Literature Review

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2.1 – Introduction

Review of related literature helps to know about the studies which have been done in the related field. By the study of reviews one can search the problem and examine the different solution various researchers have found such solution an researcher discusses his results and draw conclusion.

The literature review is a critical looks at the existing research that is significant to the work that researcher carrying out. Some people think that it is a summary but it is not so that. Although researcher need to summarize relevant research, it is also vital that researcher should evaluate work, show the relationships between different work, and show how it relates to his work.

This literature review will examine the place of Higher education, Total Quality Management, Education Quality and TQM techniques. The review will begin with an exploration of Higher education, its definition, history, benefits and questions of quality. It will then explore and their general role in higher education. Next, it will present the literature of TQM and Educational Quality. This will segue into and Total Quality Management thoughts and study. Finally, it will review TQM Techniques and Education.

2.2 - Higher Education

**H.C.S. Rathore (1993)** has provided an efficient and less expensive method of educational instruction a higher education level in the context of national development in India. The author also said that uncontrolled population growth and the failure which can provide employment to school leavers on the one hand and growing awareness and aspirations for education of our people on the other. The demand for higher education had been increasing much faster than that the stagnating economy could afford to accommodate.

**J.Prashantkumar & Digumarti Bhaskara Rao (1998)** said that provided the study that proper higher education is vital importance to a developing country moving into the next century. This is an influential factors idea has acted in expansion of higher education in the nation in both conventional traditional method and distance education
method. The author told that it is an instrument of democratizing education and to make it a lifelong process. The opportunities for higher education were initiated to augment by open learning system has been.

**M.L.Skolnik (1998)** expressed that one of the themes of higher education in the 21st century is consumer-centrism, that is, the learner as consumer. Students are increasingly placing demands on institutions of higher education, a relationship no different than that of a vendor-consumer in which the consumer drives the demand for a particular product. The consumer determines what product he desires and when and how he will use it. The vendor must determine what satisfies the consumer and develop a product to meet the demand.

**Sahney Sangeetha, D.K. Banwet & S.Karunes (2004)** explores in the study that the quality of education is becoming important particularly in higher education. The author also defined quality in education from Total Quality Management perspective.

**Sam Pitroda (2008)** the author is the chairman of National Knowledge Commission has wrote a letter to Prime Minister on the day of Republic of India. The author wrote that engineering education is among the key enablers of growth for transforming nation economy. The quality of teaching and research in this field will play a critical role in the economy of the nation.

### 2.3 - Total Quality Management

**J.S.Neves and B.Nakhai (1993)** described the basic tenets of total quality management which are as followed by a customer focus, long term perspective and top management commitment. It is also considered training systems thinking, increased employee participation, tools in quality, reporting system, improved communication between management and labour, development of a measurement and continuous improvement. Total Quality Management compasses many management and business philosophies and it is based on the scenario and focus gets shifted where Total Quality Management is applied. So that Total Quality Management describes by the author in two main notions i.e. continuous improvement and the tools, techniques and methods used in it. Total Quality Management philosophy revolves around the customer whether it is in industry or higher education.
J.R.Hackman and R.Wageman (1995) stated that total quality management can enable organizations to dynamically provide cope with their ever changing environments if properly implemented with a sustainable manner.

Robert C.Winn and Robert S.Green (1998) explained that Total Quality Management is recognized as a vital important management philosophy. It is widely used in US industry and all around the world. Satellites and aircraft to preparing officer performance reports has been used very successfully with the help of TQM in the development and acquisition of systems. The Air Force Academy had been a leader in this application of TQM. Total Quality Management has been applied in the education industry, since over the last few years. Some schools have applied Total Quality Management to curriculum development but most of the applications had been in the administrative side of the institutions. In this study author also explained that the principles of TQM are described with an emphasis on the importance of analyzing the processes and identifying the customer.

G.Hammersley and A.Pinnington (1999) said that total quality management is a systematic and rationalized philosophy for quality management in higher education. The author also told that it is change management in higher education too.

Omer Faruk (2001) studied that Total Quality Management is a way of maintaining and achieving excellence which is used in establishments of higher education. Total Quality Management have adopted by many higher educational institutions. The study showed that through Total Quality Management methods, institutions have gained improved communication, increased productivity, raised employee morale, improved process efficiency, and reduced waste or costs. The effects of using Total Quality Management in higher education are positive. Therefore it is advisable for all universities and colleges to adopt TQM to derive similar advantages. The study also suggested a nine step Total Quality Management model for higher educational institutions with some recommendations. The author suggested that every higher educational institution can design its own model according to their circumstances and it is not necessary to apply TQM across the whole institution.

Sallis Edward (2002) stated that there is less need to make this call to arms in the millennium. Nowadays quality is quite rightly and a high priority. It has become almost
the very stuff of the education system. Total Quality Management has a universal massage to emphasis on leadership, strategy, rigorous, teamwork, analysis and self assessment with management model. The author said that it is always been a philosophy for the long term rather than a short term. In the continuous change world TQM is now required more than ever.

S.S.Mahapatra and M.S.Khan (2006) identified and analyzed in the study about critical factors for the successful implementation of Total Quality Management. The author considered 256 articles from journals and identified 20 critical factors for successful implementation of Total Quality Management in any institution.

NVR Naidu, KM Babu & G.Rajendra (2007) explained the benefit of Total Quality Management to the organisation in the form of reduced costs and increased sales, which basically means increased profits. The author concluded that total quality management program creates continuous improvement. It has leads to reduction in errors and waste, which turn leads to customer satisfaction.

Chika Frank (2011), suggested that applying Total Quality Management to the graduate school admission process is necessary. Many of the universities in the developed nation that have implemented Total Quality Management find that it is not only improved the quality of their graduates, but also saved the universities money in the proves.

Hussien Ahmad Al-Tarawneh and Mania Moayyad Mubaslat (2011) defined quality and a means of attaining quality in form of Total Quality Management. Quality is a continuous improvement ascertained by customer contentment with the services they receive. Therefore TQM is a general management philosophy and set of tools which allow an institution to pursue it. TQM must be modified to fully recognize some unique aspects of education before applying to higher education institution. But education is a service industry with no visible, tangible product it should be considered in it. TQM has its advantages such as better teamwork among departments, heightened employee morale, increased quality from customer viewpoint, bridging faculty staff functions and continuous development of everyone who is part of higher education institution.
2.4 - Education Quality

Juried and Ritz (1994) expressed that the concept of total quality management must be applied for moving forward and attain a higher level of quality in engineering education and higher education.

Jack P. Pekar (1995) expressed that achieving total quality within an institution is not a single path to be work. There are no hard and fast rules to follow and become a world best company. The only constant is basic guidelines which have to followed and lead to success. All institution have their own cultures, people and technologies. TQM may work well for one company will not necessary to work for another.

L. Harvey (1995) explained that the failure to include the customer focus had resulted in organisation struggling hard to survive. In higher education today, due to the intangible nature of its processes, there is a considerable discussion on the notions of educational quality.

Zbigniew Mrozek, Osei Adjei, Ali Mansoor (1997) stated that the philosophy of Quality Assurance and Total Quality Management are derived from the industrial and commercial practice. It opined from the study that maximum effort needs to be utilized from all the personnel and services involved in the process of the educational institution to make the Quality Assurance system worthwhile.

A. V. Feigenbaum (1994) believes that education quality is the key factor in invisible competition between nations. It was happen since the quality of products and services is determined by the way that managers, workers, teachers, faculty, engineers and economists think, act and make decisions about quality.

D. Jaffee (1998) the author expected that institutions of higher education are able to adapt and meet the demands of this changing environment. Institutional theories inform the use of technology to meet the demands of institutional change. At present society looks to institutions of higher education to set the pace for educational innovations because of the uniquely recognized intellectual leadership and rich history.
Anil R Sahu, R.L.Srivastava, R.R.Shrivastava (2008) enumerated the key factors which affect the effectiveness of the technical education from Indian point of view. Therefore author suggested the seven important key factors affecting the effectiveness of the technical education.

P.Pandi, U.S.Rao and D. Jeyatilagar (2009) focuses on integrated management practices in educational institutions and institutions effectiveness. It has successfully evaluated through student perceptions about the quality.

Irfan A.Gulbarga, Soma.V.Chetty, J.P.Ganjigatti and Suniel Prakash (2012) described that quality is vital important aspect in all institutions especially technical education. Since quality bears a direct impact on the improvement of the education process. The study majority of the respondents are of the opinion that the Total Quality Management practices in technical education institutions in India are at average level or just above average level. Total Quality Management relies more on processes than on products and is based on strong assumption that a product. It comes out of a good process is always good. All the stake holders who participated in the survey pointed out that the external focus of the technical institutes is lacking and expressed their concerns that more industry organisation interaction needs to be developed. The study also reveals that the outcomes and achievements needs to be improved since these institutions have relied more on developing landscaping, advertisements, infrastructure rather than concentrating on outcomes and achievements. The author said that private technical institutions in India have become money making centers than service provider. They spend their maximum time and money on how to attract the students and parents, also they do not have a practical approach or mechanism to measure and control the outcomes and achievements. Therefore the study pointed out that the effectiveness of the process in technical education needs to be addressed. One more important issue discussed and pointed out in the study that involvement and commitment of top management. The therefore study seems to be adequate for predicting the significances about the perceptions of total quality management practices in technical education.
2.5 - TQM Techniques in Education

R. Natarajan (2000) explains the significance of institution accreditation in promoting the Quality Assurance of Technical education. It demonstrated the indicators of student, faculty and institutional quality.

M. Peat, C.E.Taylor and S.Franklin (2005) stated that Total Quality Management is a continuous effort for the management to maintain a standard in the institution. TQM can standardize the education industry. Essentially Total Quality Management has been seen as managerial tool to fix the problems relating to services as well as approaches in education industry.

R.B.Solanki (2004) stated that quality education is all about systems that lead to excellent academic result, good academic culture, clear and transparent administration, progressive and adaptive management, prominent profile of outgoing students, and moreover review and modification of inputs. All institution has a prominent role to play it. Total Quality Management in educational institutions is the need of the modern time. It must be tried in colleges and universities for maximum performance of the students and the faculties. Total Quality Management must be implemented for institutional image building. It has become all the more necessary with the entry of the private sector in education in a big way. Total Quality Management will help achieve excellence, which only can guarantee the survival of educational institution in a highly competitive market. It further noted by the author that subsidy in the education sector is decreasing nowadays.

Hani Samimi Sabet, Zeinab Seyed Saleki, Benoush Roumi and Amin Dezfoolian (2012) stated that the method of implementation is really important because so many faculty had obtained knowledge about total quality management from workshops. Unfortunately faculties were not taught how to teach these processes and concepts in their classrooms. The study has shown faculties that participated in this research did not have any special training. The author said that they wanted to continuously improve their knowledge, skills and teaching method. Total Quality Management processes and concepts were used as a method of achieving these goals.
2.6 - TQM in Higher Education

Fisher (1993) stated that total quality management has been used primarily in the industry. Further provided that there are some reasons for total quality management should be applied in educational institutions. Such as necessitate for change do not be accepted by the institution most of the time. It is the hazard to the faculty individual autonomy therefore in total quality management need to have customer involvement and teamwork.

Marchese (1993) tooled that existing process will be improved by total quality management. It cannot promote radical change Fisher. The applicability of total quality management in education is now accepted. The procedure of its process should be addressed for development.

Ralph G. Lewis & D. H. Smith (1994) explains the principles of implementing total quality management in college or university educational environment. It also expressed the history and principles of quality management. The assessment of factors in the college and university environment is leading to serious question concerning about higher education. total quality emphasizes principles that are firmly enshrined in the halls of academia so that it is appropriate to apply total quality management to higher education.

A. Bolton (1995) argues that there exist marked differences between business and organizations and their willingness to embrace Total Quality Management in higher education. The author said that language of total quality and management is regarded with hostility in institutions given the threatening nature of the objectives encapsulated in Total Quality Management programs. The priority given to customer needs over quality of output and reputation in academic research.

J. Motwani and A. Kumar (1997) stated that many institutions have reviewed the applicability of Total Quality Management in higher education. There are some proposed models to prove applicability of Total Quality Management. The author has suggested five step model which believe applicable to every institution. This model has five phases such as preparing, starting, deciding, expanding and evaluating. Total Quality Management model proposed by the author was well defined. It is clearly describing what should be taken into consideration for Total Quality Management
implementation. However, by looking at these phases and going back to the Deming cycle the author find similarities between them. It founded similarities means that put the phases defined by Total Quality Management model into Deming cycle, then it results into the new created model will have more efficiency.

R.Chakka and G.T.Kulkarni (2010) expressed the stress on improvement of teaching quality and learning processes through total quality management. They also describe evaluation of teaching quality by peer reviewing, the methods to achieve teaching quality, student feedback and evaluation of learning process. The authors propose a new concept of teacher accreditation which may be more important over the other accreditations.