# Prerequisites in Implementation of TQM Approach in Higher Education Institutes Leading to High Quality Education

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## 1. INTRODUCTION

Total Quality Management (TQM) is a philosophical concept of management which was applied in many industries. However its application in the field of education has proven rise in many aspects such as management, organizational structure, public relations, educational aids/resources available, evaluation/assessment process, communicational aspects, attitude & etc. This concept needs involvement of all hierarchical levels in order to establish a better organizational culture. Environment which gets developed through such an adaptation; facilitates the hoisting of confidence and esteem of fellow workers in a collaborative manner. Correct leadership encouraging the spirit of teamwork has a major role to play in this aspect. Irrespective of its proven benefits, still such adaptations in Sri Lankan educational context lag expected development.

# 1.1 Role of Higher Education

Higher education is the mean by which comprehensive knowledge regarding a particular specialization is divulged to young individuals. It extends the intellectuality of them and transforms them in to empowered individuals to encounter varying domains in life. According to Ronald (1992), it could be the method of deciding the "end-product" for labor market or originating the consistency needed for standard research based careers or generating high quality educators or the method of provision of developmental opportunities in one's life. These four aspects are assimilated to create the role of higher education as delivery of knowledge, elicitation of innovative research with a scope for progression. Sociological aspects of education, its role in raising country's economy and standards of living and most importantly the affiliation to technological developments are also vital concerns.

## 1.2 Higher Education in Sri Lanka

Despite the continuous growth of education sector in Sri Lanka it has been incompetent to meet the required competitive claim of the society. According to Warnapala (2009), amidst all that; the restrictions such as inadequate capacity building, inadequate qualified staff such as doctoral and professor-level academics, limited preparatory opportunities in teaching and learning techniques, absence of effective evaluation and monitoring processes for quality assured programs and lack of managerial and administrative capabilities, substandard learning environments are few major concerns affecting both public and nongovernmental Universities. Mostly the high aptitude for running of day-today managerial work and administrative work by such involved staff with very less initiation in formulation of new policies, strategic planning, launching of new projects for further development has hindered the required growth of many institutes irrespective of been government or nongovernment. He further argues stating the ad hoc; off the cuff nature of certain measures taken and implemented in certain domains of higher education without proper planning; yet merely to answer the popular pressure from different groups. They are to be refurbished at the earliest possible in order to address the Low Quality and Relevance of Graduate Output.

Traditional education system comprises of passive learning with lot of listening and watching with limited opportunities in procuring adequate technical, technological and social skills. This needs a total remodeling accommodating the under skilled category as well; facilitating lifelong learning environment while stimulating the unemployed adults as well to join flexible programs. In terms of teaching the art of teaching students to practice self-regulatory learning could have had more emphasize on. According to Suzana (2009), facilitation of learning while working, plays a vital role in professional development of working adults to boost their ability in innovation and collaborative teamwork. This is identified as a social requirement and marketing aspect in the field of higher education. These have transformed the domain of education a market-competitive entity/service from its traditional look of been a social activity.

# 1.3 Quality in Higher Education

Quality is one of the significant factors in deciding the persistence, productivity and growth of a Higher Education Institute in today's society. Consistency established in such a culture leads to specificity in meeting customer satisfaction; provision of value for money and ability in empowering the customers. Common gauges in measuring quality are structure of curriculums, types of programs and their underpinned key competencies, learning and teaching environment, proper evaluation and monitoring system, professional mechanisms of student's support, clear institutional goals-vision-mission concerns, availability of resources such as qualified panel of academics, laboratory facilities, library and etc., effective management and administrative staff and continuous quality review/assurance processes.

# 1.4 TQM Approach in Higher Education

Total Quality Management (TQM) is a renowned management technique proposed by W. Edwards Deming to improve the productivity of US industries. Over the years it has now proven its results even in service sector such as Education. Further it is an evolving concept favoring continuous improvement in almost every facet to meet the ultimate customer satisfaction involving all levels of the organizational structure. However the commitment of senior management/executives play a vital role in this as decision makers to do the required change. According to Omer (2001), TQM concept applied to the field of higher education, encircles important aspects such as Infrastructure of the University premises, total academic infrastructure, Curriculum and program developments, Assessments and evaluation system, Administrative improvements, Research and Publications, Strategic Planning for institutional development and University-Industry-Society relationships.

Further the probable challenges of adopting TQM in higher education are discussed by Waller (1996). Among them insufficient trust between departments and faculty members, low confidence level in accepting the need for change and unsubstantiated fear of a threat in considering students as customers are few major concerns. Autonomy of the faculty is the most common element in question by such groups with incomplete understanding of TQM implementation. This type of ambiguity in defining the end customer by administration and academics diffuses the collaborative effort for quality education.

Dimensions of assessment of quality in education is relatively a different and complex. Since education produces intangible products, customer's satisfaction about the service rendered on time has a considerable gravity in deciding the quality aspects. Quality of teaching techniques and quality of learning techniques are therefore to be updated more often to meet the competitive demand. According to Peskircioglu (1996), Quality control Circles play a major role in motivating individuals involved for continuous self-development. Realistic identification of the place where the institute stands vs. the place where it wants to be is highly essential in understanding its scope.

## 2. METHODOLOGY

#### 2.1 Data collection

Primary data collection was done using a standard questionnaire filled by 26 students between 18-20 years and 26 lecturers delivering various subject modules for undergraduate level from 2 state universities and 2 private university. Secondary data was collected through journals, websites and research papers as quoted. Based on those the data analysis was performed.

## 2.2 Data Analysis

Respondents were made to provide their view based on a 5 points scale varying between 1-Completely irrelevant to 5-Highly important. Factors assessed were as extracted from Sudha (2013) and Owlia et al. (1996).

Understanding of the *concept of higher education* among educator respondents

|     |  |                    |           | 1                         |
|-----|--|--------------------|-----------|---------------------------|
| S.  | Potential concepts of Higher               | Mean Score based   | Standard  | Average position based on |
| No. | Education                                  | on points provided | Deviation | mean score indicating     |
|     |  |                    |           | importance                |
| 1   | Production of qualified resource personals | 4.51               | 0.428     | 1                         |
| 2   | Training for research career               | 4.41               | 0.463     | 2                         |
| 3   | Training for professional teaching         | 3.25               | 1.402     | 4                         |
| 4   | Provision of opportunities                 | 4.40               | 0.402     | 3                         |

Understanding of the *concept of higher education* among student respondents

| S.  | Potential concepts of Higher       | Mean Score based   | Standard  | Average position based on |
|-----|------------------------------------|--------------------|-----------|---------------------------|
| No. | Education                          | on points provided | Deviation | mean score indicating     |
|     |                                    |                    |           | importance                |
| 1   | Production of qualified resource   | 4.48               | 0.455     | 2                         |
|     | personals                          |                    |           |                           |
| 2   | Training for research career       | 3.86               | 1.308     | 3                         |
| 3   | Training for professional teaching | 3.23               | 1.452     | 4                         |
| 4   | Provision of opportunities         | 4.52               | 0.433     | 1                         |

Understanding the *awareness of the importance of quality in higher education* among educator respondents

| S.  | Aims of promoting quality            | Mean Score based   | Standard  | Average position based on |
|-----|--------------------------------------|--------------------|-----------|---------------------------|
| No. | assuring aspects in higher           | on points provided | Deviation | mean score indicating     |
|     | education sector                     |                    |           | importance                |
| 1   | Competition                          | 3.75               | 1.025     | 4                         |
| 2   | Customer satisfaction                | 3.38               | 1.192     | 5                         |
| 3   | Maintaining standards                | 4.80               | 0.521     | 1                         |
| 4   | Accountability                       | 4.15               | 0.509     | 3                         |
| 5   | Improve employee morale & motivation | 4.04               | 0.563     | 2                         |
| 6   | Credibility, Prestige & Status       | 3.36               | 1.254     | 6                         |
| 7   | Image & Visibility                   | 3.34               | 1.458     | 7                         |

Understanding of the *awareness of the importance of quality in higher education* among student respondents

| ************************************** |                            |                    |           |                           |  |
|--|----------------------------|--------------------|-----------|---------------------------|--|
| S.                                     | Aims of promoting quality  | Mean Score based   | Standard  | Average position based on |  |
| No.                                    | assuring aspects in higher | on points provided | Deviation | mean score indicating     |  |
|  | education sector           |                    |           | importance                |  |

| 1 | Competition                    | 4.59 | 0.437 | 3 |
|---|--------------------------------|------|-------|---|
| 2 | Customer satisfaction          | 4.63 | 0.468 | 2 |
| 3 | Maintaining standards          | 4.67 | 0.487 | 1 |
| 4 | Accountability                 | 3.89 | 0.592 | 4 |
| 5 | Improve employee morale &      | 3.70 |       | 6 |
|   | motivation                     |      |       |   |
| 6 | Credibility, Prestige & Status | 3.76 | 1.305 | 5 |
| 7 | Image & Visibility             | 3.69 | 1.394 | 7 |

Understanding of the *Quality dimensions in higher education* among educator respondents

|     | <u> </u>                           |                    |           |                           |
|-----|------------------------------------|--------------------|-----------|---------------------------|
| S.  | Assessable Dimensions depicting    | Mean Score based   | Standard  | Average position based on |
| No. | quality in higher education sector | on points provided | Deviation | mean score indicating     |
|     |                                    |                    |           | accuracy of conclusion on |
|     |                                    |                    |           | quality                   |
| 1   | Sufficient lab facilities          | 4.63               | 0.541     | 2                         |
| 2   | Combatable learning environment    | 3.59               | 1.315     | 7                         |
| 3   | Qualified academic staff           | 4.67               | 0.502     | 1                         |
| 4   | Counselling and student support    | 3.95               | 1.298     | 5                         |
| 5   | Curriculum content                 | 4.60               | 0.574     | 3                         |
| 6   | Assessment and evaluation criteria | 4.42               | 0.587     | 4                         |
| 7   | Quick response by academic staff   | 3.67               | 1.305     | 6                         |

Understanding of the *Quality dimensions in higher education* among student respondents

| S.  | Assessable Dimensions depicting    | Mean Score based   | Standard  | Average position based on |
|-----|------------------------------------|--------------------|-----------|---------------------------|
| No. | quality in higher education sector | on points provided | Deviation | mean score indicating     |
|     |                                    |                    |           | accuracy of conclusion on |
|     |                                    |                    |           | quality                   |
| 1   | Sufficient lab facilities          | 4.68               | 0.558     | 3                         |
| 2   | Combatable learning environment    | 4.66               | 0.562     | 4                         |
| 3   | Qualified academic staff           | 4.72               | 0.521     | 1                         |
| 4   | Counselling and student support    | 4.55               | 0.567     | 6                         |
| 5   | Curriculum content                 | 4.70               | 0.547     | 2                         |
| 6   | Assessment and evaluation criteria | 3.46               | 1.247     | 7                         |
| 7   | Quick response by academic staff   | 4.59               | 0.564     | 5                         |

#### 3. RESULTS

Understanding of the concept of Higher Education among educators and students showed less similarity such as academics believed qualification has more importance over provision of opportunities which was student's main preference. Further training for research career was the second most important concept in academic perception whereas students rated that aspect as the third. Both the groups believed, training for professional teaching has less importance with respect to other concerns of Concept of Higher Education.

Upholding the standards was voted as the main concern why quality has to be taken care of by both parties involved. However certain contradictions such as the position allocated for customer satisfaction by students was way more uplifted than that was done by educators. They have given the 5<sup>th</sup> place for customer satisfaction and instead have prioritized the importance of employee morale and accountability. Hence a conflict of interest is clearly evident in this aspect.

In case of understanding the possible quality dimensions, the first three prioritizations of both groups were found to be more or less similar. However a distinct variation was seen as the importance of a combatable learning environment and response of administrative staff were much more highlighted by students while they come at the end in educator's perception. Instead evaluation criterion has more importance in their view than latter aspects.

#### 4. DISCUSSION AND CONCLUSION

Total Quality Management has proven promising results in improving quality in higher education institutes for decades. However when adopting such in Sri Lankan education context, certain preliminary work is essential to eliminate or to minimize conflicts of interest between the most leading roles of education; the educator vs. the customer/student. Growth of education sector can be significantly increased therein. Involvement of top management in taking such measures prior to TQM adaptation will ensure a robust momentum in quality improvement in higher education institutes. Top Management's understanding on the key role of quality education, "the educator" and the educator's understanding about the nature of the customer and his needs along with customer's precise expectation will provide the required platform in encountering competitive and shifting demand of education sector to strive in the market in the long run.

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