

Implementation of Total Quality Management: A Case Study of Allama Iqbal Open University

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Abstract

The concept of Total Quality Management was developed by an American, W. Edwards Deming, after World War II for improving the production quality of goods and services. Quality as a concept has been with us for millennia almost in every sector. But only recently i.e. in the last quarter of the twentieth century, Total Quality Management has emerged as a formal management function (Deming, 1986, p.20). Scurr (1990) defines TQM as “continuously meeting agreed customer requirements at the lowest cost by realizing the potential of all employees”.

Keywords: Total quality management, distance education, customers’ requirements, quality product.

Introduction

The concept of total quality management is not new one. Many intellectuals gave different definitions of TQM, in different periods, and they tried to clear the concept of TQM in their own ways.

Padhi and Palo (2005, pp.15-23) after examining a number of definitions given by management authors, consultants, practitioners, quality gurus, reached at defining TQM as “TQM is an integrated organizational approach to bring continuous improvement in products, services, and processes along with proper tools, technology and training to meet customers’ expectations in a continuous basis through total employees’ involvement.”

TQM is one of the most publicized management programmes of the 1980s. The ‘total’ part of TQM emphasizes that it is an all-round excellence effort and is not about one aspect of the company. The ‘quality’

part of the TQM emphasizes upon not only quality product but also quality services. Quality is operationally defined under TQM as meeting or exceeding customer's expectations. The 'management' part of TQM implies that, it is a management approach, not just a narrow quality control or quality assurance function.

There are variations in the scope and applicability of TQM programme. Customer focus, employee involvement, continuous improvement, defect prevention, performance measurement and continuous learning are the six principles that capture common themes in the field of TQM.

The strategic management process to implement TQM ideally should consist of three stages: strategy formulation, strategy implementation and strategy review, evaluation and feedback.

The critical component of TQM is cost consciousness in terms of quality improvement and management. From this angle, effective resource utilization is very important. Unless qualitative output is achieved, any amount of investment will be futile. Another strategic plan for TQM would be exploitation and optimum utilization of resources.

Cost of quality has two important components: cost consciousness and cost management. Cost consciousness implies developing sensitivity about costs and likely returns keeping quality as focal point and cost management is the natural corollary to cost consciousness, which implies investment decision.

Total Quality management is a management approach that originated in the 1950's and has steadily become more popular since the early 1980's. Total quality is a description of the culture, attitude and organization of a company that strives to provide customers with products and services that satisfy their needs. The culture requires quality in all aspects of the company's operations, with process being done right the first time and defects and waste eradicated from operations (Mukhopdhyay: 2005, p.59).

According to Robinson (1995, p.83) the typical characteristics require the surety of quality and provision of academic excellence for the

learners. He has developed a framework for managing quality in Distance Education Institutions (DEIs). To be successful implementing of TQM, an organization must concentrate on ethics, integrity, trust, training, teamwork, leadership, recognition and communication the key elements.

The existing quality practices in DEIs can be described as Quality Assurance, even if not called that for example, the use of external assessors in course development, redrafting, peer-review of course units etc. (Robinson, 1995). However, they are yet to complete the journey from QA to TQM. If the DEIs do not want to produce more dropouts than graduates or to lose students to competing institutions, then TQM will facilitate methods of work. As QA process spread throughout the organization and as commitment to continuous improvement developed through teams becomes widely accepted practice, the objective changes to TQM (Tait, 1997, pp.10-11).

Total quality management has been described in different ways in the form of models. Integrated Model, Oakland Model, Quality – Sweating Model, Building Blocks Model, Theoretical Model, Three Dimensional Model, Pyramid Model, House of TQM Model, Simplified TQM Model widely used TQM models.

Technology is changing that to some extent; the constructed nature of academic activity, which is not simply a matter between faculty and students, because instructional designers, editors, critical readers and peers all contribute to the material developed; the technology-based nature of contact between faculty and students, whether through printed materials, audio and video tapes, radio programmes, CD-ROMs or computers linked to the Internet and limited physical plant.

Improving the quality of products/services on a continuous basis is crucial to every organization/system. Total quality management is a concept introduced by business houses and industries to established standards and techniques that ensure quality of products/services leaving and reaching firms through continuous actions rather than one final inspections. Educational institutes throughout the global have also been influenced by this concept, although the application is very much observed in case of higher education institutions, but not much in case of open and distance learning (ODL) institutions. To operationally this concept in

educational institutes a number of implementation models and strategies have been developed. Previous research studies found that educational institutions benefit adopting TQM as they strive to improve the quality and cost effectiveness of their operations.

With changing patterns of education delivery from face-to-face to online, course content, nature to learner, and organization structures, concept of quality has become an inherent component of the educational process for its success. Globally various bodies have been established to develop guidelines for quality products and services; and their maintenance. The globalization of education, migration of students from one community to other, one country to another, provides adequate causes for concerns to the educationists and administrators. Tool quality management in education is a timely tool, which must be clearly understood, adopted and implemented as soon as possible.

Any institution wishing to implement TQM must be clear at the outset that is not merely a management technique; it is also a change management programme. No matter how technically or administratively perfect a proposed change may be, people may make it or break it. People make it when they perceive it as a 'basket of opportunities', and break it when they perceive it as a 'bundle of threats'. People are the creatures of habit and it is highly difficult for them to try new ways of doing things at workplaces. Therefore, they resist changing and this resistance occurs at all levels. However, all people do not resist TQM, whether people resist or accept as a change initiative depends upon the individual employee, who is subject to such change processes (Palo, Panigrahi and Padhi, 2002, pp.15-23).

Institutions of distance education need to carefully consider the operations involved in TQM to improve their various processes. While implementing TQM and quality improvement methodologies at DEIs can be difficult at the most, the results can be extremely beneficial for all involved if it is done properly.

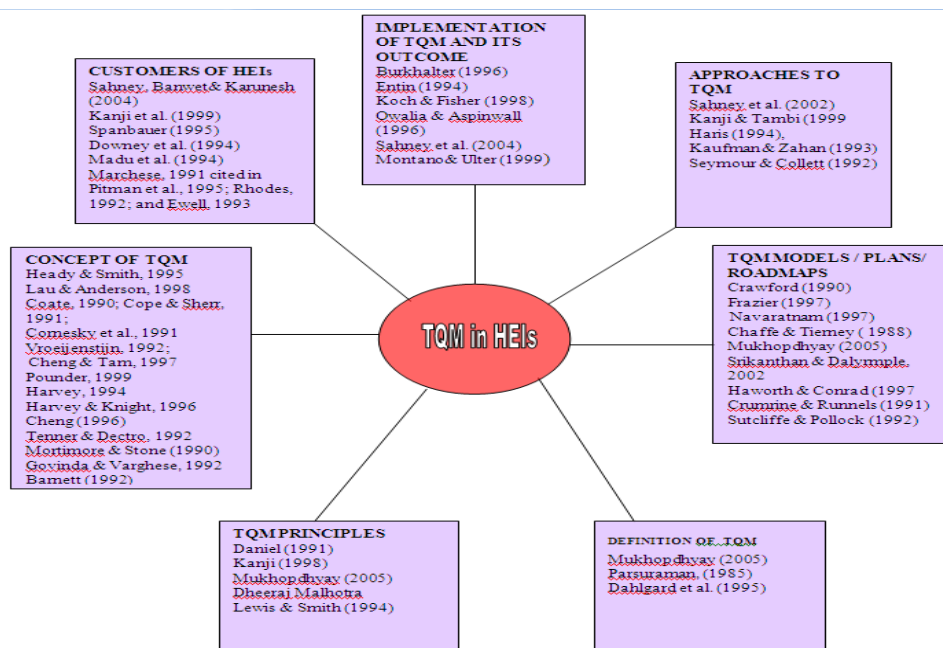
Allama Iqbal Open University (AIOU) was established in 1974 under an act of parliament as the 2nd open university of the world and the first of its kind in Asia and pacific. During its early years, the AIOU had to face a lot of problems mainly due to its non-formal system of

Education. However, due to the hectic efforts, now the university has become a prime institution, facilitating a wide variety of people with quality education at their doorsteps. Moreover the innovative changes regarding its programmes as well as its physical structure during the last four years enabled the University to cater to the lifelong needs of the masses in better way.

Allama Iqbal Open University is a unique institution in many ways, affording educational facility to all children from nine to ninety. Being the only open university of Pakistan, since its inception, it has been serving the nation by producing a highly educated human capital. Taking a start from an Elementary Arabic course, the AIOU has now reached to the pinnacle – imparting education to the level of Ph.D., M. Phil, and Executive MBA/MPA, M.Sc., etc. On the other hand, the AIOU has come up as the largest university of Pakistan in terms of course enrolment and course programmes as it is offering more than 135 programmes and imparting education to students exceeding 5, 70,000 in number. (<http://www.aiou.edu.pk/regionaloffices.asp>, retrieved on 08-02-2007)

Its purpose was to develop human capital providing a channel for continuous education to the masses working in various socio-cultural and economic sectors in Pakistan. It aims to carryout high quality education programmes on the one side and skill development in different vocational professions on the other side. How does have better productivity as compared to a conventional university is required to be examined through its internal and external efficiencies.

Allama Iqbal Open University has opened up educational opportunities for the working people and has provided access to the females on their door steps. It has also done pioneering work in the field of mass education, female literacy, teacher education and media based distance education. It is now breaking new grounds in the fields of professional, scientific, and technical education. It is attempting to reach out to the remote areas of Pakistan. It is also attempting to harness modern educational technology for spreading education in Pakistan; which support in providing access to distance especially the students from rural areas.



STATEMENT OF PROBLEM

Improving the quality of products/services on a continuous basis is crucial to every organization/system. TQM is a concept to establish standards. Educational institutions throughout the globe have also been influenced by this concept.

It is the need of time that for improving the quality of products/services on continuous basis, like other educational institutions, A.I.O.U. should also observe the concept of TQM. Focus of this study was on, "Implementation of Total Quality Management (TQM): A case study of Allama Iqbal Open University".

OBJECTIVES OF THE STUDY

The study intended to achieve the following objectives:

- 1) To analyze the Total Quality Management system of Allama Iqbal Open University.
- 2) To identify the areas of implementation of Total Quality Management at Allama Iqbal Open University.

- 3) To evaluate the problems hindering Total Quality Management at Allama Iqbal Open University.
- 4) To give recommendations for improvement of Total Quality Management system at Allama Iqbal Open University.

SIGNIFICANCE OF THE STUDY

There is a growing interest in implementation of TQM in all organizations. This study will be help for:

- 1) The administrators/managers/academicians to make essential arrangements for the implementation of TQM. It removes barriers that deprive educators, administrators and students of their right to take in their accomplishment.
- 2) The planners to keep in view the basic needs of D.E. Facilities to be provided. So the facilities should provide as a whole.
- 3) For the achievement of high quality management at A.I.O.U. This study will help in meeting the challenges of modern age and to achieve top quality performance in all areas.
- 4) Examine critically and remove non-productive aspects of the system by applying TQM techniques and comparing them with the set objectives.
- 5) Develop better and new measure of achievement. The University has the organizational improvement program that matches output to student's needs, requires teamwork and continuous improvement. This provide platform to survive in the competitive environment.

RESEARCH METHOD

For the purpose of the data collection and the assessment of "Implementation of Total Quality Management (TQM): A case study of A.I.O.U"; a descriptive analytical method was adopted using questionnaires.

POPULATION

The population of the study was consisted on the following:

1. Students of M.Ed. program (Teacher Education) of Rawalpindi region enrolled in semester spring 2009 i.e. (3965).
2. Tutors of M.Ed. program (Teacher Education) of Rawalpindi region semester spring 2009 i.e. (240).

SAMPLE

A list of recently appointed tutors of Rawalpindi region was obtained from the Regional Office Rawalpindi. Afterwards two hundred and forty (240) tutors, serving at M.Ed. level were selected. A list of M.Ed. students of Rawalpindi region was also obtained from the Regional Office Rawalpindi. Afterwards eight hundred (800) students were selected using systematic sampling.

Table 3.1: *Sample Description*

Sample description of both the populations is as under:

Population	Sampled	Total	Percentage (%)
Tutors	240	240	100%
Students	800	3965	20%

DEVELOPMENT OF THE TOOLS

In order to achieve the objectives of study the variables/parameters (Admission procedure, Mailing system, Learning material, Workshops and Tutorial meetings, Assignments, Examination system and university online system) were included in the study and instruments comprises all the parameters. For these purpose two questionnaires (one for tutors and the other for students) were developed on five point rating scales containing twenty-five items each. Both the questionnaires covered all the areas of the Total Quality Management (TQM) at A.I.O.U. Both

questionnaires were slightly different from each other. The questionnaires were discussed with the experts in the field of testing. Afterwards items and their language were slightly modified in the light of the experts' opinion. The first questionnaire was mailed to two hundred and forty tutors and the second questionnaire was mailed to eight hundred students through self-addressed stamped envelopes.

In both the questionnaires the respondents had to give their impartial responses to each item. The data were collected by using questionnaires through mail as well as by hand. After its collection, using different parameters, the data was scored in the master sheet with great care. Data was tabulated carefully after determining the overall percentage of the responses to each item and drawing the mean score, arithmetic mean and standard deviation of all the data.

FINDINGS

Findings from the Questionnaire of Tutors

1. Eighty percent tutors agreed with the statement that tutors are appointed on merit. Mean score 4.26 shows the agreement of the tutors
2. Seventy six percent tutors agreed with the statement that regional offices informed tutors well in time about their appointment. Mean score 4.06 shows the agreement with the statement
3. Eighty six percent tutors agreed with the statement that proper guidelines are provided for making assignments. Mean score 4.10 shows the agreement with the statement
4. Seventy Four percent tutors gave their opinion that enough time is provided to the tutors for marking the assignments. Mean score 3.83 shows the agreement with the statement
5. Fifty six percent tutors gave the opinion that Regional Offices are helpful to the tutors in their work. Mean score 3.26 shows the agreement with the statement

6. Seventy percent tutors gave the opinion that tutors get rapid and positive response from regional office in case of query or confusion. Mean score 3.63 shows the agreement with the statement
7. Sixty percent tutors gave the opinion that learning material of AIOU is informative. Mean score 3.23 shows the agreement with the statement
8. Seventy seven percent tutors gave the opinion that study material of AIOU fulfils the requirements of modern age. Mean score 3.86 shows the agreement with the statement
9. Sixty seven percent tutors were agreed that assignment questions are brain storming. Mean score 3.50 shows the agreement
10. Seventy six percent tutors agreed with the statement that assignment questions cover all syllabuses. Mean score 3.80 shows the agreement with the statement
11. Seventy three percent tutors were of the view that students prepare assignments carefully as per university instructions. Mean score 3.66 shows the agreement with the statement
12. Seventy three percent tutors said that students discuss their assignments with their tutors. Mean score 3.86 shows the agreement with the statement
13. Sixty seven percent tutors were of the view that assignments help the students for the preparation of final exams. Mean score 3.63 shows the agreement with the statement
14. Fifty three percent tutors gave their opinion that student's response towards tutorial meeting is satisfactory. Mean score 2.90 shows the agreement with the statement
15. Seventy seven tutors were of the view that mostly tutors are punctual in tutorial meeting. Mean score 4.03 shows the agreement with the statement

16. Fifty three percent tutors gave their opinion that mostly students submit their assignments well in time and need no reminder. Mean score 3.06 shows the agreement with the statement
17. Eighty three percent tutors were of the view that mostly tutors mark assignments on merit as per university norms and procedure. Mean score 4.03 shows the agreement with the statement
18. Forty six percent tutors were of the view that study centers are well equipped with teaching learning resources but most of them were not of this opinion. Mean score 2.83 shows the agreement with the statement
19. Sixty percent tutors gave their opinion that library services are available to tutors. Mean score 3.30 shows the agreement with the statement
20. Sixty three percent tutors denied the statement that multimedia/Audio-Visual aids are used in teaching. Mean score is 2.50
21. Thirty six percent tutors agreed the statement that computer is used as an aid in tutor assignments but most of them were not of this opinion. Mean score 2.90 shows the agreement with the statement
22. Fifty seven percent tutors were of the opinion that tutors get students from their nearby localities. Mean score 3.63 shows the agreement with the statement
23. Fifty seven percent tutors were of the view that university has effective monitoring/checking system on tutors work. Mean score 3.73 shows the agreement with the statement
24. Forty percent tutors agreed the statement that university arranges proper training for tutors time to time but most of them were not of this opinion. Mean score 2.90 shows the agreement with the statement

25. Fifty three percent tutors were of the view that remuneration of tutors is reasonable as per work assigned. Mean score 2.46 shows the agreement with the statement

Findings from the Questionnaire of Students

1. Sixty eight percent students agreed with the statement that mostly students get information about admission through newspaper. Mean score 3.76 shows the agreement with the statement
2. Fifty six percent students agreed with the statement that admissions forms and related information are easily available. Mean score 3.24 shows the agreement with the statement
3. Seventy four percent students were of the opinion that admission forms are easy to fill in. Mean score 3.82 shows the agreement that admission forms are easy to fill in
4. Seventy eight percent students were of the opinion that process of the fee submission is easy. Mean score 3.84 shows the agreement for the easy process of fee submission
5. Fifty five percent students were of the view that students receive their study material well in time. Mean score 3.16 shows the agreement that students receive their study material well in time.
6. Sixty percent students agreed the statement that students are informed about their tutors well in time. Mean score 3.38 shows the agreement for informed about their tutors well in time
7. Sixty four percent students were of the opinion that students get their Roll Number Slip well in time. Mean score 3.52 shows the agreement to get their Roll Number Slip well in time
8. Sixty six percent students were of the view that learning material of A.I.O.U. is informative. Mean score 3.54 shows the agreement for informative learning material of A.I.O.U.

9. Fifty four percent students agreed with the statement that study material is self-explanatory. Mean score 3.14 shows the agreement for self-explanatory study material
10. Fifty eight percent students were of the opinion that Regional Offices cooperates in case of problem. Mean score 3.30 shows the agreement that Regional Offices cooperates in case of problem
11. Eighty percent students were of the view that tutors are cooperative in study/teaching. Mean score 4.02 strongly agreed for tutor's cooperation in study/teaching
12. Fifty two percent students denied that the numbers of tutorial meetings are adequate. Mean score is 2.84
13. Fifty six percent students were of opinion that mostly students attend study center regularly for tutorial classes as per schedule. Mean score is 2.68
14. Sixty eight percent students were of the view that tutors are always available in study centers. Mean score 3.64 shows the agreement that tutors are always available in study centers
15. Eighty eight percent students were of the opinion that tutors come to class well prepared. Mean score 4.16 shows the agreement that tutors come to class well prepared
16. Eighty six percent students were of the opinion that tutors also guide students individually if requested. Mean score 4.10 shows the agreement for the guidance of tutors to students individually if requested
17. Eighty six percent students agreed the statement that tutors satisfy students by answering their question/queries. Mean score 4.12 shows that the tutors are handling well the questions from the students.

18. Seventy two percent students were of the view that workshops are arranged at convenient places. Mean score 3.86 shows the agreement for arrangements at convenient places of workshops
19. Eighty percent students were of view that tutors return assignments in time with detailed instruction. Mean score 3.92 shows the agreement that tutors return assignments in time with detailed instruction
20. Sixty percent students were of the opinion that examination centers are arranged at convenient places. Mean score 3.42 shows the agreement that examination centers are arranged at convenient places
21. Sixty eight percent students agreed the statement that students get their result well in time. Mean score 3.69 shows the agreement for getting their result well in time
22. Fifty eight percent students were of view that mostly students are satisfied with the examination system of A.I.O.U. Mean score 3.36 shows the agreement for satisfaction of students with the examination system of A.I.O.U
23. Fifty eight percent students were of the opinion that students can confirm their admission through website of the university immediately. Mean score 3.12 shows the agreement for the confirmation their admission through website of the university immediately
24. Forty four percent students were of the view that learning material is supplemented by multimedia but most of them were not of this opinion. Mean score 3.07 shows the agreement for supplemented learning material by multimedia
25. Eighty percent students were of the opinion that online result information, through university website, is easily approachable. Mean score 3.84 shows the agreement for online result information, through university website

CONCLUSIONS

Majority of the respondents were satisfied with the admission procedure of the university but still there is space for improvement like easy fee submission procedure and also online admission may be introduced to facilitate the students. University has good mailing system but it can be more proficient if a separate cell for mailing system is introduced and E-mail system may be introduced for quick services. Though regional offices are helpful in tutor's work, regional offices appoint tutors on merit. E-mail system may be used for quick response of the tutors queries and confusions. Learning material of AIOU is informative and assignment questions are brain storming and help students in final exam preparation as well. Tutorial meetings are also useful for students as students can discuss the assignments with tutors, tutors guide student briefly. There may be some strictness in attendance of student in the tutorial meetings. Multimedia and audio/video aids are used in teaching but still there is need for more refresher courses for tutors and use of computer may be increased. University arranges exam in different places of country and outside the country, however there may be more examination centers may be arranged at convenient places for students. Online information through the university website is easily available it may be more updated to facilitate the all stakeholders.

RECOMMENDATIONS

1. Admission procedure may be made easier. The procedure of submission of admission forms and deposit of fee may be made easier by including more banks in university panel.
2. Online admission has been launched at M.Phil. / PhD level it may be introduced at master level.
3. Post offices mail system may be used only for mailing the study material to the students. Other information may be shared through Email system.
4. Email system may be made more updated for quick information. E-mail facility may be provided at all study centres and post offices.

5. More refresher courses may be arranged for employees especially for the tutors.
6. Retention rate of the tutors may be increased.
7. The number of tutorial meetings may be increased. Students May be bound to attend at least 80% of tutorial meetings.
8. Website of the university may be more updated. More information may be uploaded on the website to facilitate all the stakeholders.

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