



Total Quality Management – An approach to Improve Higher Educational institutions

Saumi Roy¹, Dr. Sheelan Misra²

¹Assistant Professor

²Professor & HOD

ABSTRACT

Higher Educational Institutions plays a pivotal role in socio economic development of any country. Paradigm shift in knowledge dispersion, dissemination leads to the need of assured quality in higher educational institutions. The paper strives to identify the approaches of TQM that can be implemented through long term planning towards continuous improvement of higher educational institution. TQM is customer focus approach involving management for detecting and eliminating error emphasizing upon process and product sphering around each and every element of an organization. The paper is based on an extensive research conducted on previous work done in the aligning areas of quality improvement in educational institutions. The prime outcome of the paper is to provide guidelines related to implementation of quality improvement approaches towards higher educational institutions

Keywords: Higher Education, Total Quality Control

I. INTRODUCTION

Higher education institutions play a vital role in growth and socio-economic growth of any country. The proliferation of higher education institutions abides by norms, rules and other organisational factors reviewed through various accreditation committees stimulates quality improvement. Maintaining and improving Quality aspects in Higher Education Institutions (HEIs) is crucial in order to remain competitive in the business of education (Venkatraman, 2007). HEIs are responsible for paving the learning and delivery methods for future generations to survive with the challenges of sustainable development (Khan and Matlay, 2009). The pressure faced by higher educational institutions in order to update the curriculum to make students more employable as well as accommodating changing market situations and face competition globally. According to Ronald

Barnett (1992) Higher educational institutions (HEI) play a monumental role in contributing qualified human resources accelerating growth and development of business industries, preparing for qualified scientists and researchers who would continuously develop the frontiers of knowledge and meet the need of all segments of society (Khorasgani, 2008). HEI focus on efficient management of teaching-learning provisions by improving the quality of teaching, enabling a higher completion rate among the students. (Sudha,T,2013) . Education revolves around the challenges of globalisation, student migration and changes in curriculum and delivery, the concept of quality is becoming an integral part in education system in order to make the recipient more employable. Total quality management is an approach involving all elements of an organisation processes, practices, systems, methodologies and of all stakeholders involved or damage in any way the quality of

product or service. (Stanciu, I, 2003) .. Quality education is the process of enhancing intellectual growth and development by adding value to student's knowledge, skills, and techniques and in return add value to the society. HEIs have a unique culture which hinders rapid change and limits their readiness to change (Angehrn and Maxwell, 2008), but they exist in an environment which is dynamic influencing the nature of work , increase competition certain improvement initiatives, quality awards, internal and external stakeholders needs, technological advancement and globalization (Anderson and McAdam, 2004).In this essence, quality has become one of the most important concerns of HEIs (Mehralizadeh et al., 2007). Researchers have pen down meanings of quality according to Crosby (1979) is known for the concept of “Zero Defects”, while Juran and Godfrey (1999) define quality as “fitness for purpose”.Deming (1986) define quality as “a predictable degree of uniformity and dependability at low cost and suited to the market”.Approaches. One of the approaches suitable for dealing with HEIs challenges and enabling organisations to adapt by improving their overall processes is Total Quality Management.

TQM is a management philosophy originated in the 1950s and became popular in next three decades. Manufacturing sectors are the pioneers in implementing. Gradually it spread across to service sectors including healthcare, banking, insurance, non-profit organisations and educational institutions. TQM is viewed as a social solution as well as a scientific model: The two key Pillars are the use of scientific data to bring the customer experience into the process of business negotiations and emphasis on customer experience in the continuity of business operations TQM highlights a belief that views an organization as a collection of processes and maintains that business must strive to improve each process (continuously) to meet the consumer needs. Essentially, TQM is based on a business philosophy that emphasizes on standards in all aspects of work. Mistakes can happen due to people or process but business should make effort to fix such problem by tracing root causes and removing them from the management process, and repetition can be prevented by changing the process. The main objective of TQM is to foster a climate of creativity and efficiency in which all the resources

are used. TQM models based on teaching of quality gurus, generally involve a number of principles such as teamwork , top management leadership, customer focus, employee involvement , continuous improvement tool, training, etc,(Murad,A., Rajesh,K, 2010).Synergistic collaboration between various elements of education system (faculty: students, Industry: Faculty and students: Industries) assures the strategic quality among various combinations are required.



Figure:1 TQM seen as a continuously evolving management system consisting of value, techniques, and tools.(After Hellsten,H., Klefsjo,B., 2000)

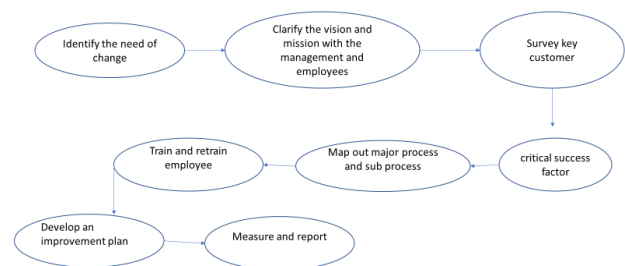


Figure: 2 Steps involves in TQM process
Success in TQM implementation lies in Strive for continuous improvement through owner/customer satisfaction and employee satisfaction , Recognize the need for measurement and fact-based decision making , Involvement of employee for companies overall improvement , Train employee to perform better, Work hard at improving communication inside and outside the company ,Use teams of employees to improve processes ,Place a strong emphasis on the right kind of leadership. Involve subcontractors and suppliers in continuous improvement (Sunil Kumar, Business technology , Slide share)

II. LITERATURE REVIEW

Education is a phenomenon of converting tangible resources into intangible resources. The educational outcome is difficult to measure as it results in transformation of individual's knowledge attitude

behaviour (Hwarng and Teo). Many researchers have tried to provide a benchmarking parameter to assess quality standards to educational institution by focusing on building flexibility and improving customer satisfaction in a dynamic environment. Sahney et al. (2004) consider education system as a transformation process comprising of inputs of students, teachers, administrative staff, physical facilities and process. The process includes teaching, learning, and administration. An output includes examination results, employment, earnings and satisfaction. Ho and Wearn (1996) developed TQM quality measurement model for Higher Education (HETQMEX). Ho and Wearn elaborated the need of TQM (Total Quality Management) for maintenance of Quality in HEI. A generic mission statement of HEI should mention about providing quality education, research and related services to continuously satisfy stakeholders' needs and achieve excellence through TQM. Any organization can improve their management of higher education by emphasizing values regarding the importance of people, knowledge and continuous improvement (Sherr& Lozier, 2006). TQM believes focusing on the right issue to be on the right track to success. Black and Porter (1996) place emphasis on Baldrige Award criteria, revealing ten critical factors for the successful implementation of TQM, and these factors are: supplier partnership, People and customer management, customer satisfaction orientation, external interface management, communication of improvement information, strategic quality management, operational quality planning, quality improvement measurement systems, teamwork structure for improvement, and corporate quality culture. As stated by Samat, et al. (2006) TQM has been explained by many scholars as „the most global advanced approach in the area of quality“. TQM provides consumer loyalty and profitability to the organization. Ho and Wearn (1996) basically applied the Quality management process on the UK Higher Education Industry and explained the factors and organizations associated with the maintenance of quality in it and concluded the presence of TQM in service quality is essential. The elements of TQM identified are leadership, commitment, total customer satisfaction, continuous improvement, total involvement, training and education, ownership of problems, reward and recognition, error prevention, and teamwork.

Owlia and Aspinwall (1996) present a conceptual framework that covers six criteria to depict quality dimensions. These dimensions are indicative of the areas that should be of concern to ensure quality in higher education.

Table 1 Quality dimensions in higher education

Dimensions	Definition in higher education
Responsiveness	Willing and readiness of staff to help students
Reliability	The degree to which education is correct, accurate and up to date
Understanding customers	Understanding students and their needs
Access	The extent to which staff are available for guidance and advice
Competence	The theoretical and practical knowledge of staff and other presentation skills
Courtesy	Emotive and positive attitude towards students
Communication	How well the students and lecturers communicate in the class
Credibility	The degree of trustworthiness of institution
Security	Confidentiality of information
Tangible	State, sufficiency and availability of equipment and facilities
Performance	Primary knowledge/skills required for graduates
Completeness	Supplementary knowledge/skills, use of computer

Source: Owlia and Aspinwall (1996)

Dimensions	Characteristics
Tangibles	Sufficient equipment / facilities Ease of access Visually appealing environment Support services (accommodation, sports...)
Competence	Sufficient staff(Academic) Theoretical and practical knowledge, qualifications Teaching experience, communication
Attitude	Understanding students needs Willingness to help Availability for guidance and advice Giving personal attention
Content	Relevance of curriculum to the future jobs of the students Communication skills and team work Flexibility of knowledge, being cross-disciplinary Containing primary knowledge/skills
Delivery	Effective presentation Sequencing, timeliness Consistency, fairness of examinations Feedback from students
Reliability	Trustworthiness Giving valid award Handling complaints, solving problems

Ahire et al, (1996) expanded the practices even further and identified 12 factors that are critical for the implementation of TQM derived mainly from the literature, these factors are: Top management commitment, Customer focus, Supplier quality management, Design quality management, Benchmarking, use of statistical process control, internal quality information, Employee empowerment, Employee involvement, Employee training, Product quality, and Supplier performance. In implementation of TQM in higher education teamwork is one the most important factor so responsibilities and also roles of team members should be well defined (Xyrichis A, Ream E , 2008). Higher Education institutions to develop its own internal Quality management has become a reality. (pratasavitskaya and Stensaker, 2010). TQM is a Holistic approach towards achieving quality aspects of any educational institutions.

III. RESULT AND DISCUSSION

The key components were management commitment, customer orientation, employee involvement, and continuous improvement. Customer for HEI are Students, Parents , Alumni and also industries where students were placed .A suggestive TQM model to achieve excellence in quality is developed for HEI. The components identified and description in brief is provided below.

1. Commitment of top management: HEI Top management comprises of Chairman, Principal Deens. Head of the departments, registrar, Chancellor. Primary responsibility includes monitoring, decision making for future course of action in order to implement changes required to maintain quality standards.

2. Course delivery: With in a department a body of subject experts need to be formed. Mode of delivery(predetermined methods like cases videos presentation, debate, role play etc), content to be covered examples to be cited need to be predetermine and adequate measures to ensure the timely completion of curriculum through lesson plan. Adequate training to use technology and Faculty development program to enhance the subject content and enlightened the changes subjectarea. Regular classroom observation will help faculty to improve content delivery and give adequate feedback.

3. Infrastructure facilities: Utmost attention is to be shown in providing excellent infrastructure and physical facilities in the campus for student learning, co-curricular and extra- curricular activities. Classrooms embedded with audio video provisions, wifi enabled campus, Digital library, discussion rooms, video conferencing hall, auditorium,specious library, open area for discussions , canteen facilities ,recreational centres , open gym

4. Interaction: A positive and emotive attitude towards students by each member of HEI will lead to congenial learning environment. This includes Counsellors guiding for admission, accounts staff receiving payment and guiding students about the procedure to be followed in the course of action for making payment, Teaching and non-teaching staff , faculties from examination department

5. Customer feedback and improvement: Constant feedback from the students leading to continuous

improvement in the process is the key to achieving excellence. Feedback from industries where students are placed regular interaction with industry to mend the gap with industry and academics.

The higher Education system needs to be strengthened in order to hone attainment of all-round, multifaceted personality: leadership qualities, communication and interpersonal skills, knowledge of the latest trends in technology, to have exposure to industrial climate. HEI has a big role to play in overall development of any nation and approaches like TQM become must in today's competitive scenario.

1. Preparation for implementing changes:
2. Training and education to faculties and other employees: The institution must devise training and development programmes Faculty development program, new technology embedded programme , behavioural training , Performance management to educate and equip faculties/employees, guiding them to carry on their work such that they will support the institution in meeting its goals thereby achieving quality.
3. Initiative: Top management should assign people role and responsibility to bring whole organisation together and implement the change. Individual targets are assigned, and benchmark can be used as effective tool for successful implementation.
4. Evaluation: The HEI must evaluate its performance quarterly or half yearly (after the semester) in order to monitor the progress and identify the obstruction to achieve quality outcome and future course of action can be decided.
5. Recognition: Recognition of teaching and non-teaching staff those who have contributed need to be motivated either through monetary /non-monetary reward system.
6. Continuous Improvement: TQM is a continuous process. And changes need to be incorporated looking into the need of society, industry and individual students. the process needs to continue with one dedicated team to define quality requirement and bring change accordingly.

VI. CONCLUSION

The Success of any quality approach depends on HEI strategy and commitment towards the quality

aspect. Goals need to be identified and corresponding changes need to be implemented Kurt Lewin theorized a three-stage model of change namely unfreezing-change-refreeze can act as guideline for implementing change it will help organisation to achieve desired objective .TQM is a continuous process and changes need to be incorporated looking into the need of society, industry and individual students. TQM is a concept which need time to get into organisation culture. Definitely organisation is going to benefitted. But HEI need to Analyses and understand the obstruction identify and divide role and responsibility and key people driving the change leading to beneficial quality educational system to serve society and country. Further future detailed research is suggested in order to upgrade the indicator used for Quality assessment in future.

V. REFERENCES

- [1] Total Quality Management in Higher Education: A Review, Mohammed Hasan. In'airat, Amer Hani Al-Kassem, International Journal of Human Resource Studies, ISSN 2162-3058 2014, Vol. 4, No. 3
- [2] Process Improvement in Higher Education Institutions, Noha Gamil Ibrahim, Bournemouth University
- [3] Quality Measures in Higher Education: A Review and Conceptual Model , Ram Komal Prasad1, Manoj Kumar Jha2 Quest Journals Journal of Research in Business and Management Volume1 ~ Issue 3 (2013) pp: 23-40 ISSN(Online) :2347-3002
- [4] Total Quality Management In Higher Education Institutions, DR. T. SUDHA, International Journal of Social Science & Interdisciplinary research, ISSN 2277 3630 , Vol. 2 (6), JUNE (2013)
- [5] The need of Total Quality Management in higher education, Amalia Venera Todorut, 2nd World Conference on Educational Technology Researches WCETR2012, Procedia - Social and Behavioral Sciences 83 (2013) 1105 – 1110
- [6] Total Quality Management in Higher Education: A Review, Mohammed Hasan. In'airat, Amer Hani Al-Kassem, International Journal of Human Resource Studies ISSN 2162-3058 2014, Vol. 4, No. 3
- [7] Implementation of Total Quality Management in Higher Education Institutions, Pushpa L, International Journal of Scientific Engineering and Research (IJSER), ISSN (Online): 2347-3878, Impact Factor (2015): 3.791
- [8] A Study of Key Components of Total Quality Management Programs in American Manufacturing Firms, Pascoe, Larry Bruce (1993, UMI) United States International University, 1992, Quality Management Journal Vol1 1993
- [9] Implementing Total Quality Management (TQM) on the Higher Education Institutions – A Conceptual Model, Abdulraheem M. A. Zabadi, Journal of Finance & Economics Volume 1, Issue 1 (2013), 42-60