

# Total Quality Management & Higher Education – A Study Towards W. Edwards Deming's Principles

Ms. Maheshwari. M

Assistant Professor, Department of B.Com (e -Commerce), PSGR Krishnammal College for Women, Coimbatore, India. maheshwary.15@rediffmail.com

# I am Forever Learning & Changing - W. Edwards Deming

**Abstract Education** is the progression of making the hold of knowledge, ability, morals, beliefs and habits. A high-quality education is the one that offers all learners with competency what they require to become economically prolific, develop sustainable livelihoods, contribute to peaceful and democratic societies and improve individual welfare, in any educational system, quality of teaching and learning is an essential and important element. TQM is exploited in educational system, which offers assistance in teaching and learning process in order to continuous improvement in quality through the complete educational course of action. TQM interference had to take place in the teaching and learning process with the association of all branch. Teaching and learning process is surrounded with basic parts, such as students, administrators, parents, teachers, stakeholders and their connections. The main endeavor of the study is focused on Total Quality Management in the Educational Institutions and spotlights on Edwards Deming 14 principles with regard to Total Quality Management and their applicability in the educational institutions with various dimensions which includes the students, faculty members as well as the top management. It is feasible to conclude that a good impression is been created for a product only when there is quality in it, similarly quality is expected in education also. Because education plays a vital role, when quality education is given to the students it will be reflected in development of the economy as a result of having eminent staff members, who will be inducing the grasping capacity among the students with the support of prompt educational institutions.

Key Words: Total quality management, education, commitment, moralities, continuous improvement.

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## I. INTRODUCTION

Education is the process of facilitating learning, or the of knowledge, dexterity, values, way thinking, and habits. Education frequently takes place under the guidance of tutors, but learners may also tutor themselves. Education can take in formal or informal settings and any experience that has an influential effect on the way one thinks, sense, or acts may be considered enlightening. The methodology of teaching is called pedagogy. Education is commonly divided into various stages and is vital in life because it gives people the skills and tools they need to steer the world. Without education, people would not be able to read, write, calculate or communicate; they would also not be able to perform jobs competently, accurately and safely. Education also teaches community about the world in which they live, together with the information about history, philosophy and culture. National development is possible only through education. The education should be

qualitative and hence Total Quality Management in education is needed (Pragya Aggarwal)<sup>5</sup>.

# II. QUALITY EDUCATION

In all fields, especially education quality has an important matter. Total Quality Management as a necessary element always has a direct influence on the human improvement. It can be also led to high commitment and sprit in work environment (Ankit Chauhan et,al) <sup>8</sup>. A good quality education is one that provides all learners with capabilities they require to become economically productive, develop sustainable livelihoods, contribute to peaceful and democratic societies and enhance individual well-being. The economic, social, cultural, technological changes contribute to knowledge society. The present growth of economic growth can be substantially increased if India becomes super power in knowledge sector (Sudha) <sup>6</sup>.

According to UNICEF, "A quality education is defined by five elements: the learner's outside experiences, learning environment, content of education, learning processes, and



education outcomes. Learners must be healthy, well-nourished and supported by their families and communities". The learning environment should be protected, fit and stimulating, appropriate education content is relevant to the learner and presented in a well-managed classroom, learning outcomes should meet promote participation in the society as well (Rajni Bhalla)<sup>3</sup>.

# III. TOTAL QUALITY MANAGEMENT

Total quality management a system of management based on the principle that every member of staff must be committed to maintaining high standards of work in every aspect of an institution's operations. Total quality management consists of institution-wide efforts to install and make permanent climate in which an institution continuously get better of its ability to deliver high-quality of education and reimbursement to students and the community.

## TOTAL QUALITY MANAGEMENT AND EDUCATION

In any educational system, quality of teaching and learning is an essential and important part. TQM is exploited in educational system, which offers assistance in teaching and learning process in order to continuous improvement in quality through the absolute educational process. TQM meddling had to take place in the teaching and learning process with the association of all parts (Bunglowala et.al) <sup>1</sup>. Teaching and learning process contains basic parts as students, administrators, parents, teachers, stakeholders and their connections. The practice of new teaching and learning approaches, changing procedures of teaching provision, and course content, are all in the notion of quality which has improve an important section of the educational system, continuous improvement and selfassessment for its accomplishment. It is expected that by applying TQM practices on teaching and learning system would outcome not only in quality improvement but also better teaching and learning satisfaction of teachers and students. TQM requires a change in culture. This is notoriously difficult to bring about takes time to implement. It requires a change of attitudes and working methods (Pragya Aggarwal) 5.

#### STATEMENT OF THE PROBLEM

Education is the backbone of each and every individual, without education everything becomes impossible. But, there were number of environmental forces which make a driving change in the country & in higher education. Quality is expected in all the aspects, this study is also focused on quality education and its effectiveness in the educational institutions which is to be a continuous process. To improve the quality of education, the principles of driving out fear in the classroom, ceasing dependence on mass inspection, breaking down barriers, increasing pride of work for both students and teachers, providing training and education, and long-range goals are some of the

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principles presented for management, teaching, and learning and how they relate to improving management, teaching, and learning process in their institutions. When individual teachers or groups of teachers consistently apply these principles to how and what they teach and when students consistently use these principles to guide how they learn, study, and create their learning yield, the quality of both teaching and learning improves. In brief, TQM is the management of quality throughout all members of organization. The organization must satisfy internal and external customer needs and then use strategic planning including all functional areas to achieve strategic goals (Lilly et, al) <sup>7</sup>. TQM is one of the most important factors that shape the strategies of higher education institutions in ensuring quality with multi-dimensions such as the students, faculty members as well as the educational institutions (top management). The present study spotlights on Edward Deming's principle and their applicability in the higher educational institutions.

#### **OBJECTIVE OF THE STUDY**

The objective of the study is to know the Edwards Deming's moralities of total quality management's performance towards educational institutions are as follows:

 To encompass knowledge and applicability of moralities towards Total Quality Management

## SCOPE OF THE ST<mark>U</mark>DY

A good impression is been created for a product only when there is quality in it, similarly quality is expected in higher education also. Because education plays a vital role, when quality education is given to the students it will be reflected in development of the economy. Applying Deming's principles to the instructional setting may well have the most dramatic, revolutionary impact on increasing quality teaching and increasing quality learning. Improvement is a journey, not a destination. The voyage is accomplished with commitment to constantly and systematically improving the teaching-learning productions. This study identifies in giving a major scope towards quality education which requires eminent staff members, high grasping capacity of the students and a prompt management in educational institution.

#### IV. RESEARCH METHODOLOGY

- AREA OF THE STUDY The study has been carried out in Higher Educational Institutions (most specifically arts & science colleges) in Coimbatore city
- SOURCES OF INFORMATION This is a descriptive study were both primary and secondary data has been used
- PRIMARY DATA has been collected through observation from the respondents



- SECONDARY DATA has been analyzed through various websites like: Mhrd, Nirf rankings, Bharathiar University etc., apart from that various journals, magazines, newspapers and other sources has been considered
- ❖ SAMPLE SIZE Faculty members, students from various higher educational institutions (with the ratio 10: 10: 1) has been considered for the study
- SAMPLING TECHNIQUE This is a purposive study & Quota sampling technique has been used. After various measures the study came out with the judgment that to consider and to analyze the total quality management in Higher Educational Institutions. There were three quality gurus who focused on Total Quality Management in general namely: W. Edwards Deming, Juran and Crossby with various principles. As Deming is called Father of TQM, and most the principles are covered from the aspects of other two authors, the present study is been followed with Deming's principles in the Higher Educational Institutions. When it comes to HEIs it is been classified into Arts & Science colleges and Engineering colleges, this study aims in identifying arts and science colleges in Coimbatore city, hence colleges affiliated to Bharathiar university has been selected; out of which 44 higher educational institutions were found during 2016 – 2017 academic year, based on Mhrd guidelines & Nirf rankings status top 10 colleges/ higher educational institutions were considered. The respondents have been selected randomly and observed from the higher educational institutions.

# ANALYSIS & INTERPRETATION OF DEMING'S 14 PRINCIPLES TOWARDS TOTAL QUALITY MANAGEMENT IN EDUCATION

As this study is based on observation the interpretation for the principles analyzed from the educational institutions are as follows

## 1. Create constancy of purpose

Maintaining long-term consistency is corresponding to striving for a reduction of the spread around the route so that the target is consistently achieved. To develop the skills, attitudes, and motivation in our students so they will become answerable citizens and be capable of making optimistic contributions to society. The long-term prospect is important and should serve as the focus for alteration (Pushpa) <sup>4</sup>. Target the future, become additional competition, grow, and provide for the long term needs rather than short-term profits. The existence of a long-term purpose brings with it the climate of stability and prolonged existence and a climate within which continuous

improvement is realistic. Deviations from the principle must be dealt with by appropriate action right away.

#### 2. Adopt the new philosophy

The heart of the point is that without innovation a company will not survive in today's global bloodthirsty environment. Just determined to stand still will ensure failure against forward moving competition. The days of quantity being more important than quality are over, it has to be realized that quality is supreme. What is often missed is that, in the long run, higher quality actually costs less. Insist on quality in everything this is particularly true in the classroom; management must ensure that the processes put in force encourage cooperation at every level student to student and faculty to student.

### 3. Cease dependence on mass inspection

Inspection and quality control is necessary and should always be there to improve the overall process. Product and process excellence should be built in at the design and development phase through proactive quality assurance. We need to develop processes in which there is less testing but more focus on progress in learning.

## 4. End the practice of conducting business on cost

It is the reward for high quality the long term costs of supplying educated people to civilization may be less if some of the resources of the university were spent on improving high and junior high schools.

## 5. Constantly improve processes

There is always room to get better the consistency of product or service provided. It should be management's top priority to strive to constantly seek out troubles and resolve them to improve quality and to diminish costs. This striving should lead to more and more deterrence of problems rather than inspect and correct.

### 6. Institute training

Education at all levels is an essential part. Training can also help to ensure consistency of output through use of common approaches. Training of new recruits should not be neglected. An effective induction and training programme can help to bring new blood up to speed quicker and more effectively than their being terrified in at the deep end.

### 7. Institute leadership

Every person at the university has a leadership position of some sort. Each person in a supervisory role should try to be a coach and teacher, not a judge and supervisor.

#### 8. Drive out fear

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Fear within the workforce is the direct opposite of the new management philosophy. Fear leads to insecurity within the workforce, general unrest and are the causes of enormous waste.



#### 9. Break down barriers

A team made up of faculty, staff, and students (perhaps from more than one department) will have a broader perspective in addressing issues than a more hardly composed committee. The key here is teamwork, crossfunctional collaboration so that the whole job can be done right first time, every time. Any individual department's performance should be evaluated in terms of the performance of the company as a whole rather than the individual profit it makes. Encourage cooperation, not competition.

#### 10. Eliminate slogans and exhortations

Any poster demanding something without the methods to achieve it should be eliminated. Simply demanding people work harder will be counterproductive because, everybody is already doing their best. Stating that goal and then providing excellent instruction, arranging for study teams, giving extra help where needed, etc., will give the students a much better chance for success.

#### 11. Eliminate quotas for staff

This point describes for a focus on quality rather than quantity and thereby decries management by objectives, management by targets. MBO and quotas are the keys to short-term thinking, regularly at the outlay of the long-term.

## 12. Pride of workmanship

Pride is a strong motivator. In the academic scenery, pride certainly flows from personal and group achievements, but there is also a good contract of pride in the institution as well. Often this institutional pride is a result of having survived the program, but it can also stem from having had a part in the development of that program.

# 13. Encourage education and self improvement

Management should encourage continual training in new developments and in innovative techniques. In this way companies can keep up with and, hopefully, gain competitive advantage over their competition.

# 14. Accomplishing the change

It is top management's responsibility to ensure a permanent commitment to quality and productivity improvements that can be transmitted down the organization to everybody. Management, at each level particularly at the very top, must take and show pride in adopting the TQM philosophy. The meaning of each of the 14 points as related to the mission must be clear to all involved.

### V. SUGGESTIONS

There are few suggestions taken from the various bodies of education sector in which all the educational institutions must follow to have a quality education concept.

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- NIRF National Institutional Ranking Framework is a methodology adopted by the Ministry of Human Resource Development, Government of India, to rank all institutions of higher education in India. Framework uses a number of parameters for ranking purposes like resources, research, and stakeholder perception.
- \* MHRD To originate the National Policy on Education and to ensure that it is implemented in letter and spirit, planned development, including expanding access and improving quality of the educational institutions all through the country, including in the regions where people do not have easy access to education. Paying special attention to disadvantaged groups like the poor, females and the minorities. Provide financial help in the form of scholarships, loan subsidy, etc to deserving students from deprived sections of the society.
- ❖ NAAC The National Assessment and Accreditation Council is an organization that assesses and accredits higher education Institutions in India. It is an autonomous body funded by University Grants Commission of Government Curricular Aspect
- 1. Teaching- Learning & Evaluation
- 2. Research, Consultancy & Extension
- 3. Infrastructure & Learning Resources
- 4. Governance, Leadership & Management
- 5. Innovation & Best Practices
- 6. Student Support & Progression
- ❖ QUALITY CIRCLE Quality circle is a group of workers who do the same or similar work, who meet regularly to identify, analyze and solve work-related problems. In general small in size, the group is usually led by a supervisor or manager and presents its solutions to management; where possible, workers implement the solutions themselves in order to improve the performance of the organization and motivate employees.

# LIMITATIONS OF THE STUDY

There are certain limitations while the study was conducted, they are:

- Time constraints and concealed information
- Focuses on a part of the concept and on particular educational institution
- Not applicable for all institutions

# VI. CONCLUSION

If you are planning for one year - grow rice, if you are planning for ten years - grow trees, but if you are planning for hundred years, EDUCATE your children - Confucius



India being a democratic country makes sure with everybody of equal opportunity in getting education. There are a number of educational institutes but they provide theoretical education. No emphasis is given on practical education. The syllabus which is taught in schools is coming from several decades; no changes are done according to the needs of the learners, changing times, and according to the needs of the society. No education is offered in schools which may create professionalism, scientific temper and practical hands. According to Deming, TQM is a management philosophy that requires a radical cultural change from traditional management to continuous improvement management style in an organization. This study is to examine the extent to which TQM is relevant and matching with education; and what may hinder the successful application of TQM in education. A quality culture is a system of shared values, beliefs, and norms that focuses on delighting customers and continuously improving the quality of products and services here it specifies about teaching learning process. Quality culture can promote the TQM principles like continuous improvement, open communication, fact-based problem solving and decision making, etc. It is necessary to spread professional management practices in the educational institutions. Current system is producing learners with certificates, employability, learners with grades but no creativity, learners with degrees but no knowledge (Revathi et.al)<sup>2</sup>. So the learners have to face the problems when they have to utilize the knowledge. If we do not notice to quality education at school level, our university level education and mission of literacy will be a great failure. Without total quality management, we cannot transform our simple or traditional society into knowledge society. Without development and efficiency in education system it will be difficult for India to move ahead in shoulder to shoulder with other countries. These points are general philosophies that require the processes undertaken within the organization or function to be reconsidered and changed with a view to continuously improving them. Hence total

quality management in education is very important in the current scenario.

#### REFERENCES

- [1] Dr. A. Bunglowala & Dr. Nidhi Asthana (2016), A Total Quality Management Approach in Teaching and Learning Process, International Journal of Management, Vol 7, Iss 5, Pp 223 227.
- [2] R. Revathi and S. Kathiresan (2015), Total Quality Management in Higher Education Institutions, International Multidisciplinary Research Journal, Vol 5, Iss 2.
- [3] Rajni Bhalla (2012), Study on Indian Higher Education: A TQM Perspective, Researchers World Journal of Arts, Science & Commerce, Vol 3, Iss 4(2).
- [4] Pushpa L (2016), Implementation of Total Quality Management in Higher Education Institutions, International Journal of Scientific Engineering and Research, Vol 4, Iss 5.
- [5] Pragya Aggarwal (2016), Total Quality Management and Teacher Education, International Journal of Applied Research, Vol 2 (1).
- [6] Dr. T. Sudha (2013), Total Quality Management in Higher Education Institutions, International Journal of Social Science & Interdisciplinary Research, Vol 2 (6).
- [7] Lilly J & Maheshwari M (2014), A Study Related to the Issues of Total Quality Management, International Journal of Research in IT & Management, Vol 4, Iss
- [8] Ankit Chauhan & Poonam Sharma (2015), Teacher Education and Total Quality Management (TQM), The International Journal of Indian Psychology, Vol 2, Iss 2.

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