, the TQM philosophy is just a slogan that contains sheer nonsense.

# 4) Standardization and recognition (standardization and recognition)

There is a need for uniformity in the application of TQM so that the quality of services delivered is standard (robust). In addition, TQM must be introduced to all parties in the organization or educational institution, so that its application can be uniform.

Furthermore, TQM principles that can be applied in the business world can also be applied in the world of education and are often referred to as Total Quality Education or Total Quality School. What is most important is how leadership in the sector or educational institution focuses on systems rather than pursuing management problems on a micro basis. So, strong leadership is used as a force in making system improvements. According to (Mar Fuentes-Fuentes et al., 2004), the characteristics or requirements for TQM to be applied in an educational sector or institution, among others, are that the educational institution must have the following things.

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# 1) Strong leadership

The TQM philosophy that has been changed to Total Quality Service will be implemented if there is support and commitment from the leaders. Leaders in an educational institution include the principal or chancellor or program director who must support the implementation and implementation of the philosophy. This philosophy will only be realized if it is implemented as a whole, not just the department.

# 2) Continuous system improvements

The system is a series of processes that are one unit and interrelated with each other. The system in an educational institution involves a very wide range of problems, ranging from the admission system for teaching and non-teaching staff to the student admission system. From the implementation of the vision and mission of an educational institution to the preparation of the curriculum. All these systems are certainly interrelated. To be able to apply the Total Quality Service philosophy, the system must always be improved, improved, and continuously improved by adhering to the "quality first" guideline.

#### 3) Statistical method

Total Quality Service which we know as quality management philosophy does not mean just a slogan or target whose achievement is without evidence. Therefore, every person who is above him or who is based on this philosophy must dare to speak based on data or facts. Likewise, the deviations that occur have also not been proven without quantitative calculations. So, quality is not only qualitative but also quantitative.

## 4) Have a shared vision and values

Shared values and vision are important in reaching an agreement. Agreed in the sense of agreeing to make quality the way of life and Total Quality Service as a philosophy that will change the culture from being results-oriented to quality process-oriented.

5) Consistent messages and behaviors that need to be conveyed to customers

The results of the service industry, especially education, are difficult to see how is quality education difficult to measure.

Until now, educational institutions are said to be of high quality if their graduates can work in comfortable places. But we must remember, is a good place relevant to the abilities it has. Therefore, in the Total Quality Service philosophy, those who will graduate from an educational institution should be placed as customers. Although some people consider it as input, this is a second assumption. As customers, they certainly want to get good and satisfying service. They can formulate good service and they ask the employees and teachers as service providers who deal directly with customers, or the unit leaders (deans, department heads, and so on) as service providers who indirectly deal with customers. Therefore, the service provider, either directly or

indirectly in contact with the customer, must have an agreement and be consistent with his decision.

In online learning, in addition to the TQM principles above, a work plan is needed that must be realized. In an ideal online learning plan, do check, and action is needed as a mature design concept (Mehmood et al., 2014). This means that there must be an online learning plan starting from facilities, regulations, and other technical matters (plans). Next, the institution must carry out the planning carefully by the online learning blueprint (DO). Then, the institution must also conduct periodic evaluations to assess whether online learning has gone according to plan or not (check). In the last stage, there will be improvements that lead to increased service to users (action) (Neyestani, 2017). Looking at the cycle, it proves that the total quality of service in online learning is not immediately realized. The consistency of implementing TQM is something that takes time and is very valuable. The results of the evaluation of the implementation become important material for service improvement. Suggestions and criticisms from all users ranging from lecturers, students, administrators, and assessors have an important role in the implementation of learning in the future.

## **CONCLUSION**

The implementation of online learning in higher education institutions or schools must meet educational standards. Online learning should not be implemented as a formality only. The procedure for implementing online learning must be carried out perfectly. What institutions need is an effort to provide flexible online applications, strengthen supervision by assessors, increase understanding of the use or application of the teaching process, help students access the internet, and improve quality service based on users' feedback. Total Quality Management needs to be implemented in educational institutions such as campuses and schools to survive in the digital era. This system is an attempt to check and balance an object, especially in the online learning process. because it is oriented toward user satisfaction, to realize reliable management requires careful planning, proper implementation, measurable evaluation, and service improvement based on user satisfaction. This research is expected to be able to provide an overview to the institution about the importance of a system that regulates the performance of a company. The next research is expected to be able to measure the level of user or customer satisfaction with the implementation of online teaching in educational institutions. With the statistical measurement of learning service variables, it is hoped that there will be improvements in the online learning system that focuses on things that are more urgent, serious, and service improvement.

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