

APPLICATION OF TOTAL QUALITY MANAGEMENT IN EDUCATION

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Abstract

The purpose of the paper is to analyzing thoughts of the modern management paradigm “Total Quality Management” (TQM), and its application in the field of education. The basic theme of TQM is participatory approach to address the question(s) of quality in business aswell as in the field of education. Reviewing fresh literature from the internet and other sources, the works of W. Edward Deming’s: fourteen principles for quality assurance, Philip Crosby’s: fourteen points for quality management & the idea of zero defect, and J. Juran’s three areas: quality planning, quality improvement and quality control are discussed.

INTRODUCTION

People want to do their best and it is the management’s job to provide environment through continuous improvement of the system, is the assumption, at which Total Quality Management is based. Total Quality Management (TQM) is an art of organizing the whole to achieve excellence. It is enrichment to the conventional way of managing business. It helps for survival in the global antagonism. This is not only a philosophy but also a set of guide lines and regulations for ongoing improvements for the services and/or products offered to customers. Human resources and quality methods are utilized to improve all the processes to satisfy all the needs of the clients. It integrates fundamental techniques, prevailing efforts and practical gear, which are being operated under a disciplined approach of management. This organizational management move is paying attention towards quality, which is due to the collaboration of members of

organization, and focusing on long range profitability through customers’ contentment, including benefits to society. It is the “integration of all functions and processes within an organization in order to achieve continuous improvement of the quality of good services” (Akhtar, 2000; Besterfield, Michna, Besterfield & Sarce, 2004; Fitzgerald, 2004). TQM has a strong impact on the values, culture, and mind-sets within an organization by providing technological modifications (Boje & Winsor 2005).

The history of quality control is undoubtedly as old as industry itself. Total Quality movement was started after the 2nd world war in industry, but on large scale it attracted attention in 1980s, when Japanese captured a large share of world market under the slogan “Made in Japan” (Akhtar, 2000; Besterfield, Michna, Besterfield & Sarce, 2004). After wards this concept shifted into other fields of life to improve the performance by quality management. Later on this movement

entered into the field of education to have improvements in all walks of education.

Quality is the entirety of facial appearance and distinctiveness of creation or service that bears a capability to congregate an acknowledged or implied want (Arnold & Holler, 1996; Ross & Joel, 1999). According to Juran (1988) it is fitness for use and according to Crosby (1979) it is conformance to requirement. The concept of quality according to Sallis (1997) is usually considered in two ways: Procedural concept of quality and Transformational concept of quality. Procedural concept is concerned with measuring up and ensuring conformity to a predetermined specification. The question that is asked is does this good or service do what is asked or expected from it? This is fitness for purpose. Transformational concept of quality views quality as a complex process with a wider canvas. It focuses on the softer and more intangible aspects of quality. It has less to do with systems and procedures and more to do with continuous improvement and organizational transformation. These softer concepts are care, services and social assistance being provided. This type of quality can be achieved through exercise of leadership, which establishes a vision that translates into clientage services. This approach is about improving the system. It is about "doing things right, not just doing the right things. This concept of quality aims for excellence and is satisfied with fitness for purpose. Excellence is an aspiration and striving for the best.

Mass inspection is one of the organizational important strategies in achieving the targets. Deming (1991) a

key person in TQM movement, in this regard, thinks that inspection with the aim of finding the bad ones and throwing them out is ineffective and costly. Quality is only the end product of mass assessment but also from development of the procedure. He (1991) states that management's role is to assess origin of the problems; the system or the people's activities. He opined that it is the managers, not workers who are responsible for 85% of the defects in products or service. According to Deming (1991), 85% performance of workers is assessed through the system in which they work and 15 % is determined by short of skills. Workers aren't bad but the system is not perfect. Deming says that people work in the system and management creates the system. As a pioneer of TQM movement Deming has contributed several works: Fourteen points, the system of profound knowledge, PDCA Cycle, Seven Deadly diseases. This paper presents summary of the Deming's fourteen points in the next pages:

1. Generate Reliability of Function for Perfection of Merchandise and Service

Develop a system for the up gradation and betterment of the teaching learning processes. The focus should be on the intention that product of the system would be valuable and be capable to participate and fulfill the societal needs and desires in a purposeful manner. Organizations must develop a long-term view and program to sustain in the field for a range of goals and objectives. Novelty is created and measures are adopted to guarantee the sustainability of wares and services for long term. Traditional models of management focus only in defining the purpose of the

organization where as Deming (1991) suggests more than that: reliability of function.

2. Implement Innovative Ideas

Adopt new philosophy of finding facts through data. Clinch new management ideas; awaken the leadership for their responsibilities and challenges for change. For the new economic age, management needs to take leadership for change into a learning organization. New methods like participation and discussion method, problem solving method, project method, and experimental work is used in teaching at all levels.

3. Stop Dependence on Mass Inspection

According to Deming (1991), without improving the system the dream of quality can't turn up into reality. Inspection services can not result into improvement of the service or product. The quality can live achieved only through learning experience to masses, which towards quality assurance.

4. End Grading Practice

TQM, philosophy focuses on the fact that the grading practices in organizations should be stopped because ratings of people create harmful results. Attention should be paid to learning processes rather than the rating processes.

5. Develop Persistent and Everlasting System of Production and Service

In education the focus should be on the improvement of teaching learning processes Deming (1999). This can be

done by using the findings and results of the latest researches in these areas. The best techniques, strategies and methods should be adopted and evaluated accordingly. This process of improvement of production or services would be constant in nature.

6. Institute Training

Establish a mechanism of continuous training on the job for members of the faculty, allied staff and administration of educational institutions. Each of them should follow the vision and mission of the organization through their commitment and improvements in the institutes.

7. Develop Leadership

School leadership's role should be shifted from inspection to supervision. These supervisory practices should be to help and guide the members of the staff for adopting new paradigms of quality assurance. Supervisors may be so smart to help the colleagues how to use the new materials and technologies in their teaching and make learning a joyful activity for the young learners. Supervisors are to lead people not to punish. Ho (1999) proposed that leading should consist of serving work force for better performance to learn by objective methods.

8. Drive out Fear

Fear is enemy of creativity, which is a key factor in continuous improvement. Therefore, Deming (1991) suggests driving out fear in all walks of the organizations both industry and education. This is how everyone will perform bettering the system. This can

be done by preparing and encouraging people for taking risks boldly. Fear can be thrown out from the organization by creating an environment of dignity and respect. If we behave with respect and dignity then the members of the organization will provide innovative ideas for improvements.

9. Maximize the Effort of Team Work

Quality of the educational organization can be optimized by developing a sense of cooperation and collaboration among the members of the institutional groups. Therefore, Deming (1991) argued to break down barriers between departments. Strategies for the improvement of collaboration as a team work should be adopted. This dynamics can be ensured by time management.

10. Remove Slogans and Catchphrases

Slogans and buzz words have the assumption that the staff members can perform better if they will try harder and harder. This makes angry rather than to inspire the members of the staff. Such targets and catch words for educators and learners in the educational institutes for ideal achievement and new echelon of efficiency should be eliminated. This is to do so because slogans create adverse effects on the performance of the teachers and the students. The causes of low quality of productivity and achievements belong to the organizational system of education rather than the educators and learners.

11. Eradicate Numerical Quotas for Staff

Quotas are for the quantity of work done rather than the quality of work.

Management should learn and adopt the methods for improvement. When quantity is required according to a fixed amount then the quality will certainly go down. New policies for quality work should be shared with the members of the organization for a continuous ongoing process of system improvement. Work force will ensure the sustainability and productivity in light of the new adopted policy.

12. Eliminate Barriers to Satisfaction and Pleasure of Workmanship.

Majority of teachers want to perform better. Therefore remove barriers that rob students, principals and other supporting staff of their right of joyful events. This leads towards the end of rating practices. Management's responsibility must be moved from quantity to quality. Some common barriers are conflicting or ambiguous goals, changing directions from the authorities, fear of mistakes, lack of information and training deficient feed backs on achievements.

13. Encourage Education and Self Improvement for Every One

The school authorities should be retained in new techniques and philosophies of management through collaborative efforts and shared decision makings (Lunenburg & Ornstein, 1996). This principle is related to the continuous improvement of the system. It encourages the staff and the workers to get knowledge about the challenges and demands of the field. Continuous improvements in quality will lead the work force to develop new skills, new ways of carrying out their job efficiently.

14. Accomplishing the Change

Transformation of the preceding 13 points is extremely important. It is not the administrator's job only, but all part of administration to contribute and make sure the implementation of the above 13 principles. The school administration should be with comprehensive plan of action for quality tasks. This is the comprehensive message for the assurance of quality in any organization. The emphasis is on teamwork, collaboration and using everyone's respective expertise, which makes the transformation possible. It is the management's role to star a never ending process of improvement. Implementation of the quality policy will be based on a sound infrastructure.

Juran (1988) suggested wonderful strategies for improvement of quality in all walks of business life. He gave the concept of quality trilogy that is "Quality planning, quality improvement and quality control" He developed a strategic quality approach which is three-part process based on a staff at different levels making their own unique contributions to quality improvement. Senior management has strategic view of organization; middle management takes an operational view of quality; workforce is responsible for quality control. Juran relies on systems and problem solving techniques .He focused on top-down management and technical methods. According to Ho (1999), Juran's three aspects are divided into these components.

1. Quality Planning

For quality planning the management has to identify the customer. Their needs should be properly determined and addressed accordingly. Those needs should be in understandable language and the product should be able to respond the needs of the customers. Optimize the product features so as to meet our needs and customers needs.

2. Quality Improvements

There should be a process which is able to produce the product. Optimization of this process is very essential for the improvement of quality of goods or service.

3. Quality Control

For the purpose of quality control it is needed to develop a process that can produce the product under operating conditions. All the process for quality control should be operative. Juran (1988) focuses not only on the end customers, but also cares the internal and external customers. Every one in the organization must consider the fitness for use of entire product at each stage of production.

Crosby (1992) another guru in TQM gave two very appealing and powerful ideas in quality. The first idea is that quality is free. It means that there is no need to prevent the waste and inefficiencies in the system because it costs more or less equal. The second idea of Crosby for quality is of zero defects, which means that, errors, failures, waste, and delay all the inequality things can be totally eliminated if the institution has the will. According to Willborn & Cheng (1994) and Crosby's (1992) "absolutes of

quality are: quality is defined as conformance to requirements, not goodness, the system for achieving quality is prevention, not appraisal, the performance standard is zero defects, not that's close enough and the measurement of quality is the price of non-conformance, not indexes". Crosby's (1992) stresses motivation and planning rather than statistics and has fourteen points about quality management which have a different mode with same message. These fourteen points are comprehensively given as under:

1. Management Commitment

Higher authorities should be persuaded from the need of quality and it must be communicated to whole organization in written form. This policy must be consisted of the expectations and needs of the customers. Crosby (1979) discussed the need of quality enhancement with the help of management; emphasizing the need for defect prevention. Do not confuse communication with motivation. The results of communication are real and long-lasting; the results of motivation are shallow and short-lived. Develop a policy for quality which states expectations from the individuals to perform exactly like the requirements of the students. Quality enhancement is a practical way to profit improvement. Helping management recognize it must be personally committed to participate in the program raises the level of visibility for quality and ensures everyone's cooperation so long as there is progress.

2. Quality Improvement Team

There should be a team comprising of organizational heads to look after the

affairs related to quality issues in the establishment as a whole. Representatives from all the departments should be the members of the quality improvement team. These should be people who can speak for their departments to commit operations to actions. Preferably, the department heads should participate at least on the first go around. Crosby (1979) suggested that members of team be provided orientation of the content and purpose of the program. Their roles should be explained, which are to cause the necessary actions to take place in their departments and the company. All the tools necessary to do the job will be together in one team. It works well to appoint one of the members as the chair of the team for this phase.

3. Quality Measurement

Every activity should be measured properly for the purpose of required quality. The level of the quality should be determined through out the organization. Each area for quality must be reviewed. Quality status record will indicate the aspects where the corrective measures for quality are needed and how can be documented in future (Crosby, 1979). A number of ways can be adopted for measurement of procedures. If a supervisor says that his area is completely immeasurable, he can be helped by asking how he knows who is doing the best work, how he knows who to keep and who to replace. Formalizing the organization measurement system strengthens the inspection and test functions and ensures proper measurement.

4. Price of Quality

The costs of quality should be estimated for the areas where quality improvements will be beneficial. Initially these estimates may be faulty but later on these must proceed to definite figure. School heads office should do this assignment. They should be provided with detailed information on what constitutes this cost for quality. These cost estimates will enable to identify that where the corrective measures will be praise worthy. Higher costs will that more actions are to taken. Having the established cost of quality, it removes any suspected bias from the calculation. So measurement of quality management performance will be established in the organization's system.

5. Quality Consciousness

Create quality awareness among the staff members of the educational organization. They must understand the importance of product conformance and the costs of non-conformance. The costs of non quality should be shared with the employees of the organization. This is done by training supervisors to orient employees and by providing evidences for the purpose of quality improvement through communication material such as booklets, films and posters Crosby (1979). Don't confuse this with some get motivated- quick scheme. It is a sharing process and does not involve manipulating people. This is an important step. It may be the most important step of all. Service and administrative people should be included just like everybody else. The real benefit of communication is that it gets supervisors and employees in the habit of talking positively about quality.

6. Corrective Action

Take corrective action as a result of quality measurement and cost of quality Crosby (1979). People are allowed to talk about their problems, so corrective measures can be made involving not just the defects found by inspection, audit or self-evaluation, but also less obvious problems as seen by the working people themselves that require attention. Problems of the workmen should be brought into notice in the meeting of supervisors at every level. Those that cannot be resolved are formally passed up to the next level of supervision for review at their regular meeting. If a specific functional area does not hold such meetings, the team should take action to establish them in that department. Individuals soon see the problems brought to light are being faced and resolved on a regular basis. The habit of identifying problems and correcting them is the beginning.

7. Zero Defects Planning

Committee must be formed for planning of a program appropriate (zero defects) to the organization (Crosby, 1979). Members of the staff should be selected for investigation of zero defects paradigm and its implementation in the school. It must be understandable for the manager that zero defects is not motivation program. Its purpose is communication of the fact that zero defects means every body has to do things right. This must be transmitted to every member of the team. In particular, the adhoc group should seek ways to match the program to the organization's personality. Improvement comes with

each step of the overall program. By the time zero defects day is reached, as much as a year may have gone by and the initial improvement will be flattening out. At that point, the new commitment to a specific goal takes over, and the improvement begins. Setting up the adhoc committee to study and prepare the implementation ensures the goals of the program will be firmly supported by the organization's thought leaders.

8. Supervisors' Training

Members of the management should be trained for implementing their role for the quality enhancement program Crosby (1979). Conduct an orientation program formally before implementing the quality steps in the organization. All managers must understand each step well enough to explain it to their people. The proof of understanding is the ability to explain it. Eventually all supervisors will be tuned into the program and realize its value for themselves. Then they will concentrate their actions on the program.

9. Celebration of Zero Defects Day

Arrange for celebration of a day which signals that organization has a new standard to adopt. Establishment of zero defects, as the working standard for the company should be made in a single day. That way, everyone understands it the same way. Supervisors should explain the program to their people and do something different in the facility so everyone will recognize it is a "new attitude" day. Making a day of the zero defects commitment provides an emphasis and a memory that will be long lasting.

10. Goal Setting

"Individuals must establish improvement goals" (Crosby, 1979). These goals may be for the period of 30, 60 or 90 days. Supervisors will guide the educators and the staff for the accomplishment of such goals. These goals should be of measurable natures.

11. Errors Cause Removal

Principals should encourage the team members for informing them about the causes which avert them for accomplishing error free tasks. This is not a suggestion system. All they have to list is the problem; the appropriate functional group will develop the answer. It is important that any problems listed be acknowledged within 24 hours. People now know their problems can be heard and answered. Once employees learn to trust this communication, the program can go on forever.

12. Appreciation

A move for quality products and services can be launched and sustained by recognizing the outstanding performance of the members of the working group. Awards should be given to those who performed up to the set standards. It is wise not to attach relative values to the identification of problems. Problems identified during the error cause removal stage should all be treated the same way because they are not suggestions. The prizes or awards should not be financial. Recognition is what is important. Genuine recognition of performance is something people really appreciate. They will continue to support the

program whether or not they, as individuals, participate in the awards.

13. Quality Councils

Regular meetings of the heads of the schools and the quality consultants be over there. The members of this council will share ideas and experiences with each others in the meetings. Meetings of the professionals and the heads will help to solve the problems and designs the ways how to create the quality culture in the educational institutes. These councils are the best source of information on the status of programs and ideas for action. They also bring the professionals together on a regular basis.

14. Repetition of Actions

All the above steps (1-13) should be repeated. This will ensure a non stop quality improvement process. The typical program takes the time for 12-18 months. By that time, turnover and changing situations will have wiped out most of the education effort. Therefore, it is needed to form a new team and repeat this process again and again. Schedule a zero defects day as an anniversary or give a special lunch for all employees. The point is that the program is never over. Repetition makes the program perpetual and, thus, "part of the woodwork." If quality isn't ingrained in the organization, it will never happen.

The total quality management principles are very effective in business as well as in education. Mehrotra (2006) thinks that TQM principles can be helpful for the working at educational institutes by "redefining the role, purpose and responsibilities of schools. Schools should be improved as a way of life. Comprehensive leadership training at all

the levels should be planed. Attitudes and beliefs of school staff should be properly addressed. Policy and practices should follow the research based information. Comprehensive child-development initiatives, which cut across a variety of agencies and institutions, should be designed".

In order to achieve the above as opportunities to the academic scenario, in addition to patience, participatory management among well- trained and educated partners is crucial to the success of TQM in education; everyone involved must understand and believe in principles. Some personnel who are committed to the principles can facilitate success with TQM. Their vision and skills in leadership, management, interpersonal communication, problem solving and creative cooperation are important qualities for successful implementation of TQM (Akhtar, 1998-99).

CONCLUSION

Application of Total Quality Management in education will give better results in all fields of the process of education as a good technique of management used and proved giving excellent results in other industrial and business organizations (Akhtar, 2000). It is the provision of extraordinary customer's satisfaction (Akhtar, 1998-99). It is based on the participatory management philosophy. It believes on never ending improvement through the collaborative efforts of members of the educational organization. TQM philosophy encourages the students, teachers and the employees for extraordinary performance (Akhtar, 2000). Being a potential paradigm we

can get benefits of TQM in educational institutions (schools, college & universities) in both public and private, as Schmoker and Wilson (1993); Fitzgerald (2004) thinks: TQM can help a school or college providing better services to its primary customers; students and employers. The continuous improvement focus of TQM is a fundamental way of fulfilling the accountability requirements common to educational reform. Operating a no-fear TQM system with a focus on continuous growth and improvement offers more excitement and challenge to students and teachers than a "good-enough" learning environment can provide.

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