

Exploring Total Quality Management (TQM) Approaches in Higher Education Institutions in a Globalized Environment- Case Analysis of UK and Sweden

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ABSTRACT: Universally, the role of Higher Education is changing and getting becoming more and more integrated with the process of economic development and prosperity by contributing to the intellectual capital of many a country and act as a source of physical and social capital. This integrated global phenomenon is throwing multitudes of critical challenges in terms of developing qualitative approach towards managing higher education in a global platform with a clear objective to bring uniformity in many critical areas and reduce the gap of discrimination in terms of quality of education towards knowledge and skill building. This prudent approach and quality focus will make higher education not only more integrated with the global standards but also contribute to the talent equation of any country perfectly ready to take on global challenges and contribute towards economic growth and prosperity. The genesis of this research comes from the above backdrop which added to my quest to explore Total Quality Management (TQM) approach to Higher Education in a globalized environment with special focus on practices in United Kingdom and Sweden and analyze the practices of University College in Sweden. The quest to adopt TQM approach is to make the Higher Education Institutions (HEIs) more qualitative in the knowledge generation and dissemination as measured in the three most critical areas of Teaching, Research and Consulting as a part of extended activities. Total Quality Management (TQM) is inevitably common factor that will shape the strategies of Higher Education Institutions in their attempt to satisfy major stakeholders like students, industry, society etc. This research is an attempt to explore adoption of Total Quality Management (TQM) in HEIs as adopted by various industry and created bigger and better value delivery to its' respective stakeholders and contributed richly to the economic development and prosperity of the nation. The adoption of Total Quality Management in education sector will have profound impact on the critical dimensions such as: Consistency, Fitness to purpose, Value for money, Transformative. The evolution of various internationally recognized quality agencies like EQNA in Europe and QAA (Quality Assurance Agency) in United Kingdom is making the tough task of bringing and managing quality in Higher Education Institution possible and creating a framework for meeting the increasing expectations of stakeholders in alignment with the changes in external environment. Last but not the least, TQM is a general management technique can be applied to Higher Education Institutions to define and attain quality with a focus to meet and exceed the expectations of stakeholders by instituting the process of continuous improvement. Over the last few years, TQM has been applied in the education industry. Majority of the applications have been in the administrative side of the institutions, but some institutions have applied TQM to curriculum development and delivery area.

KEYWORDS: Total Quality Management, Quality in Higher Education, Implementation, Transformations, Culture, Models of implementation, Higher Education Institutions, Customers of higher education

INTRODUCTION

Higher education has always operated within a global and multi cultural arena. But the environment has changed dramatically over the past decade. We now live in the era of instant global communications. Many higher education institutions see themselves as international bodies. Reports from organisations such as UNESCO, the world bank, OECD acknowledge the crucial role for education in economic development throughout the world. In these reports the roles for higher education in economic development, the globalisation of the world economy, the development of a knowledge based society and the education and training of a flexible and skilled workforce are seen as crucial.

The development of Higher Education Institutions across the world are bringing the importance of elements of Quality and Accountability into surface, more prominently than others, which is the bedrock and key driving forces in higher educational institutions in Europe, and in this respect, the total quality management (TQM) movement has assumed the attention of educators or academic professionals at all levels and spectrum. Certainly, University College in Sweden or for that matter any higher education institution embraces the concept of Total Quality Management (TQM) as a set of tools for planning and driving continuous improvement.

Academic and academic related staff in higher education are increasingly likely to become involved in a variety of ways in educational activities in international dimension whether as policy makers, advisors, members of research or teaching groups or as individual practitioners. This increasing international participation has had the effect both emphasising existing problems of ethical issues arising out of academic work and of raising new ones.

This thesis has considered the role of higher education in an increasingly inter-connected world, a role which is becoming more and more recognised and integrated into the process of economic development. It has also sought to look at development from qualitative perspective in broader terms than just economic and in way that reflects higher education's traditional roles and values. While this process may take a little longer time to establish and therefore will generate tensions, but the fruits of success are not so far and predictable.

On the threshold of a new century higher education must come to terms in its teaching, research and scholarship with effects and consequences of globalisation. Higher education must strengthen and target its contribution to sustainable qualitative development and towards human developments—in particular through sustained efforts to promote the sharing of knowledge, to the reduction of inequalities at the international and national levels, to combating exclusion and unemployment, and to the eradication of poverty and various forms of exploitation and discrimination.

As far as quality in higher education is concerned, it is not the modern concept rather it goes to the medieval ages (Rosa and Amaral, 2007). In the 13th century, the two models have been observed in quality concepts i.e. French model—the archetype of quality assessment and the English model—a self governing of community. These models deal with the two dimensions of the quality; intrinsic and extrinsic. The first one has been dominating over the period of time

and now it has emerged as a driving force in HEIs. The approaches have been changed in quality concepts in higher education institutions due to various factors as argued by (Rosa and Amaral, 2007: 183) "the massification of higher education, changes in the relationship, between higher education institutions and governments (from a model of state control to a model of state supervision), the increasing role of market regulation, increasing institutional autonomy and the problems of the principal/agent, and the loss of trust in universities associated with new public management". Keeping in view all this, the research work has been designed identifying the issues and processes, illustrating the models theoretically as well as pragmatically.

Why Total Quality Management (TQM) in higher education! This is one of the most important and pertinent question as it sets the tone and build the **rationale** for adopting TQM approaches in higher education. In a globalised environment of higher education, the concept of Total quality management (TQM) has assumed critical importance as it is the only means by which the entire value chain of higher education can be improved further and integrated with the global requirements. Therefore, TQM as a quality management process has made inroads into higher education institutions (HEIs) in many developed countries.

For example, in the US, the success of many large corporations put huge demand on HEIs to embrace quality approach to overcome the critical state of education in the 1980s in terms of student grades, funding, and complaints from employers and parents. In UK higher education, the progress of TQM is relatively slow as adopted by only a few universities. Those universities or institutions have benefited from a TQM process similar to their counterparts in the US in the parameters like improved student performance, better services, reduced costs and stakeholders satisfaction. In other words, adoption of TQM has helped the HEIs to achieve the business excellence. Therefore the critical task before the HEIs is the measurement of TQM principles as to provide a means of assessing the quality of institutions on various aspects of their internal processes. As regards measurement method, various measurement methods could be used by the quality assurers in the UK to assess education quality of HEIs.

As far as TQM in higher education institutions (HEIs) in Sweden is concerned, it is of paramount importance to illustrate an institution reflecting the TQM approaches and development in true sense. In this regard, the author has chosen the University College of Borås in Sweden. The key objective is to assess its quality work and the committee has been appointed named as Committee for Evaluation and Self-assessment which gives its investigation every year. The model of University College in Sweden is no doubt a substantial with regards to comprehension and implementation of TQM approaches effectively. This model has been cited by many organisations and higher education institutions and the writer has not only presented it but also expounded it in comparison with UK higher education institutions and their TQM approaches.

The pivotal role of the Quality in the higher education has established and it has earned a respectful position in the highly competitive environment. Babbar (1995, pp. 35-55) argues that educators and administrators are paving the ways to construct an effective and meaningful instructions for the betterment of the higher education.

In UK, substantial efforts were given to establish the quality sector to enhance the quality and standards of higher education effectively. Keeping in view this, the philosophy emerged in the face of the literature is the named as Total Quality Management.

TQM has been effectively executed and implemented in some Higher Education Institutions (HEIs) and the results are tremendous and it has improved their quality as a whole. Therefore, this institute has intended to do an assessment of its quality work and this objective is described and achieved in this thesis work. The writer has realized that this kind of evaluation will be proven as a benchmark in TQM philosophy. Further, the aim of this work is to compare and contrast the quality work of this chosen institution with the principles of a TQM approach.

The issues of quality management have become one of the most essential ingredient and force within higher education institutions all over the world. In this respect, a plenty of approaches and principles are being adopted and exercised depending upon the circumstances and challenges. HEIs have been dealing it as an agenda as well as a criterion for the enhancement of credibility and value creation. There has been some forces such as growing populations of the masses, greater expectations and diversity of the students, their need and demand for flexibility in provision and above all the fierce competition in the global world are some of the forces driving the HEIs towards projecting the quality standards high and up to the mark (Becket and Brooks 2007). HEIs plays a vital role in stimulating economic growth and international students to national growth exacerbate the demand to make sure the quality within the HEIs. These factors highlights that quality assurance processes are crystal clear and rigorous and it becomes evident that the need of quality enhancement initiatives are measured to serve quality of education to the masses.

This article will impart the sneak peek review of the different approaches and principles being exercised to enhance the quality management in HEIs. Within the UK, it has been observed that there are some environmental forces forcing the urgency for the effective quality management which include;

- A growing climate of increasing accountability
- An expansion in the size of the student populations
- An increasingly diverse student population as a result of widening participation initiatives and targeting international markets
- Diminishing resources by which to deliver programs to study
- Greater expectations of students as paying customers
- More flexible educational provision at both undergraduate and graduate level
- An increase in collaborative provision between institutions

These sorts of forces demands that institutions should have some effective and result-oriented quality assurances programs and processes which ought to satisfy the internal as well as external stakeholders. Avdjieva and Wilson (2002) argue that HEIs have now become the *learning organisations* where stakeholder's interest is more important and the adoption of the quality management is always on front to enhance the effectiveness and to win the competition. All these factors will be discussed in this thesis and such is the strong background of this work.

LITERATURE REVIEW

This chapter is the main body of the thesis, giving conceptual clarity and intellectual perspective of the key concepts of Quality, total quality management with regards to the higher education which is no doubt the focal point of this thesis.

Quality

It seems to be simple when one look at the word quality but it has profundity in it. The term is widely used and defined by many scholars and companies with regards to its context. The writer of this thesis has presented some of the key definitions of the term as follow:

- “The degree to which a set of inherent characteristics fulfills the requirements, needs or expectations that is stated, generally implied or obligatory” (ISO 9000:2000).
- “The lack of quality is the losses a product imparts to the society from the time the product is shipped” (Genichi Taguchi).
- “Quality should be aimed at the needs of the customer, present and future” (Edwards Deming).
- “Fitness for use” (Joseph Juran).

Mikel Harry from Six-Sigma Academy defines: “Quality is a state in which value entitlement is realized for the customer and provider in every aspect of the business relationship”.

In addition to these definitions, Bergman and Klefsjö (2003) have defined quality as: “The quality of a product is its ability to satisfy, or preferably exceed, the needs and expectations of the customer”. All above mentioned definitions are given in various perspectives and contexts on various issues.

Quality Dimensions

It is quite worth mentioning here to differentiate the quality dimensions in higher education sector. It is observed that the quality management has got different dimensions and it has been developed within the organisation. Let’s have a look some of the quality dimensions in goods:

- Reliability, in the context of the quality, refers to the occurrences of a problem for a specific product and the probability of which that problem may occur.
- Performance refers to the important criteria of product for the customer such as useful life, and speed.
- Maintainability, that points out how difficult or easy it is to recognize, concentrate, delimit, and solve a problem.
- Environmental Impact is a measure of the influences of a product on environment. Emissions of a product and its recyclability are important in this dimension.
- Appearance, which relates to aesthetic appeal and aspects created at design time such as color and shape.
- Flawlessness, which means that the goods are not destroyed by errors and defects at the time of purchase

- Safety that means the good does not have any damage to person or property and take in place some protective actions against destructions.
- Durability is mostly concerned about the usage, storage, transportation of that product without being destroyed or being failed.

In addition, there are some of the quality dimensions for services:

- Reliability in the context of quality dimension for services means the fitness to operation, which is including the accuracy of information and procedures and commitment to what you have pledged.
- The main concern of credibility is the capability of relying on suppliers.
- Access is related to facilities for making contact with the suppliers and availability of suppliers.
- Communication points out to be in touch with the customer in an explicable manner.
- Responsiveness refers to being interested in assisting the customer.
- Courtesy refers to the fact that how suppliers behave to their customers.
- Empathy, insists on understanding the customer's condition.
- Tangibles refer to the appearance of equipment and physical environment of service execution.

It has been made clear that the quality dimensions are the essential part in planning the products. The products and services are to meet the need and expectations of the people. In this respect, the quality dimension in the context of HEIs is the service quality. It should be kept in mind that the students are not the products but the education is the product. Moreover, it is HEIs that impart the quality of services to their students to enhance their knowledge and make them competitors in a globalized environment Bergman and Klefsjö (2003).

Quality and Success

What is quality and how it generates growth and success in any business? According to Bergman and Klefsjö (2003), quality brings numerous profits to the organisation or business and some of them are mentioned here.

Quality and success are taken as reciprocals. Being the part and parcel for each other, it generates loyalty as well as trust of the customers. Customer's satisfaction lies in the quality of the product or the service and this is the real success of any business. Its fruits are cost reduction as well as value generation by achieving the competitive advantage in any field.

Another fruit of quality work is to increase the productivity and this enhancement of the quality does generate the effective capability to offer more effective services. In HEIs perspective, the funds and amounts revived by government will be decrease and financial stability will be ensured. In globalized environment of today, it has become essential to avoid the waste and load of rework by planning thus reducing the cost of education eventually.

Effective and improved quality in the HEIs leads towards prosperity and applause at all levels. The market position gets strengthened and employees turn over as well as the sick leave rate is reduced and this will result in creating more opportunities for jobs and thus reducing the unemployment rate as well.

Finally, improved profitability is the product of improved quality work and sets higher parameters of competition. Poor productivity is the product of poor quality work and it increase the lead time as well. All this ends with the dissatisfaction and disappointment which is the death of the business Bergman and Klefsjö (2003).

Quality of Higher Education

The exact and profound definition of quality in higher education is thought to be one of the difficult tasks coming forth. There is no speck of doubt that the quality plays a pivotal role in higher education today. Owlia and Aspinwall (1997, pp. 527-543). Feigenbaum (1994, pp. 83-4) believes that in “invisible” and fierce competition among the different countries the quality of higher education has become the main focal factor. The reason behind it that the quality of the product is defined and measured the way the actions, decisions, plans are taken by engineers, managers, workers and teachers in the quality work.

Today, higher education has personified and emerged as a commercial competition, Seymour (1992). The global market of higher education is emerging as an economical force and producing the quality services in the field of education. The reduction of the government funds and grants encourages the HEIs to take the plunge in getting other financial resources freeman (1993). Therefore, it is essential to know what quality means in education. Hence, there is no single line definition of the quality of higher education however the abundant explanations are available to understand the concepts.

Furthermore, Cheng and Tam (1997, p. 23) suggest, “Education quality is a rather vague and controversial concept” and Pounder (1999, p. 156) argues that quality is a “notoriously ambiguous term”. Though the definitions presented above are somehow related to the industry, there are some gurus who has defined and explained it with context of higher education. In this sense, Campell and Rozsnayi (2002, pp. 19–20), defined the concepts of quality of higher education related to industry:

Quality as excellence: this definition is taken to be the traditional academic view believing that goals to be the at best.

Quality as zero errors: this definition is most suited to the mass industry where products specifications are developed and uniform products are measured within one standard set of measurements. This sort of view is not considered in higher education because the graduates are not supposed to be identical being the products of the higher education.

Quality as fitness for purpose: it means that the product for the service reflects as well as fulfills the needs, expectations and desires of the customers.

Quality as transformation: this concept puts emphasis on the learners. The improved and quality HEIs have to have the ability to empower the students with skills, knowledge, and attitude to live as well as to serve in the society for the enhancement of the intellectual capital as well as the social capital.

Quality as threshold: this means that an institution ought to have the set norms and criteria as threshold on which basis it can achieve its goals and look forwards beyond the horizon.

Quality as value for money: it implies the accountability which is the central point of this quality not depending upon the public expenditures.

Quality as enhancement or improvement: this notion always pursue the continuous enhancement and improvement and it believes that the academic ethos set the directions and goals to achieve the quality and academics themselves know better what is quality and what it stands for?

In spite of all these different definitions on quality of education, quality of output and reputation in academic study is valued in HEIs. However, the quality processes and procedures adapted from the business school of world required to be reinstalled and reoriented and reshaped and more compatible and coherent for higher education perspective and condition by turn the focus from business management to education practices, Mizikaci opines (2006 pp. 37-53).

In addition, Tribus (1994, pp. 37-40) argues that one should keep in mind that there is a striking difference between education and business industry to clarify the routes as well as feasibility of practices. The major differences are as under:

- The school is a learning institute, not a factory.
- The student is not a product.
- The education of the student is the product.
- Successful completion of the product requires the student to participate as a worker, co-managing the learning process.

According to Kwan (1996, 25–35), there are four differences between education and industry; objectives, processes, inputs and outputs. In the industry perspective, the measure or criterion to be effective as an organisation is the profit. But in educations, the goals and objectives are not so simple. In education, the objectives of the higher education ought to cover the answers of such question; what should an institution impart to its learners and how effectively it can convey its message? Tribus (1994, pp. 37-40) views that the objectives of the HEIs should give opportunities to students to improve and enhance their learning, knowledge, intellectualism, wisdom and above all character enriched with formation of soul. It also creates the sense of building societies as well as preserving values, becoming the respected and trusted member of the society.

Customer of Higher Education (HE)

It is very important to define who is the customer of the higher education? A tough question to ask! Anyways, HEIs believe that it's a challenge to do so, Lawrence and Robert (1997, pp. 279-91). According to Owlia and Aspinwall, (1998, pp. 501-18), "From different customers of higher education, students were given the highest rank. The remainders, in rank order, were employers, society, faculty, and families". To give ranking is essential because the needs and expectations of different peoples and groups are different.

Michael and Sower (1997, pp. 104-120) argue that there is no university or college that wants the definition of customers in HEIs and they dislike to define students as customers. This issue is problematic for the administrators and HEIs. The faculty does not take students as customers because they know customer is always right but not the student. They cannot afford student always right.

Michael and Sower (1997, pp. 104-120) argues that quality of education does not mean that student should be given whatever they demand. The faculty believes that student's interest is

to pass the exams at any cost and entitled as graduates and this is not the long term learning and the real essence of learning.

According to Venkatraman (2007 pp. 92-112), stakeholders should be taken as customers and these stake holders could be internal such as employees and could be external such as students and society.

Harvard University defined its customers as “as one to whom we provide information or service”. Students who use the services of the institution and employees who are consumers of students are regarded as customers. Therefore, the customers are students, employees or both. According to the Span Bauer, there are two types of customers internal and external. According to Srivansi, students as customers take four particular roles:

- I. The product in process
- II. The internal customers for many campus facilities
- III. The laborer of learning process
- IV. Internal customer for delivery of course material need is determined by education mix. viz teaching, research and extension activities.

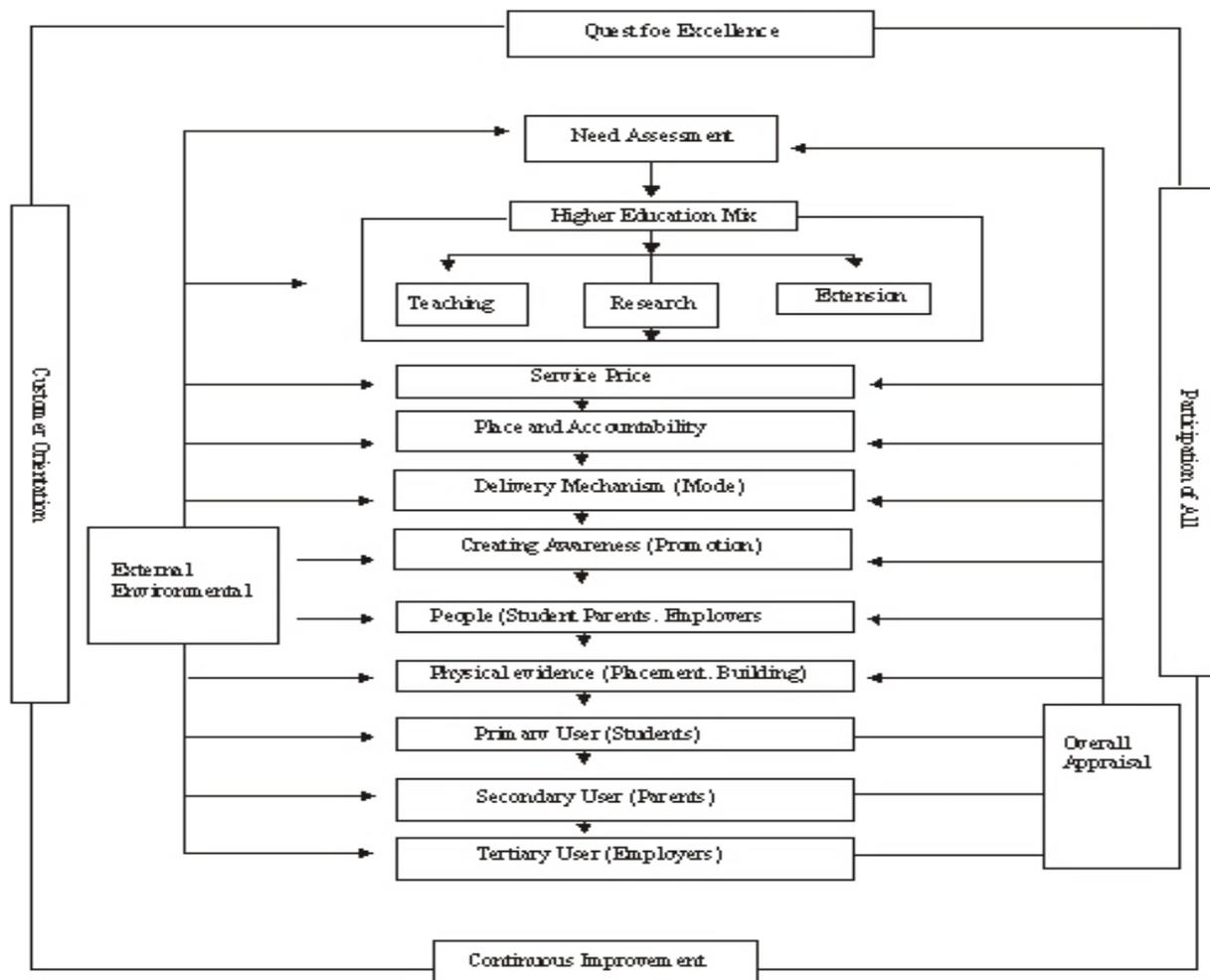
Teaching, being the backbone of educational system, has the objective of transferring the knowledge from teachers to the taught ones effectively. It could be in any form such as class room teaching, discussions, case studies, presentations, field projects and stimulation methods etc. teaching methods in synchronization with the learning objectives will facilitate better teaching-learning process.

Research has been stereotyped to be the part of educational systems hierarchy where focus is on exploring new horizons in the research studies in higher education. It is related to innovation and insight to the subject matter. A good and effective research not only promotes scientific thinking and rationalism but also leads towards the economic growth and glory in the long run.

Extension activities are those activities that address the common problems and issues of the society with the help of developed knowledge. Higher educational system does not operate in isolation rather it has a lot of interfaces including sociological, cultural, economic, technological and political as well. The laboratories of the universities are constantly engaged in innovating the new developments for the betterment of the societal challenges and life cycle.

Service Price is also an important criterion in determining as to have access to higher education, living hand to mouth; the majority of the population is not able to pay the fees. Therefore the government and public funded institutions are striving in controlling the cost escalation and providing higher education to the economically unprivileged ones at a reasonable cost.

There are more considerations kept in mind while providing the best education to the students and these are place and accountability, delivery mechanism, physical evidence, creating awareness and above all the people who really contribute a lot in various forms. Therefore, it can be concluded that participation of all these constituencies of higher educational systems does result in continuous improvement in the process. This approach will facilitate more customer friendly practices resulting in excellence of performance in terms of quality outputs. This system will improve quality at every stage.



A strategic Model for Implementing Total Quality Management in Higher Education Services available at <http://maxwellsci.com/print/ajbm/v2-9-16.pdf>.

In the aforesaid model, need for higher education is primarily based from what the customers want in terms of output and satisfaction.

There are some key **Challenges** in TQM implementation in higher educational institutions as given as follows;

According to Srivanci (2004) critical issues in implementing TQM in higher education includes leadership, customer identification, cultural and organizational transformation. Unlike business organizations, chancellors and heads of higher educational institution do not enjoy ultimate authority in hiring and firing of personnel and allocating resources. Lack of necessary authority makes it difficult to deploy their values and goals through layers of higher education institutions. Deep rooted traditions dating back to centuries, a rigid departmental model, inter departmental competition for resources, lack of market focus are the cultural and organizational reasons that makes it difficult important questions, non-receptive of academic culture to TQM (Koch, 2003).

Unlike other organisations, Higher education institutions (HEIs) have been facing some **challenges and issues** which include;

Leadership: Unlike CEO's of business organizations, Vice Chancellors/Directors of Universities/Institutions do not enjoy ultimate authority hiring and firing personnel and allocating resources. Institutional heads can set goals, organizational values and performance expectations. However since they lack necessary authority, it is difficult for them to deploy these values and goals through the layers of higher education institutions.

Cultural and Organizational transformation: Many business organizations have adopted TQM and transformed their institution's culture into a total quality culture that involves elements such as teamwork, employee participation, customer and market focus etc. However higher education institutions have adopted much better and improved approach as illustrated in the model above. Market requirement for their students are of secondary importance to them except for some professional schools as business and engineering. In business organizations there is cross linkage and well communication between the various functional departments. But in the case of higher educational institutions, most of the individual departments operate in vacuum. This is one reason that interdisciplinary study and research is a rarity.

Customer Identification: A different aspect of customer issue here is customer loyalty. In businesses, customer loyalty is very important because repeat buying by loyal customers has a direct effect on profitability. However higher education is "once in a lifetime activity". If students are considered as customers, this concept makes sense only when they make donations as alumni. However if employers are customers, repeat purchase means recruiting at same institutions every year.

Total Quality Management (TQM)

To define the concept of quality is an initiative objective for the HEIs, but the real motive is the concentration of achieving this motive. The critical question arises how the quality of HEIs can be achieved and what parameters and what is the science need to be adopted.

Over the past few decades, the quality gurus Crosby (1979), Deming (1986), Feigenbaum (1983), Juran (1986) and many others have developed this concept expounding and illustrating this area of study under the canopy of quality management. The approach they have has been considered a milestone in understanding of the quality management principles.

The term has been devised and coined by Feigenbaum in 1961 as total quality control (TQC). The term TQM has been defined comprehensively as "the process of integration of all activities, functions and processes within an organisation in order to achieve continuous improvement in cost, quality and function and delivery of goods and services for customer satisfaction". Gaither (1996) has defined the term as "TQM is the process of changing the fundamental culture of an organisation and redirecting it towards superior product or service quality".

Michael *et al.*, (1997) argued that TQM is regarded as a general management philosophy and a set of tools which allow an institution to pursue the definition of quality and a means for attaining quality, with quality being a continuous improvement ascertained by customers' contentment with the services they have received.

According to Witcher, (1990), TQM is composed of three terms: Total: meaning that every person is involved including customer and suppliers, Quality: implying that customer requirements are met exactly and management: indicating that senior executives are committed. While summing up the conceptual framework of TQM, it nothing but doing things

right for the first time, striving for the continuous improvement, fulfilling customer's need making quality the responsibility of every employee etc.

However, quality issues are taken serious in the activities because of the increasing number of institutions and organisations and the competition among them enhance the significance of this exercise. Keeping in view all this, the concept of quality and management has emerged and evolved into new philosophy named as Total Quality Management (TQM).

It has been viewed that people hold different views and opinions regarding the TQM, some believe it is a sole way to reach the competitiveness and value creation in real sense. Other argues that it is no more than a management kind of exercise. All these perspectives are true to some extent but Becker (1993, pp. 32-3), Ghobadian and Gallear (1996, pp. 83-106). Hellsten and Klefsjö (2000, pp. 238-44) believe that all these concepts are have been formed and these concepts are not likeable by the fathers of TQM.

Despite all the descriptions and discussions and having different names for the same concepts, there are some serious definitions of TQM. What is TQM is actually all about? In the coming review, the definitions and descriptions of TQM will be presented in order to enhance the understanding as well as the exploration into TQM approaches in higher education in a globalized environment.

In this context, it seems to be tough to define TQM in two line definition. However, Okland (1989) says TQM is "an approach to improving the effectiveness and flexibility of business as a whole", and there are some others as well:

- A set with improvement tools useful in an organization.
- TQM is a management philosophy.
- TQM is a program for changes based on a company's culture.
- TQM is a management system.

Hellsten and Klefsjö (2000, pp. 238-44), have argued that the TQM is a management system which comprises of three interrelated and interdependent components: tools, values and methodologies. The aim and goal behind this is to increase the satisfaction of the internal as well as external customers with the use of reduced resources. Therefore, the writer has discussed the management system view for this approach in the next part and this work will rely on this approach.

It is quite interesting to note that the origins of TQM in business and industry and its effective execution in multiple cases as a dynamic remedy has linked it with HEIs and plenty of articles have been produced in this regard. It has been seen that many organisations and businesses have approached TQM in services like HEIs has earned immense credit and credibility among its competitors and it's all about pursuing TQM programs, Ramona and Sower (1997, pp. 104-120).

TQM philosophy has successfully penetrated in HE having varying perspectives as far as approach is concerned. Some see it as a system of fulfilling the needs of the customers effectively. Other takes it as a philosophy to foster change in an organisation or educational institution. Academic institutions have adopted both the approaches in implementation setting in HEIs. Internal and external environments are regarded crucial in operating the institutions.

The systems approach to education consists of inputs, processes and outputs all encompass in an arbitrary boundary and environment. Inputs are like humans, physical and financial resources (students, faculty, administrations, and organisational culture). Process is a series of actions or operations concluding to an end. Finally the outputs are tangible outcomes, value addition (through examination results, employment, earnings and satisfaction), intangible outcomes (educated people, research findings and service to community).

TQM Implementation in Higher Education

In the previous discussion it has been discussed and expounded what TQM and its components are actually all about? However, there are some effective and useful points to remember for the application and improvement of the quality work. Now the second part of TQM is the implementation of all what has been described in previous chapter. Keeping in view the implementation of TQM the author has presented and projected a model, suitable and applicable for any organisation.

TQM Model for Higher Education

There is no denying the fact that TQM has been working usually in the industry effectively as well as successfully but there are some strong reasons for using it in the educational institutions. Firstly, the inevitability and necessity of change is not welcomed and accepted in the institutions most of the time. Secondly, the institutions face the autonomy of faculty's individuals. Therefore, in TQM approaches, the involvement of team and customers is appreciated and regarded as well, Fisher (1993, pp. 15-19). Lastly, TQM will improve the current process in the HEIs. Radical change cannot be promoted there easily, Fisher (ibid); Marchese, (1993, pp. 10-13). The applicability of TQM is made accepted in education first and then the procedure of its process is going to be addressed.

For the applicability of TQM, several models have been proposed and in the field of HEIs many institutions have been reviewed the applicability of TQM in HEIs. Five steps model have been introduced and presented by J. Motwani and A. Kumar (1997, pp.131– 135) believing that it is worth applying to every organisation with no exception at all. The five phase's model does; deciding, preparing, starting, expanding and evaluating.

J. Motwani and A. Kumar (ibid) has proposed such a TQM model that clearly describes what needs to be done and what measures it needs for the implementation of TQM. If we start pondering over the Deming cycle and these phases, we come across many similarities between the two. These similarities will serve the greater purpose in the sense that the combination and integration of both will bring more effectiveness as well as efficiency in terms of quality improvement systems and TQM in HEIs.

It is noticed that the purpose and function of Deming cycle is the continuous improvement in quality processes whereas the selected TQM model improve the quality. Therefore, both the models with some novelties and changes would bring about an effective and continuous improvement in the quality. See figure 13, for the demonstration of the proposed model where the Deming cycle is presented and projected with some changes as TQM model. Therefore, it will be crafted as a four step cycle and the components are mentioned as follow;

Plan step has been divided into two parts. First one is the study of TQM which includes the research of what the TQM and its concepts and the management perceive the concepts and its aspects, objectives and they initiate the plan accordingly. The next part of this plan is to prepare

for the cause and perform an initial investigation of the quality work along with defining and identifying the values, methodologies and tools. In this part the visions and objectives ought to be cleared and demonstrated for the greater purpose and results as well.

Do step in this model is about initiate, plan and implement the solutions with dexterity. For this purpose, the training should be introduced at all levels regarding the terms such as quality, TQM, core values, methodologies and tools. The customer surveys should be conducted effectively and presented to both the internal customers as well as the external customers. The formulation of the quality council as well as quality improvement teams will prove a milestone in this respect. Lastly, some measures should be taken and benchmarking on the part of universities should be performed for the recognition and rewards improvements.

Check step is nothing but the evaluation of the plans and do steps accordingly. More focus is on the checking of actions that has been done ensuring that these actions are in the right directions and really contributing in achieving the set goals and objectives in the quality improvement.

Act step is divided into two parts. The occurrences of the problems lead towards rechecking the systems applied before. This step is crucial as it monitors and solve the issues and gives new ways of doing things effectively and with standards. The criteria of doing work is to be up to the mark and this will stop the unnecessary changes and issues been affected within the acquired systems.

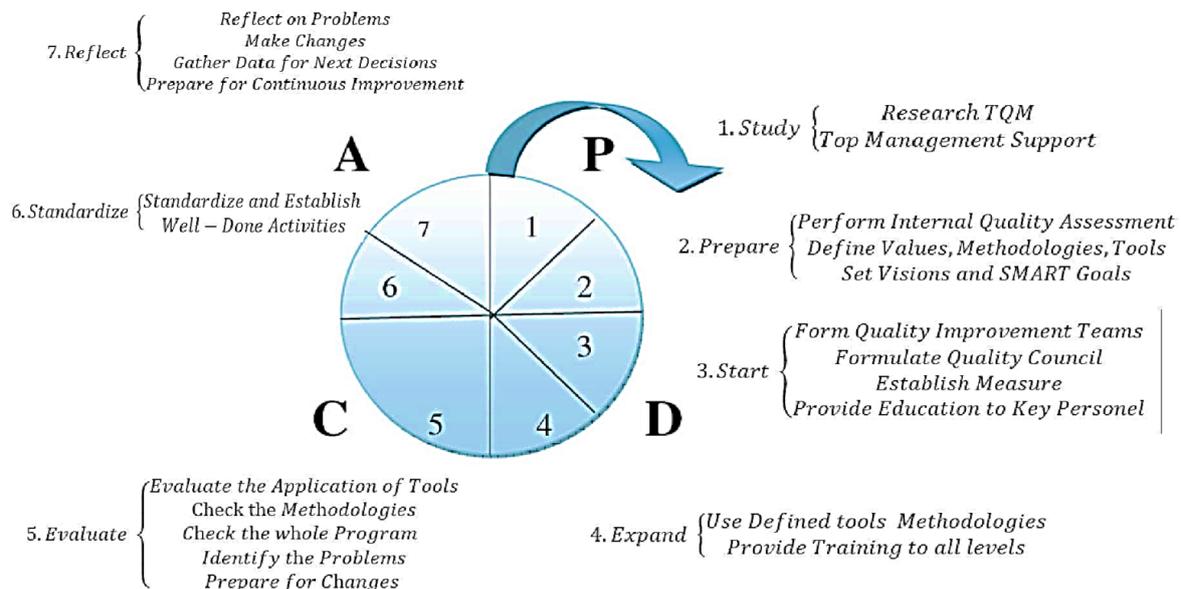


Figure 13. TQM Model for Implementation in Higher Education

<https://www.google.co.uk/search?q=quality+awards+by+different+agencies&source/>

RESEARCH METHOD, ANALYSIS AND DISCUSSION

The Author has chosen to apply case analysis of University College in Sweden elaborated the concept of quality and the approaches of Total Quality Management in this research article. The process of evaluation and investigation of the quality work in different departments of the

university college has been done and various issues and problems are identified and need to be redressed in the above sections. Now it is the time to give solutions and recommendations to improve the quality efforts and systems in this university particularly and in HEIs generally.

As witnessed in the above readings, the objective of this thesis work is to point out the general principles and approaches of TQM in HEIs projecting how these dynamics and versatile approaches has been and can be utilized to improve the quality in the real sense in such a globalized environment. From very beginning to the very end of this process; definition to implementation, the researchers have strived to present the comparative study of quality work of this university college with the general principles and approaches of TQM.

Analysis & Discussion

University College in Sweden carries a clear and lucid vision which is to be a university of profession. In addition to this, there are some short-term goals as well paving the way towards long term goals effectively. The endeavor to reach the set goals of effective quality management in solving the quality issues has been worth-applauding by publishing various policies and guiding principles and effective TQM approaches by this university. Different responsible peoples have been assigned the different activities to enable this institution a model and guiding star in the field of quality managing and quality producing industry.

The appointment of different boards of directors, quality coordinator and quality improvement teams is believed to be a crucial step towards these policies, quality movement within different quality issues. There is some other improvement teams appointed in some other departments as well. The approach of this university regarding the quality issues is effective as it does evaluate and assess its work on regular basis, making sure the efforts and processes are really contributing to the set goals and objectives of this institution. This is not the end of it rather it does seek always the betterment and improvement in the quality issues and takes some initiative measurements in this context.

When it comes to the results and achievements, some departments, programs and committees have had great success in achieving objectives a result of these movements and this quality system. The committee for equality and multiplicity is the best example of successful in terms of achieving objectives towards improving the equality. Furthermore, Swedish school for Textile is another example of success when it comes to profession.

Although, some people argue that quality work varies from departments to department and it depends upon work within the concept of quality. These departments improve their education system on their own within the circumstances and challenges they are facing.

In fact, this institution is constant in evaluating and auditing the quality work of this institution on regular basis. They believe this internal assessment and audit beneficial and of paramount importance because it helps figure out problems and their solution as well, thus considering it a tool for continuous improvement. However, the committee for evaluation and self-assessment worked in this project to unveil the upcoming and possible problems that could cause hindrance in the way of continuous improvement.

The findings regarding quality work of University College in Sweden in the above investigation has been described here. Firstly, it has been concluded that not all the people are quite familiar with the concepts and approaches of quality along with related issues in true sense. An endeavor to redefine the concept with all its association and implications is deemed necessary for the

enhancement of this concept in this institution and HEIs as well. In this context, the responsible groups of people in this field of this task should be given enough knowledge as well as training to deal with the issue of the quality. Some more detailed problems have been identified in the investigation which will be described as well.

There have been some reservations and questions regarding the goals and visions of this university college and some argue that defined goals and visions of this university are far and not accessible. According to the authorized personnel of quality efforts, employees can be taken as external customer with no exception.

The decision is made based on the analysis of the data to design the programs keeping in view the needs and demands of the students and society and only the systematic data can deduce the desired results and outcomes. The analysis and investigation of the data and sources reveal that university college of Boras is not exercising well-defined processes and the relation between these activities and the purpose of the actions is vague as well.

As far as plan of action in this university is concerned, the investigation is there for allocating resources to develop healthy disciplines in particular areas. In this context, methodologies and consumption of resources have been improved continuously in this institution. For instance, some responsible people for the quality work think that this university college can use Bologna process is thought to be the best approach for this university college as many argue.

The approach and principles set by this university college is the belief that every department ought to be involved in quality work and efforts to maximize the results and gain objectives and they are held responsible of that as well. That is how the commitment comes in. In this way, we see in the investigation of data that all the departments are not playing their active role in the main stream of quality work and some people belonging to the committee and council have not been seen as vigilant as they supposed to be. The people responsible of the quality work have not been educated properly regarding the concepts of the quality work. As far as the methodology is concerned there is no well-defined methodology practiced for the enhancement of the quality work.

In addition, according to findings there must be a systematic way to facilitate university for controlling the strategic goals of the university and actions done more regularly. However, this systematic way should also take into consideration the point that there should not be more workload for employees and staffs.

Although, there are many documents regarding activities should be done, towards objective of the university and the needs of different stakeholders, still lack of some well-defined processes that show the connection between these activities and objectives are visible.

The university board and top management are always looking for continuous improvement and they have plan for their activities. Although, there are some actions done towards their plans and they check what they have done, but it does seem that there is no record on well-done actions.

According to existing documents and interviews, it does seem that for analyzing verbal information and numerical data there is no such a structured way. However, there are some meetings and many discussions for analyzing all kind of data and information. This may lead to wrong analysis and consequently some inappropriate decision may be make.

At this institution, different departments have special procedures and methods for improvement. The overall objective of all of them should be the same and towards the objectives of the university. These diverse procedures may lead to different results, which not necessarily are the same as what the university wants to achieve.

In another word, within one institution it might be more effective if all departments use the same frame of reference for their improvement, although this does not mean they must all follow the same methodology or the same processes.

Another finding in this investigation is that group of chairman of different committees, quality council, and quality coordinator form a quality improvement team for the whole university, and some schools have their own quality improvement teams like school of engineering. In our point of view, appointing a technical and supportive quality improvement team is differing from these improvement teams, while they must have the whole responsibility for the quality work of university.

This university has started to use ISO 14000 as a tool for moving towards environmental issues. Furthermore, in all meetings appointed for discussions about quality issues, brainstorming is a tool in order to uncover problems as well as suggestions for problem solving. According to this investigation, there is no evidence proving that some other practical tools have been used by this university i.e. some appropriate and more structured tools for collecting ideas, data and analyzing, and prioritizing.

Evaluation and assessment of the quality work at this institution is about internal assessment, which not necessarily will lead to identifying the problems and recognition of areas for improvement. In fact, self-auditing has many advantages but some external audits can facilitate and motivate this institution for more improvement.

According to above discussions the following points were founded regarding to the quality system of the university.

1. There are some defined visions and goals; however, they could be defined better.
2. There should be some overall awareness about the goals and visions defined by the university.
3. The concept of quality has not been fully understood by those involved the quality work of university.
4. Commitment of all people involved the quality work is desirable.
5. There is a need for participation of more people in quality work, and they must be active in this context.
6. The tasks of different groups must be clarified, and there should be some well-defined goals and objectives for them.
7. Well-done activities should be recorded in order to let others to know. This will prevent overdo activities and making the same experiences by different groups of people and at different timetables.
8. Lack of some well-defined processes is visible in the quality work of university.

9. Although, there are many documents and activities defined for improving the quality of higher education at this university, still there is no a systematic way of improvement.
10. In some departments there are some quality improvement team, other departments have different procedures for improvement. That might be a wise idea to implement a unique approach in all departments.
11. Quality work should be conducted in a way, which will not lead to more work for employees and staffs.
12. Some well-defined methodologies must be classified by the university, and requirement of different stakeholders will be translated to university objectives in all areas.
13. Some more practical quality tools must be used by those involved quality work. This will facilitate the university to have more structured data collection and analysis.
14. There is a need for some external audits. Assessing the quality work of university by some other quality assurances and accreditation agencies not only will facilitate the university in the context of quality, but also it will motivate them to work straighter forward.

CONCLUSION & RECOMMENDATIONS

Conclusion

In the conclusion, the writer has summed up the discussion on quality issues and standards established by UCB administrators to improve the quality in HEIs in such a globalized environment. This university has established and set the directions, guidelines, approaches and policies to improve its quality in different issues in order to embrace the goals and objectives of the institution. This university has named the quality work as Quality Effort which constitutes that the quality is an everlasting phenomenon and a constant effort is the hallmark of its effectiveness and success.

This research work is the projection of a complete and comprehensive document on TQM approaches as a facilitator to the Higher Education Institutions (HEIs) and more precisely considered institutions and towards embracing the goals. Policies and different quality issues are believed to be the key focus of various boards of directors such as Center for Learning and Teaching Method (CLU), quality coordinator, quality council and its consisting committees and quality improvement teams to deduce the effectiveness of the institution in TQM approaches thus giving the radiance and glow to it.

Defining the parameters and approaches with set directions and plans of actions with various effective activities have paved the way of this university to the path of success and glory and this is the way the landscape and the phenomenon of the HEIs is increasing breaking the barriers of nationalism emerging to the horizon as an international and global phenomenon unavoidable for the world education system. These movements strive to evaluate and assess quality work and its issues at all times. The sought of continuous improvements is the hallmark of success and glory in HEIs particularly in this institution.

The aim of this project is to evaluate the current quality work of University College in Sweden.

In this context, the quality work has been assessed based on the defined TQM approaches and its implementation. In the approaches the researcher has pointed out the problems and its relevant recommendations and suggestions to reach the ultimate goals and objectives in university college of Borås as well as HEIs. Some more points and improvements are needed to be emphasized in quality management issues. All the committed people should be involved in the quality work and efforts by defining the concepts of quality so that it can facilitate this university college to move ahead covering the milestones in a systematic way.

The healthy relation between TQM approach by the researcher and quality efforts in this university reveals that implementation needs more focus on the TQM model by training the key personnel and people involved the quality work and the activities been worked in the college. In conclusion, the author has strived his best to address and point out the general principles of a TQM approaches and various different terms regarding the concept of quality described in details. These various sort of approaches with effective implementation.

The literature review constructed and designed by the author on TQM approaches in higher education institutions (HEIs) concluded that the environmental forces and global changes has been affecting the HEIs and its policies continuously leading to the emergence of the quality management issues and challenges in the related fields. From the literature study, the researcher has projected the models and its implementation with details discussions and analysis which is of a paramount importance and a crucial step not only exploring the TQM approaches but also enjoying the fruits of it in such a global environment of HEIs. "These models have far greater applicability in measuring administrative or service functions within HEIs rather than the quality of research or teaching and learning", Brookes and Becket (2007: 105-106).

This research work has argued that it has become inevitable for the higher education institutions (HEIs) to develop and establish their own internal quality management systems keeping in view the European guidelines and standards (ESG) by considering the current quality management models, ignoring the debate whether TQM is suitable for HEIs or not, paying more heed to the content and substance of models such as (Harvey, 1995; Pratasavitskaya and Stensaker 2010). In this context, the Birnbaum (2000:104) states "TQM was sound; it was the implementation that was at fault". The research work concludes that the quality enhancement is the result of the quality management models implementation effectively under the canopy of the standard and guidelines of ENQA for the development and better prospects of HEIs in the field of TQM. The adoption of these principles, quality standards, approaches and quality codes are the hallmark of the progress and enhancement in HEIs which allows it to step forwards paving the ways of *benchmarking*. Benchmarking is nothing but a procedure and process to enhance the improvement and performance of the higher education institutions (HEIs) (Jackson and Lund 2000). The self-evaluation method highlights the better performance of the organization, promoting the continuous improvement. It does support the administrative, technical and management areas effectively in HEIs.

In a nutshell, this research work has explored the TQM and its approaches along with implementation and processes in higher education institutions, exploring new horizons and widening the scope of the research topic as well.

Recommendations

Author has tried to highlight the following recommendations based on the research of Higher Education sector in UK & Sweden in general and that of University College in Sweden in

particular but, in wider context, applicable to any Higher Educational Institutions in the world who has the eternal quest for growth and to occupy the top list of best higher educational institution by adopting total quality approach as a guiding principle which focus on fundamental change in organizations.

1. The Philosophy and theme of total quality management need to be incorporated or embedded into the DNA of the University College in Sweden as a global Higher Education Institution and should be reflected in the Strategic Planning documents
2. The Philosophy and techniques of TQM should be applied for continuous improvement towards mission of providing quality education experience to be a leading Higher Education Institution in the global perspective
3. The focus on developing and bringing Total Quality Approach need to be ingrained in the attitude and approach of workforce by holding regular training and staff development program as a part of orientation towards Quality Function Deployment.
4. The adoption of ‘ Quality Driven, Demand Led ‘ Strategy is critical to ensure that it has an high quality focused infrastructure to provide excellent academic support services so as to create and deliver better level of learning experience where superior level of learning engagement is a part of it.
5. The establishment of various Quality Circles (Voluntary Improvement groups) need to be done as a part of strategic approach towards developing the TQM culture and implementation in cross functional areas in Higher Education Institutions.
6. A comprehensive strategic quality plan need to be developed so that Academic and Non-Academic staffs read and identify their role to apply to teaching, assessment and other pertinent areas.
7. A simple framework of Quality Improvement model need to be developed by HEIs comprising of key nine steps. These are identifying, deciding, preparing, education and training, initiation, expansion, recognize/reward success, evaluation of improvement and continuous learning.
8. Top management commitment need to be visible across all levels in the organisation as it is critical to get commitment of top management to address required behavioural change so as to frame and implement a corporate strategy to provide quality education; research and quality services to satisfy stakeholders’ need and achieve excellence through Total Quality Management.
9. Focus need to be given towards allocation of adequate time and resources for a TQM program.
10. A critical study of existing processes and systems need to be undertaken so as to understand and eliminate of unnecessary processes, rules and regulations creating hindrance towards implementation of the TQM program

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