TOTAL QUALITY MANAGEMENT (TQM) IN THE ELEMENTARY SCHOOLS OF PUDUKOTTAI DISTRICT

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Abstract

Total quality management is both a philosophy and a methodology. Total Quality Management (TQM) is being used for promoting quality in educational systems. It can assist school education institutions to manage change and to set their own agendas for dealing with the plethora of new external pressures. The purpose of this study was to find out the strengths and weaknesses of the different components of the Total Quality Management in the Elementary Schools Pudukkottai districts. The data collected through Mukhopadhyay's Institutional Profile Questionnaire (MIPQ), were subjected to analysis under eleven quality indicators viz., Leadership, Teacher quality, Linkage and interface communication with the environment, Students' academic and non-academic quality, Co-curricular activities, Teaching quality, Office management, Relationship, Material resources, Examination purposefulness and methodology and Job satisfaction. Each of the dimensions has 10 descriptive statements and the total numbers of items are 110. After critical analysis, the results concluded that the schools are very weak in the areas of Leadership, Linkage and interface communication with the environment, Co-curricular activities, Teaching quality, office management, Relationship, Material resources, and Examination purposefulness. The institution has to focus on these areas and improve upon for the quality education.

Introduction

Total Quality Management is a management approach that originated in the 1950's and has steadily become more popular since the early 1980's. It is a method by which management and employees can become involved in the continuous improvement of the production of goods and services.

It is a combination of quality and management tools aimed at increasing business and reducing losses due to wasteful practices. Quality is at the top of most agendas and improving quality is probably the most important task facing any institution. However, despite its importance, many people find quality an enigmatic concept. It is perplexing to define and often difficult to measure. One person's idea of quality often conflicts with

another and, as well is all too aware, no two experts ever come to the same conclusion when discussing what makes an excellent school, college or university.

Framework of Total Quality Management

The TQM framework should be built upon a set of core values and concepts. These values and concepts provide foundation for integrating the key performance requirements within the quality framework.

A set of fundamental core values forming the building blocks of the proposed TQM framework are:

i.   Leadership and quality culture
ii. Continuous improvement and innovation in educational processes
iii. Employee participation and development
iv. Fast response and management of information
v.   Customer driven quality and partnership development, both internally and externally.

A quality framework needs to meet the special requirements of education and must make sense within the context of the pedagogic developments currently taking place. To be appropriate in the educational context a quality framework must concern itself with teaching and learning. As has pointed out in a higher education context, 'what students learn are the most critical element of educational quality and one that has been virtually ignored on both sides of the Atlantic'. The delivery of learning to students, who are the primary customers of the process, must therefore form the central focus of the framework. Devising a quality framework will require an institution to define its own standard for the principal attributes of quality and setting up arrangements for achieving them.

Total Quality Management in Elementary Education

Total quality management is both a philosophy and a methodology. It can assist school education institutions to manage change and to set their own agendas for dealing with the plethora of new external pressures. Considerable claims are made for TQM. There are those in education who believe that TQM properly applied to it can complete a similar transformation. However, TQM does not and will not bring results overnight; neither is it a panacea for all the problems that beset in. Rather it is an important set of tools that can be employed in the management of educational intuitions.

The complexity of education and the importance of values in education make the moves for taking a quality stance more complicated and diverse. The four imperatives reflect the complex environment in which educational intuitions operate. They are the drivers and motivating forces that challenge any institution to take a proactive stance on quality. The quality of students, teachers, principal, physical infrastructure, instructional resources, and financial resources are some of the examples of inputs for quality.
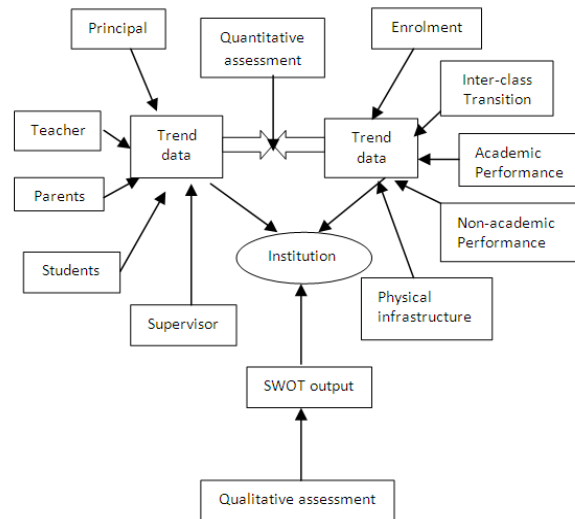
Figure 1: Mukhopadhyay's Institutional Assessment System

Need of the Study

The emphasis on quality in education is a matter of recent concern. It is obvious that quality in education may be determined with respect to how it develops individuals with exceptional qualities, consistency in process and criteria for evaluation, the value for men and materials involved in the educational process and how it brings out changes in the learners in terms of cognitive, affective and psychomotor domains of human development. It is the need of the hour to improve quality in elementary education.

Total Quality Management (TQM) is being used for promoting quality in educational systems. In brief many trends such as students' enrolment, physical infrastructure, capacity and competency of teachers, motivation, training needs, instructional issues, institutional and organizational structure, academic accountability, competency outcomes, standardizing and adaption of learner-consumer demands, technological fluency are influenced by the Total Quality Management. The present study attempts to ascertain Total Quality Management in (TQM) in the Elementary Schools of Pudukottai District, based on 11 areas of quality indicators. Those are, Leadership, Teacher quality, Linkage and interface communication with the environment, Students: academic and non-academic quality, Co-curricular activities: non-scholastic areas, Teaching: quality of instruction, Office management: support services, Relationship: corporate life in the institution, Material resources: instructional support, Examination: purposefulness and methodology and Job satisfaction: staff morale.

Ultimately, the investigation will pave the way for the institutions to understand their strengths and weakness of Total Quality Management where they have to improve upon.

Objectives of the Study

This particular study is proposed to analyze the following objectives

1. To find out the average of Total Quality Management in the Elementary Schools of Pudukkottai District.
2. To find out the average of Total Quality Management with regard to Principals in the Elementary Schools.
3. To find out the average of Total Quality Management with regard to Teacher in the Elementary Schools.
4. To find out the average of Total Quality Management with regard to Linkage in the Elementary Schools.
5. To find out the average of Total Quality Management with regard to Students in the Elementary Schools.
6. To find out the average of Total Quality Management with regard to Co-curricular activities in the Elementary Schools.
7. To find out the average of Total Quality Management with regard to Teaching in the Elementary Schools.
8. To find out the average of Total Quality Management with regard to Office in the Elementary Schools.
9. To find out the average of Total Quality Management with regard to Relation in the Elementary Schools.
10. To find out the average of Total Quality Management with regard to Resource in the Elementary Schools.
11. To find out the average of Total Quality Management with regard to Examination in the Elementary Schools.
12. To find out the average of Total Quality Management with regard to Satisfaction in the Elementary Schools.

Research Questions

The present study will find answers to the following research questions related to and derived from the above objectives:

1. What are the strengths and weaknesses of the different components of the Total Quality Management in the Elementary Schools Pudukkottai districts?
2. Does the system of Elementary Schools of Pudukkottai districts accomplish its objectives?

Methodology

      The investigator followed the survey method for the present study. Mukhopadhyay's Institutional Profile Questionnaire (MIPQ) was administered to the elementary school teachers of Pudukkottai District of Tamilnadu. The elementary teachers have responded to the questionnaires. The data thus collected were put into appropriate statistical analysis.

Development of the Tool

      The investigator selected five point rating scale technique. Number of statements regarding each dimension and sub dimensions were selected. The statements were arranged into eleven dimensions rating scale.

      The scale values and scoring procedure of each item are given as follows:

Response pattern	Score for Positive Items	Score for Negative Items
Very True	4	-4
Largely True	3	-3
Partly True	2	-2
Not Sure	1	-1
False	0	-0

Sample of the Study

      The non-probability (purposive) sampling method was employed in this study. Sample of 15 teachers were selected from the elementary schools located in Pudukkottai district.

Data Collection

      Mukhopadhyay's Institutional Profile Questionnaire (MIPQ) was administered to the teachers. The MIPQ take about 10-15 minutes to fill-out. By using ($\sqrt{}$) mark, respondent should make his/her answer below in any one of five specified categories: 'Very True', 'Largely True', 'Partly True', 'Not Sure', and 'False'. The respondents should fill the required demographic information and the items in the questionnaires. The researcher ensured that the respondent had understood the directions properly. Respondent were asked to answer each item honestly. Respondent were asked to check whether all items have been answered.

Mukhopadhyay's Institutional Profile Questionnaire (MIPQ)

      The MIPQ has been widely used for generating institutional profiles. Although the MIPQ is largely used to elicit teachers' perceptions, it has also been administered to the principals and non-academic staff. The MIPQ comprises 11 areas that the considered indicators of quality.

   1. Leadership

2. Teacher quality: preparation, competence, commitment
3. Linkage and interface communication with the environment
4. Students: academic and non-academic quality
5. Co-curricular activities: non-scholastic areas
6. Teaching: quality of instruction
7. Office management: support services
8. Relationship: corporate life in the institution
9. Material resources: instructional support
10. Examination: purposefulness and methodology
11. Job satisfaction: staff morale

The list indicates the inclusion of input indicators like leadership, teacher and student quality, and material resources; process indicators like leading, linkage and interface, teaching, co-curricular activities, office management, and examination; and product indicators like job satisfaction and relationships. It is implicit that these are critical success factors for quality.

This list takes basics like discipline, punctuality, and maintenance of premises for granted. The major difference in this case, however is the emphasis on process – of leadership, teaching, co-curricular activities, examination, office management, etc. It includes the issue of quality of vital inputs like teacher quality, students, instructional resources, etc. It also includes within its ambit, intangibles like relationships, job satisfaction, linkage with the outside world, etc. The fundamental assumption is that an institution that is strong in all or most of these areas is a quality institution. Excellence in academic and non-academic activities as outputs missing from this list are presumed to be automatic products of a good institution. These are, however, covered in the information blank.

The MIPQ consist of 110 items, 10 on each area of an institution mentioned above. Out of the 10, five are positively keyed and five are negatively keyed. For each respondent, for each area the scores in positively keyed items are adjusted against the responses to the negatively keyed items. Hence, the summated score in each area can be positive or negative. Respondents are asked to respond to each and every item by checking out one of the five possible responses, namely, Very True (VT), Largely True (LT), Partly True (PT), Not Sure (NS), or False (F). For the purpose of scoring, a numerical value of 4 to 0 is attached to each category of response; the actual value depends upon the item, whether it is positively keyed or negatively keyed. The following table, an example is given on scores vis-à-vis response to a positively (+) keyed item and a negatively (-) keyed item.

Table 1: Sample Scoring Plan for Positively and Negatively Keyed Items

Items	Keyed	VT	LT	PT	NS	F
Teacher prepare before teaching (Preparing for teaching contributes to good teaching, hence a positive feature)	+	4	3	2	1	0
It is an isolated institution (Isolation deprives an institution from understanding percener expectations and learning innovative practices from others, hence a negative features)	_	-4	-3	-2	-1	-0

Data Analysis

This study attempted to study the Total Quality Management in (TQM) in the Elementary Schools of Pudukottai District. Data were collected from 15 Elementary School teachers. For a school, one teacher is a respondent, likewise from 15 schools 15 teachers selected and the data were collected from them. Those collected data were analyzed, tabulated and presented below:

Table 2: Average Score of the Sample

Respondents → Area ↓	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Avg.
Principal	3	6	4	5	2	5	-4	3	2	-7	9	11	-8	7	5	2.87
Teacher	7	9	5	11	7	5	7	5	8	8	6	4	7	5	6	6.67
Linkage	5	-7	4	3	2	2	-7	8	6	5	-2	6	0	7	3	2.34
Students	4	5	3	2	2	8	2	4	5	7	3	7	3	2	8	4.60
CCA	3	6	4	2	-3	7	5	3	4	-2	7	5	4	4	7	3.70
Teaching	1	-5	4	-2	7	5	9	4	1	3	2	7	-6	5	3	2.54
Office	2	4	0	1	-7	7	3	-5	6	-4	5	3	7	-6	4	1.34
Relation	6	8	9	7	4	5	3	4	7	2	3	9	11	5	6	5.94
Resources	7	-6	3	2	1	4	6	4	-3	8	11	5	4	3	7	3.70
Examination	6	4	3	2	5	3	4	-5	6	-4	3	2	4	3	6	2.66
Satisfaction	8	11	9	5	8	7	11	7	3	4	5	7	6	11	8	7.27

With 10 items – five positively and five negatively keyed – each area can have score ranging from a maximum of 20 (5×4-0×4). The questionnaire, scoring key, and sample tabulation sheet are given. The scores in each of the 11 areas generate a profile of the institution. Organizational ethos and satisfaction are matters of perception. Let us take an instant case to illustrate what the MIPQ offers. The scores of nine teachers of a school on

each area have been tabulated in the sample-scoring sheet. The average score in each area has also been worked out. The tabulation sheet indicates several trends.

- In each area there is wide divergence in the perception of teachers, e.g., +9 to -8 on principal as leader.
- There are divergences among the area, e.g. from a maximum average score of +7.27 in relationships to +1.34 in office management.
- Inconsistencies like good teachers as indicated by a score of +6.67 but not so good teaching by a score of +3.00 only.
- There are apparent relationships between two or more areas, e.g., relatively high scores of 7.27 and +6.67 in Teachers and satisfaction.

In order to define a crude cut-off point/score to label areas as weak or strong, an institutional average score point is calculated by averaging the averages of various areas. In the instant example, 3.75 is the institutional average score. All areas with scores above 3.75 are stronger areas and all below that are weaker areas.

Table 3: Average Scores in Sub-Areas of the MIPQ

Areas	Scores <3.75	Scores 3.75+
Principal as leader	2.87	
Teacher quality		6.67
Linkage	2.34	
Students quality		4.60
Co-curricular activities	3.70	
Teaching	2.54	
Office	1.34	
Relation		5.94
Resources	3.70	
Examination	2.66	
Satisfaction		7.27
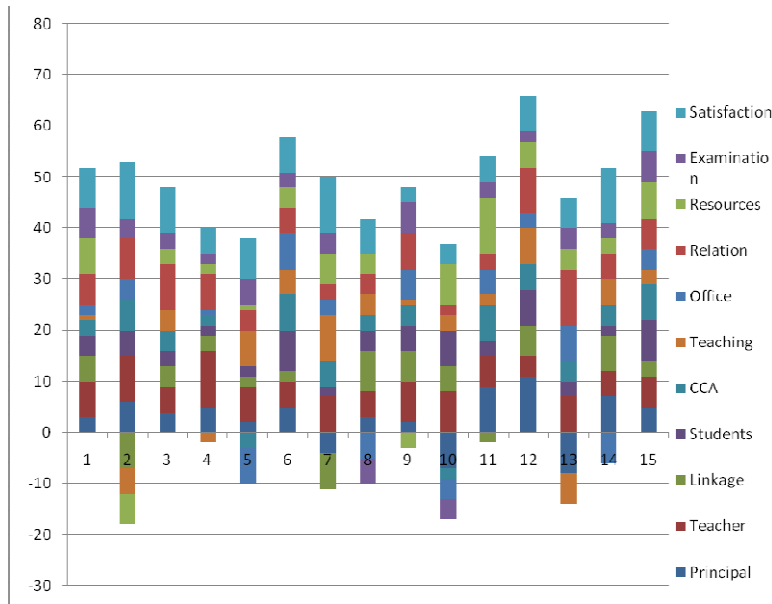
Figure 2: Organizational Profile

The plotted averages yield figure 2, which illustrates the stronger and weaker areas of the school and also indicates their relative position along each other. The MIPQ can be administered to teachers. Each category of respondents will generate different profiles because of their differential perceptions of the various aspects of the institution.

Findings

- Leadership quality among the Principal is very week.
- Teacher quality towards preparation, competence in subject knowledge, commitment towards work in very high.
- Linkage and interface communication with the environment by the school administration is very week.
- Students are very strong in their academic and non-academic performance.
- The schools gives little importance to Co-curricular activities and it is little weak.
- The quality of teaching is very weak.
- Office management is poor and they are not extended their services to the benefit of the students and teachers.
- Corporate life of the institution is very strong and they run the institution for business propose.
- Material resources are very weak and instructional support for the teachers is low.
- Method of examination, evaluation and result announcement are very poor.
- The Staff has very strong job satisfaction.

Suggestions and Recommendations
1. Every Principal should develop the leadership quality.
2. The institution should have good cordial relationship within them and with the outside agencies.
3. The school administration should give guidance and encouragement for the co-curricular activities.
4. Teachers should develop their teaching skills. They should really care whether students understand their lessons and undergo training.
5. Administrative staff maintains good relations with teachers, students and their parents.
6. The institution should run not only in the concept of business purposes but also in the service motives.
7. The school should provide necessary infrastructure to the students and instructional support like audio-visual aids for the teachers.
8. The school should announce the examination results in short span of time. The teachers should not show partialities in awarding marks in examinations. Examination results should be used to give feedback for improvement in learning.

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