MANAGING QUALITY IN HIGHER EDUCATION SYSTEM: INSIGHTS FROM THE LITERATURE

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Abstract
The purpose of this paper is to understand meaning and operationalization of quality management concepts such as total quality management, quality assurance, benchmarking, service quality and accountability in context of higher education. The paper comes under category of systematic literature review and involves three phases of planning, reviewing and reporting. The paper examines 522 articles published in various journals of repute from 1999 to 2022. Findings reveals the trend and evolutionary pattern of literature in terms of frequency of articles, key dimensions, pattern of research methodologies, frequency of citations, distribution of articles in journals, trend of publication for countries and models developed. Findings also show that there is a differentiation of issues of quality management pertaining to developing and developed economies. The paper contributes to theory by highlighting the adaptation and application of quality management concepts in knowledge generation processes of higher education. It also presents an integrated framework which may be used to develop various instruments of measurement for periodic planning, review and audit of quality levels. The policy makers and academic administrators would find identified role of each stakeholder useful for planning and enhancement of academic productivity. The relationship among various constructs might help policy makers to maintain the sustainability of the system and develop a more effective regulatory system. The paper highlights the importance of quality management concepts in the management of higher education system.

Keywords: higher education; quality management; literature review;

1. INTRODUCTION

In today's global economy the competitive advantage of nations lies in their ability to create, disseminate and commercialize knowledge products. The knowledge creation process involves interplay of universities, research and development organizations, industries, governments and societal actors. In these processes universities representing a higher education system acts as a central anchor that coordinates and collaborates with other actors to create a knowledge product. Quality is a critical concern as the diversification of higher education systems have led to increase the demand for competent human capital. Higher education institutes are adopting quality management systems and processes to enhance quality of leaning and stakeholder satisfaction (Sawhney et al. 2008). In order to enhance quality of learning, thereby, improving results and student satisfaction, higher education institutes (HEI's) are becoming more willing to adopt quality practices and systems (Sohail et al., 2003, Sawhney et al., 2008). Therefore, governing bodies of HEI's are assigning top priority to quality management. In this paper quality in HEI's have been conceptualized in terms of quality constructs. Quality constructs are mechanisms which results in qualitative product. Quality is not a concerted process and various quality constructs plays its role along various levels of organization (Cruikshank, 2003; Marques, 2007). This paper uses constructs of quality assurance, service quality, benchmarking, accountability and total quality management (TQM) and uses them to categorize the literature. Subsequent sections deal with the framework of the research, relationship between quality management and higher education, methodology, results, discussions and conclusions

2. FRAMEWORK OF THE RESEARCH

Owlia and Aspinwall (1996) uses systems approach and conceptualizes higher education quality in terms of Garvin's quality framework (Garvin, 1987) and service quality dimensions (Parasuraman et al., 1988). A framework for educational quality has been conceptualized which is depicted in Figure 1. Quality in education is outcome oriented and judged in terms of indicators (Olssen et al., 2005). Indicators reflect on issues such as educational productivity, effectiveness, efficiency, equity, responsiveness etc. and are the macro-level requirements for enhancement in quality. Quality constructs are the mechanisms through which outcomes are

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delivered. Dimensions are underlying sub-themes through which quality construct mechanisms are operationalized.

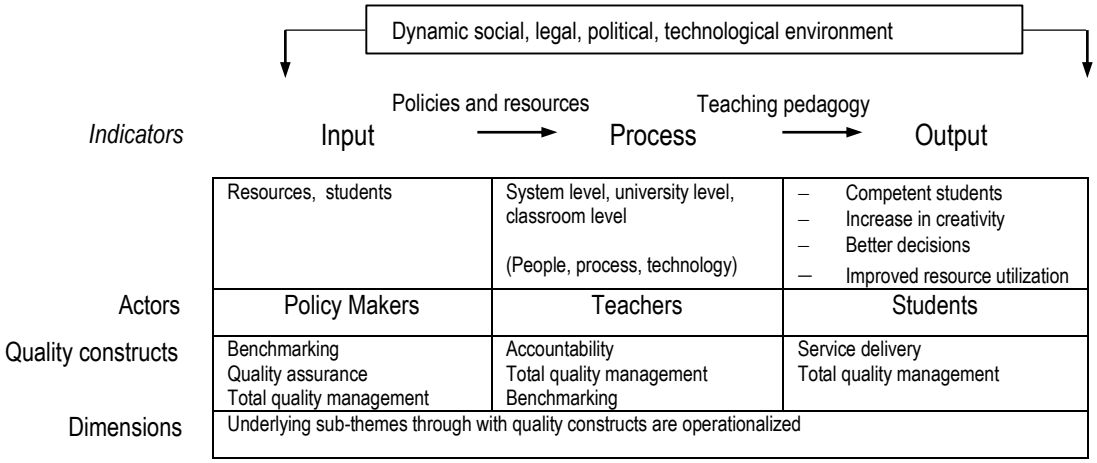

FIGURE 1 - A FRAMEWORK FOR EDUCATIONAL QUALITY

This paper aims to explore the literature of quality management in the context of higher education. The research questions are- what is the current status of literature over the years for quality management in higher education? What is the status of research across various countries? What methodologies have been used to study quality management in higher education? What are the challenges in implementing in quality management in higher education? What are various models for execution of qualitative processes in higher education across the globe? What could be an effective framework for infusing quality in higher education?

3. QUALITY MANAGEMENT AND HIGHER EDUCATION

Quality management (QM) systems and practices have originated in manufacturing settings and have made their inclusion into service organisations including public services such as HEIs (Hides et al. 2004). Quality in education is categorised in terms of educational quality and administrative Quality (Lola, 2013). Educational quality pertains to teaching processes and stakeholder perceptions (Mok, 2002; Rosa et al., 2006). Administrative quality concerns the availability of needed infrastructure as well as functioning of administrative processes.

Organizations that deliver quality and value in the provision of their educational services are likely to grow and prosper. Satisfaction of stakeholders such as students, staff and society results in enhanced loyalty and retention of man power (Marginson et al., 2002; Morley, 2003). Many strategies that make higher education excellence driven, affordable and valuable for students need to be applied at the national level so as to support the social role of the HEI's (Mazzarol, 2003).

4. METHODOLOGY

This paper follows a systematic review method to analyze, summarize and drawing inferences from available literature on quality in higher education. A systematic review involves a time frame for selection of literature and methods for evaluation and synthesis (Parahoo, 2006). The process involves setting criteria for formulation of research questions, criteria for set inclusion or exclusion, selection and assessment of literature quality, analysis, synthesis and dissemination (Colling, 2003). This paper follows three stages of planning- fixing the time frame, database selection, criteria of search, conducing- sorting of articles, classification of articles and reporting- classification of articles, analysis of research questions and presenting of the data. The approach is in line with Tranfield et al., (2003).

4.1. Planning

The timeframe chosen for this literature review is from 1999 to 2022. The beginning of Bologna process in year 1999 has been taken as the starting point. Bologna process is considered as a milestone for marking revolutionary thinking for improvement of quality in education. Subsequently journal databases as well as international reports of various agencies have been identified. Articles have been searched based on key words such as quality management, service quality, accountability, total quality management, benchmarking, quality

assurance, benchmarking etc. Articles selected have been analyzed for issues such as process management, customer satisfaction, knowledge management, policies and strategies, teaching pedagogy, curriculum design, learning outcomes, measurement and evaluation. Articles selected have also been analyzed to understand the pattern of methodological approaches.

4.2. Conducting the Review

The databases such as Emerald, Springer, Science Direct, Inder Science have been explored with key words such as education, TQM, benchmarking, quality assurance, accountability, service delivery. The search resulted in 825 articles; however, 197 articles have been found either quite related or have some sort of duplication. Remaining 628 articles have been reviewed and finally 522 articles have been chosen based on their relevance to the underlying theme of quality in higher education. We found that many studies focus on public administration but very few focus on higher education and emphasis of quality in education is of recent origin.

4.3. Reporting and Dissemination

Articles have been tabulated in MS Excel in terms of key constructs of quality management, key dimensions underlying the construct, methodology, authors, year, journals and citations. These tables have been analyzed to generate summary inferences.

5. RESULTS

5.1. Constructs of Quality

Quality constructs such as quality assurance, benchmarking, TQM, accountability and service delivery constitute much of the literature. Table 1 shows the numbers of articles dealing with each construct.

TABLE 1 - NUMBER OF ARTICLES BASED ON CONSTRUCTS

Quality constructs	Number of articles
Total Quality Management	60
Service Quality	52
Quality Assurance	48
Benchmarking	38
Outcome based	56
Pedagogy	43
Student centricity	89
Technology	92
Accountability	44

In this regard it has been found that TQM has been the most researched construct. Implementation of TQM has the potential to encompass various perspectives of different stakeholders (Motwani et al., 1997) and deliver positive impacts (Thakkar et al., 2006). Studies of Taiwan and Malaysia exemplify the implementation of TQM in their higher education.

Service delivery also plays an important role in maintaining quality in the higher education. Service is multi-dimensional concept and is operationalized as a package. Education as a service is primarily delivered to students and literature reflects that service delivery is being mostly perceived from student's point of view. The measurement of service quality provides cues for carving out of policies that aims student satisfaction (Duarte, 2012; Grace et al., 2013; Chahal et al., 2013). The measurement of service delivery is based on parameters like academic and non-academic resources (Abdullah, 2006). Academic resources include teaching staff, teaching pedagogy, curriculum design, library resources etc. (Doherty, 2008) whereas non-academic resources include technological infrastructure, campus facilities, non-teaching staff etc. (Grant et al., 2004).

Quality assurance is the next construct. This reflects that quality management in higher education has to be regulated through policies (Sahney, 2008). Quality assurance follows approaches such as audit, accreditation and assessment and brings continuous improvement through effective leadership. Quality assurance facilitates control of existing processes, nurtures curriculum design (Tambi et al., 2008) and enhances learning (Welsh, 2002).

Benchmarking is an overarching concept and involves standard setting for implementation of policies. Benchmarking in education system may results in improvement in the teaching pedagogy (Tam, 2002), curriculum design (Wilson et al., 2000), employability ratios (Sohail, 2003), industrial collaboration and research dynamics (Henderson et al., 2006).

Accountability in higher education has gained importance due to concerns such as increasing college costs, disappointing retention and graduation rates, poor knowledge base of students, lack of employability skills and deteriorating values. Accountability takes into account concerns and perspectives of other stakeholders (Romzek, 2000). Performance evaluation of the education system reflects its accountability (Pounder, 1999). There are different forms of educational accountability such as professional, bureaucratic, performance or test-based (Robson, 2002), consequential, result based or outcome based (Goertz, 2001). Major theme of accountability is performance-based. Performance-based accountability systems arise when there is acknowledgment that there exists a problem or deficiency in services or outcomes (Stretcher et al., 2010). It leads to transparency (Wilensky, 2004), fair evaluation (Anderson, 2005), strict adherence to rules and regulations (Levielle, 2005), rewards and recognition for the performance (Jafar et al., 2008).

5.2. Key Dimensions of Quality

The operationalization of major quality constructs is through their underlying dimensions. Key dimensions under each quality construct are elaborated in Table 2.

TABLE 2 - DIMENSIONS ALONG MAJOR QUALITY CONSTRUCTS

Major Quality Constructs	Underlying Dimensions
Accountability	Evaluation, Monitoring, Performance based evaluation, incentives, test-based incentives, fairness and equity, responsibility, policies and goals, examination, teaching practices, learning environment. Rewards and recognition.
Benchmarking	Policies and strategies, curriculum design, people management, campus facilities, performance measurement, evaluations external and internal, competence required, continuous improvement.
Quality Assurance	Strategies and goals, commitment to top management, effective leadership, strategic planning, measurement and evaluation, faculty and staff development, decision making, external regulation, process management, audits, well defined channels of communication, rewards and recognitions, fairness in treatment of all.
Service Quality	Student satisfaction, academic and non-academic resources, performance feedback and evaluation, learning organization, teaching practices, library resources, employment opportunities, training opportunities, market oriented methodologies, industrial collaboration, soft skills management, technical apprenticeship, congenial learning environment
Total Quality Management	Development of well-defined policies, knowledge management, information management, environmental activities, societal regulation, legal compliances, technological infrastructure, research orientation, culture and structure of organization, partnerships on a global and local basis, workforce quality, training and feedback, job satisfaction, market-oriented excellence, teaching practices

(Adapted from: Ho, 1996; Owlia et al., 1997; Kanji et al., 1999; Helms, et al., 2001; Borahan et al., 2002; Rosa et al., 2003; Calvo – Mora et al., 2006; Becket et al., 2008; Sawhney, 2008; Bilen, 2010; Ali et al., 2010; Liao et al., 2010; ; Dereli, 2011; Yeo et al., 2012; Veiga 2013; Chahal et al., 2013; Chen et al., 2014)

It is inferred that certain dimensions are vividly incorporated in all the constructs. To explain the systematic relationship among these dimensions it can be said that effective leadership brings out better policy implementation which leads to process management along with resource management efficiency that can be developed through collaboration among stakeholders. This collaboration can be strengthened by the technical infrastructure which builds a process oriented culture and enhances teachers' accountability towards the system. Through improved policy execution performance measurement and evaluation becomes fairer and regulatory procedures becomes effective. Literature reveals that quality is not a concerted process rather it is a phenomenon that involves equal participation of all the stakeholders across various dimensions of quality constructs. Table 3 presents the frequency of major dimensions that have been acknowledged over the period of the time.

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TABLE 3 - MAJOR DIMENSIONS IN LITERATURE

Major Dimensions	Researchers																	Number of Citations
	Chen et al (2014)	Sahu et al (2013)	Veiga (2013)	Ali et al (2010)	Bayraktar et al (2008)	Sahney (2008)	Tambi et. al (2008)	Osseo Asare et al(2007)	Badri et al (2006)	Clavo Mora et al (2006)	Popli (2005)	Sakthivel et al (2005)	Hides et al (2004)	Rosa (2003)	Borahan & Zirati (2002)	Hill et al (1995)	Kanji et al (1999)	
People and resources Management	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	16
Process Management		x		x	x	x	x		x		x	x	x	x	x	x	x	13
Information Dissemination			x		x	x	x	x		x			x	x	x	x	x	11
Planning and Co-ordination		x	x	x	x	x	x	x		x		x		x		x		11
Effective Leadership	x	x	x		x	x	x			x	x	x	x	x	x		x	13
External and internal Collaboration	x	x		x	x	x	x		x			x			x		x	10
Continuous Improvement		x	x	x	x		x			x		x		x			x	9
Program Design	x	x	x	x			x			x		x		x	x	x	x	11
Policies strategies implementation	x		x	x	x	x	x	x			x		x		x		x	11
Technological Infrastructure		x		x	x	x		x	x		x		x		x		x	10

Table 4 gives a brief description of each of these dimensions.

TABLE 4 - DESCRIPTION OF THE DIMENSIONS

Major Dimension	Description
People and Resources Management	Involvement, training, rewards and recognition, professional development, willingness to engage in self-evaluation, facilitative environment, sharing culture, trust based relationship, open and active commitment to achieve set goals.
Process Management	Formal set of goals and objectives, rational procedures to facilitate improvement, evaluation process to map fairness, design of learning culture.
Information Dissemination	Appropriate sharing of resources including knowledge both tacit and explicit, strong network among all levels of structure, flexible organizational structure, stakeholder relationships.
Planning and Co-ordination	Definition, communication and review of objectives and plans.
Effective Leadership	Top management commitment; deal with ambiguity, and development of coping mechanism and strategies deliver improvements.
External and internal Collaboration	Industrial approach, market oriented environment, sharing transnational culture, impact of globalization, strong inter- relationships with external collaborators, more employment opportunities, facilitative training exposure.
Continuous Improvement	Development in a holistic way, more flexible organizational culture, adaptability towards dynamism of the environment.
Program Design	Market oriented curriculum, influencing the shape of subjects quality profile, high level of awareness to imbibe changes on the global platform.
Policies and strategies implementation	Firm regulatory framework, includes specification of standards, clear specification of roles and responsibilities, involves all staff, clear commitment to identifying and disseminating good practice, prompt, sensitive and appropriate action to redress problems, prompt continuous improvement.
Technological Infrastructure	e-Resources, networking, standardization of resources, updated software and hardware

(Adapted from: Burgar, 1994; Kanji et al., 1999; Barnard, 1999; Borahan et al., 2002; Sakthivel et al., 2005; Calvo Mora et al., 2006; Badri et al., 2006; Osseo et al., 2007; Tambi et al., 2008; Sahney, 2008; Bayraktar et al., 2008; Ali et al., 2010; Sahu et al., 2013; Veiga, 2013, Chen et al., 2014).

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5.3. Type of Methodologies

In order to understand the pattern of methodological approaches the articles have been classified in term of articles having theoretical focus such as conceptual frameworks and literature reviews and articles having empirical focus such as survey based, single case study based, multiple case study based, survey and case study based. It has been noticed that most of the studies have been found in the journals like Quality Assurance in Education, International Journal of Educational Management, Quality in Higher Education, Journal of Higher Education Policy, Total Quality Management & Business Excellence, The TQM Journal, The TQM Magazine, Journal of Operations Management and Managing Service Quality. Table 5 depicts the distribution of these studies.

TABLE 5 - DISTRIBUTION OF ARTICLES IN JOURNALS

Journals	Number of Articles		
	Theoretical	Empirical	Total
Total Quality Management & Business Excellence	46	38	84
The TQM Journal	22	34	56
International Journal of Quality & Reliability Management	10	11	21
Managing Service Quality	22	15	37
The Asian Journal on Quality	-	4	4
Journal for Quality and Participation	1	3	4
Journal of Operations Management	-	3	3
Critical Perspectives on Accounting	1	2	3
Systematic Practice and Action Research	-	2	2
Public Administration Quarterly	1	1	2
Managerial Auditing Journal	1	1	2
Journal of Quality Management	1	1	2
International Journal of Operations and Production Management	-	2	2
American Journal of Business	1	1	2
South Asian Journal of Management	1	-	1
Performance Measurement and Metrics	1	-	1
OMEGA	-	1	1
Management Research Review	1		1
Management Communication Quarterly	-	1	1
Journal of Research Administration	-	1	1
International Journal of Technology Management	1	-	1
International Journal of Public Sector Management	-	1	1
International Journal of Production Economics	-	1	1
International Journal of Organizational Innovation	1	-	1
International Journal of Management and Innovation	1	-	1
International Journal of Management and Information Systems	1	-	1
International Journal of Consumer Studies	1	-	1
International Journal of Accounting and Information Management	-	1	1
International Journal of Management	1	-	1
Computers and Industrial Engineering	-	1	1
Canadian Journal of Administrative Sciences	2	-	2
Business Communication Quarterly	-	4	4
Benchmarking for Quality Management & Technology	4	-	4
Australian Journal of Public Administration	1	-	1
Academy of Management Journal	2	2	4
Quality Assurance in Education	68	56	124
Tertiary Education and Management	29	45	74
International Journal of Educational Management	10	6	16
Academy of Management Learning & Education	-	4	4
Journal of Education for Business	10	24	34
Journal of Economic Education	-	1	1
Journal of Accounting Education	6	-	6
International Journal of Sustainability in Higher Education	-	5	5
Journal of Hospitality, Leisure, Sport & Tourism Education	3	-	3
Total	**250**	**272**	**522**

Empirical category emerges as a major method. Business journals represent a higher number of empirical studies than education journals. The survey method is the most popular empirical method. The statistical analyses such as factor analysis, multiple-regression and co-relation, structural equation modeling (SEM),

analytic hierarchical process (AHP), decision making trial and evaluation laboratory (DEMATEL) method, multi-attribute utility theory, fuzzy logics have been quite prevalent in empirical studies. To summarize it could be said that multi-criteria decision methods dominate the in these studies. Among the theoretical article more were review articles than conceptual articles. Figure 2 states the patterns of research method used in surveyed articles. Theatrical and empirical studies complement each other in a sense that theoretical studies lay the foundation upon which empirical studies are built. Some studies involve mix of methods and provide frameworks which may be used as policy template for formulation and implementation.

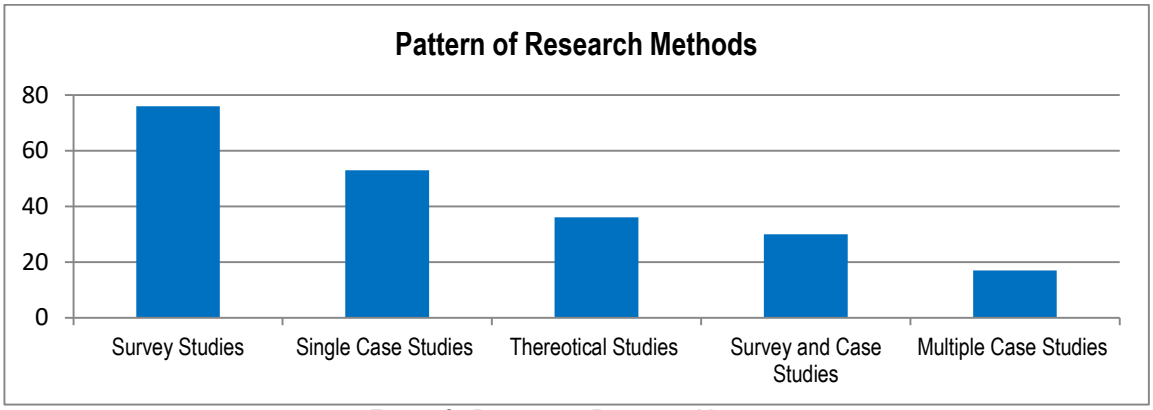

FIGURE 2 - PATTERN OF RESEARCH METHODS

The number of citations indicates that the frequency of various articles. Articles under higher citation category represent widely accepted body of knowledge that is needed to understand the underlying phenomena. Figure 3 depicts citation of various articles in the context quality in higher education.

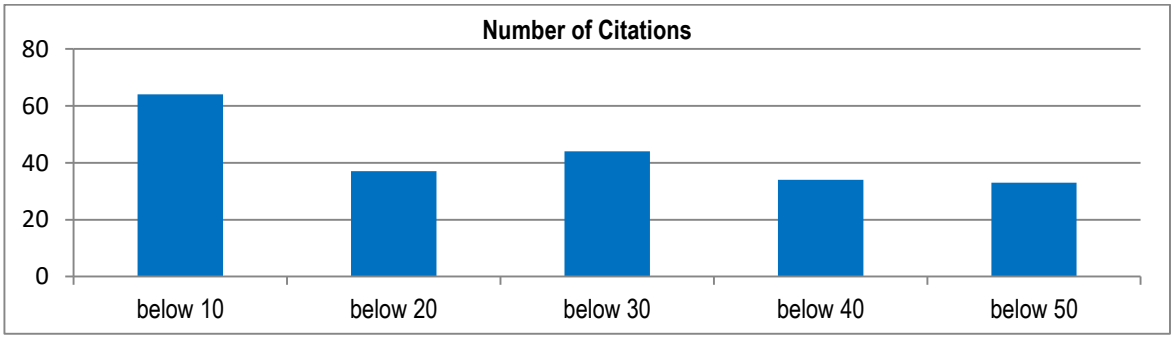

FIGURE 3 - NUMBER OF CITATIONS

Analysis also reveals evolution of articles published in the review period. The evolution of articles over span of review period is depicted in figure 4.

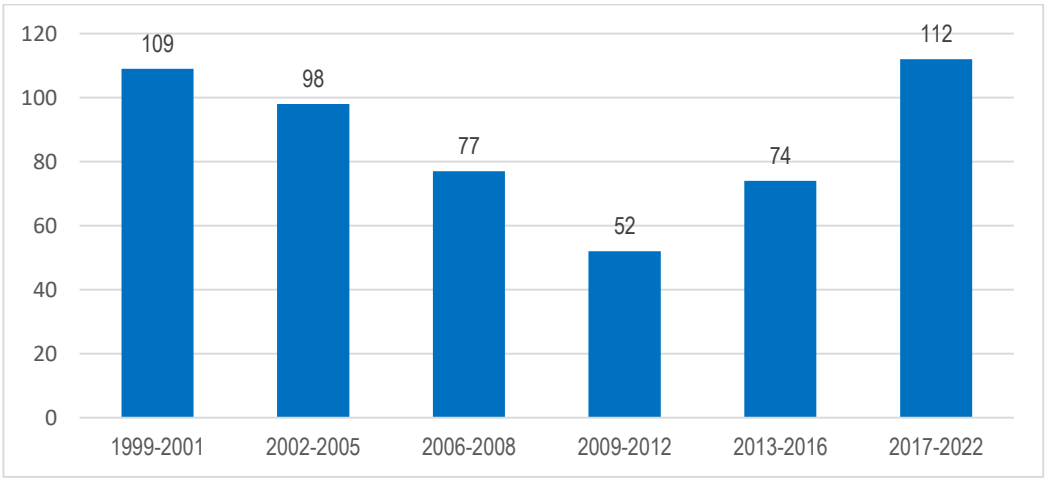

FIGURE 4 - EVOLUTION PATTERN

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This evolution shows that after the Bologna process in 1999 by the European Union there has been great increase in number of studies focusing on quality management in higher education system. The Bologna process involved series of ministerial meetings and agreements between the European countries to ensure comparability in the standards and quality of higher education qualifications. The quality assurance methods used by countries of the European Union have been followed by many other countries.

Articles have also been tabulated to understand their country of origin. Articles reviewed belongs to 31 countries. In the context of theoretical studies, the country of author has been taken as the country of origin whereas the in the context of empirical studies the country of firms studied have been taken as the country of origin. Most of the studies involve one country however in seven cases the number of involved countries have been two to three. Table 6 depicts country wide spread of various studies.

TABLE 6 COUNTRY-WIDE SPREAD OF STUDIES

Countries	Theoretical Studies	Empirical Studies	Total
UK	86	55	141
USA	56	45	101
Australia	44	31	75
India	41	22	63
South Africa	19	15	34
Spain	15	8	23
Malaysia	10	6	16
Sweden	7	5	12
Finland	3	1	4
Portugal	2	2	4
Turkey	-	3	3
Hong Kong	4	1	5
Canada	3	-	3
Switzerland	3	-	3
Norway	-	2	2
Lithuania	-	2	2
Singapore	1	2	3
Iran	2	-	2
Trinidad and Tobago	-	2	2
Greece	-	2	2
Italy	2		2
Fiji	-	2	2
Indonesia	1	-	1
Malta	1	-	1
New Zealand	1	-	1
United Arab Emirates		1	1
Taiwan	1	4	5
Russia	-	2	2
Peru	-	2	2
Ghana	-	1	1
Malaysia	-	4	4
Total	**302**	**220**	**522**

5.4. Models Developed for Quality Management

The analysis reveals that many HEIs have incorporated quality management models that have been originally conceptualized for industry. These models act as guidelines for promotion of quality in various organizations. They concentrate on developing systematic processes which are required to achieve measureable quality outputs. Models such as TQM, European foundation for quality management (EFQM) excellence model, balanced scorecard, service quality (SERVQUAL), business process re-engineering (BPR) and many more have shown their effectiveness in producing remarkable outputs. In the context of higher education these models have been tested and implemented in various settings. Despite varying approaches self-assessment

against the pre-defined criteria emerges as a commonalty across these models. The adaptation and operationalization of these models in higher education context is elaborated in Table 7.

TABLE 7 - MODELS DEVELOPED FOR QUALITY MANAGEMENT

Models	Adaptation and Operationalization
TQM models	TQM enables the integration of strategies with processes It has shown improved results in terms of customer service, staff and faculty morale, administrative processes, course quality. It has encouraged a disciplined orientation about tangible and intangible aspects of academic processes. However, they have less scientific control, lack of acceptance and have more relevance to academic service functions than teaching pedagogy. (Colling et al, 1995; Motwani et al., 1997; Roffe, 1998; Widrick,2002; Cruikshank, 2003; Popli, 2005; Thakkar et al ., 2006; Davies, 2008).
EFQM Excellence Model	It has integrated methodology to facilitate all stakeholders, forms basis of self assessment, and becomes a catalyst for self appraisal. However they have short term benefits and less relevancy to service functions McAdam et al, 2000; Hides et al., 2004; Osseo et al., 2005; Tari, 2006; Calvo Mora,2006; Campateli et al., 2011).
Balanced Scorecard	It monitors performance improves resource allocation and lack careful identification of evaluators to monitors performance holistically ((Cullen, 2003; Chen, 2006; Taylor, 2007).).
Business Process Re-Engineering	It is a cost effective method and encourages continuous improvement, but possess less scientific control (Garrett et al., 2000; Welsh et al., 2002; Sohail et al., 2003).
SERVQUAL	It enables assessment holistically and has more focus on customers. However lacks evaluation on basis of other aspects than teaching (teaching (Spencer, 2000; Abdullah, 2006, Lomas et al., 2007; Teerovengadum et al., 2016).).

Even though these models are productive in nature but when it comes to the higher education system the outputs are difficult to be quantified. There is still a need to develop a model that evaluates learning output of a student and also provides a framework that defines performance dimensions for a teacher. Other challenges include difficulty in analyzing core learning processes, difficulty in controlling teaching pedagogies, lack of academic independence, lack of self-empowerment, difficulty in understanding and specifying needs of the customer, absence of benchmarks for quality improvement, difficulty in defining and measuring commitment and developing sense of accountability toward education system (Cruikshank, 2003; Meirovich et al., 2006; Srikanthan et al., 2007; Dereli et al., 2011).

6. DISCUSSIONS

In the last fifty year the evolution of education system has been phenomenal. Driven by technological advancements post-industrial societies are becoming more dependent on their knowledge workers. Knowledge society is more substantive and analytical representation of emerging information society (Burkhalter, 1996)) which is further evolving towards a network society where the key structures and activities of a society are organized around electronically linked information networks (Harvey, 2005). Information societies consider human mind as a key resource. These ideas are taken up in the World Bank reports where it is argued that a knowledge society depends primarily on the use of ideas rather than physical abilities and on the application of technology rather than the transformation of raw materials or the exploitation of cheap labor. It is a society in which knowledge is created, acquired, transmitted and used more effectively by individuals, enterprises, organizations and communities to promote economic and social development (World Bank, 2002). Thus, slowly and gradually the focus has completely shifted towards the expertise of knowledge that an organization possesses. This evolution of society depicts that knowledge has become one of the most important asset of the society and is an outcome of the delivered education (Tari, 2006). Knowledge is not only the technical or managerial expertise but it is also the combination of life skills that makes an individual a valuable resource.

It is inferred that quality management in education has gained importance due to the emergence of knowledge societies. Evolution of quality in higher education varies from developed economies to developing economies. The country specific distribution reveals that many of the developed nations are working on the advanced issues of quality as they have already achieved a certain level of excellence in their system. Table 9 elaborates on the differentiation that exists between developing and developed nations.

TABLE 9 - QUALITY ISSUES IN HIGHER EDUCATION SYSTEM

Issues pertaining to Higher Education Systems of Developed Nations	Issues pertaining to Higher Education Systems Developing Nations
Technology transfer: Universities are working on this issue to achieve continual improvement of quantitative results.	Setting benchmarks for administrative and operational activities: Standardization of policies in the system will help in effective growth of education system.
Cross-border education: Increased globalization forces to promote facilitative education for international students.	Quality Assurance: It includes accreditation, audit and assessment which improve the standards of educational institutions.
Innovative education: This has become most recent advancement to enhance quality of outcomes. It will lead to better the education system as students will be dealt in a more facilitative manner.	Performance measurement and evaluation: In developing nations performance evaluation is not yet evolved completely. Efforts still need to be made to enhance the learning outcomes.
Research based education: This issue will lead to increase the number of patents, research publications. It will also help in enhancing the role of research in education which will foster more creativity.	Provision of technology oriented resources: Many nations still face problems in giving resources and materials to the stakeholders of education system.
Process management: Education is the most complicated process for growth of economy so it should function in a more facilitative environment.	Accountability and Improvement in teaching quality: Sense of accountability leads to teachers' effectiveness which improves the outcomes in terms of learning, students' satisfaction.
Explicit and Tacit knowledge sharing and dissemination: Knowledge Sharing has been the most important aspect of the education system. Efforts are being continuously made to enhance the tacit knowledge sharing and its dissemination.	Perception of students' satisfaction: Students being the major customers of education system need to be catered in accord with their requirements so that level of satisfaction among them gets enhanced and they will be able to deliver better results.

(Adapted from: : Woodhouse, 1999; Dill, 2000; Smith et al., 2000; Ferrin 2001; Jenkins et al., 2001; Welsh et al., 2002; Simpsons, 2003;Scott, 2003; Tang et al., 2004; Freeman, 2005; Abdullah, 2006; Gibbs et al., 2006; Tari, 2006; Calvo Mora,2006; Sahu et al., 2013; Veiga, 2013; Chen et al., 2014).

Analysis reveals that most higher education systems have started to incorporate quality management practices and strategies for improving their teaching and learning quality to enhance the innovative ability of an individual. Quality frameworks provide a frame for institutional perceptions and actions (Sultan et al., 2014). Therefore, the challenge for universities lies in creating an environment that is conducive for enhancing the quality culture. Thus, a vibrant social fabric is needed which nurtures HEI's activities, their inter-relationships and their quest towards excellence (Van et al., 2011).

Higher education system across nations are highlighting the importance of effective service delivery and enhancement in student satisfaction (Abdullah, 2006: Yeo et al., 2012, Teerovengadum et al., 2016). Articles exploring service delivery and student satisfaction focuses on conceptualization of student experience and its measurement. The key research issues that have been dealt with for exploring service quality construct in higher education systems are identification of factors which influences student's learning experiences (Ellis et al., 2004; Campbell et al., 2008; Ward et al., 2010), assessment of factors that defines the impact of student satisfaction (Tsinidou et al., 2010; Chahal et al., 2013), exploration of policy agendas to improvise the student quality outcomes (Ginns et al., 2009; Cahill et al., 2010; Nair et al., 2011; Arambewala et al., 2012) and modeling of student satisfaction (Douglas et al., 2008; Voss, 2009; Wilkins et al., 2013). However, these approaches vary in their conceptualizations of service delivery encounters for assessment of student satisfaction levels. There is lack of a general and universal model for service delivery. There is a need to broaden the unit of exploration so as to incorporate perspectives of other stakeholders.

Building on these inferences drawn from the literature a framework for education system is conceptualized which is depicted in Figure 5. Various stakeholders perform tasks such as planning, executing, evaluating and monitoring along the educational value-chain (Simpsons, 2003; Barefoot, 2004). Many authors claim that the quality of education has a direct co-relation with inclusive growth and development (Smith et al., 2000; Jenkins et al., 2001). Therefore, it can be said that higher education should be a transformative process (Evans, 1996; Mazzarol, 2003) that supports the development of graduates who can make a meaningful contribution to the local communities, wider society and to overall economy (Tang, 2008).

Education system is a system where each stakeholder works in synchronization and adapts themselves to address market forces. Education system is transforming itself to achieve high level of competitiveness and achieving long-term sustainability. They are aiming to increase enrollment rate, graduation rate, number of patents and intellectual property rights, number of research publications, competency ratio, employment rate

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etc. It not only targets to enhance the numeric figures but the system wants to develop and achieve a balance between both quantitative and qualitative concerns.

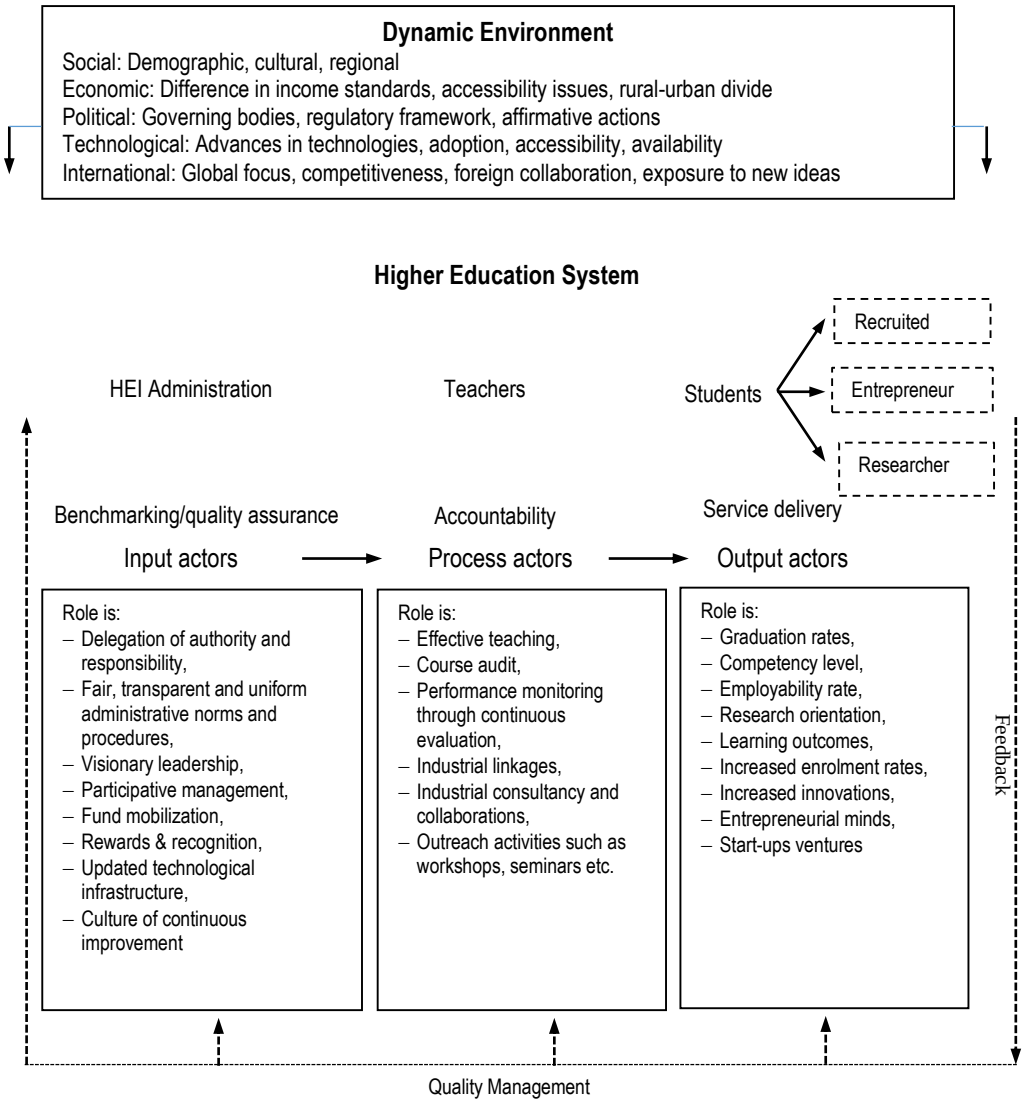

FIGURE 5 - SCHEMATIC OVERVIEW OF EDUCATION SYSTEM

7. CONCLUSIONS

7.1. Implication for theory and practice

This paper contributes to the body of knowledge by presenting a synthesis of literature on quality in higher education. It presents a framework of education system that links students' learning outcomes with teachers' accountability, effectiveness of teaching pedagogies and service delivery infrastructure. It uses constructs of quality along with their underlying dimensions to categories extant literature and eliciting meaning from it. In addition, the review brings out evolution pattern, methodological directions, citations, quality management models and trends across various journals. Total quality management has received highest attention followed by quality assurance, service delivery, benchmarking and accountability. The key dimensions involve people management, process management, effective leadership, planning and controlling, technological infrastructure. Policy makers may use these dimensions to assess quality in academic processes. It emerges that globally quality models have been used contextually and there is no consensus on a model which is best fitted for higher education system. Use to various models may become a limitation as this may encourage a managerial culture in higher education system. Findings also reveal that empirical studies have received greater attention that theoretical studies.

Findings reveal that European nations are most pragmatic and are making efforts to embed quality in their educational systems. Customer centricity has increased due to fast commercialization of education which necessitates further exploration of quality issues in education. Developing countries experience suggests that there is a surge in quantitative figures but the qualitative measures have been degraded. This emphasizes the critical role of quality in achieving the balance between qualitative and quantitative measures. This can be achieved by defining target audience, analyzing teaching & research processes, developing a surveillance system and using data for taking decisions.

It is not surprising that parents, students, teachers and employers have their own conceptualization of quality. Parents view quality as relating to input (e.g. ranking of the universities, reputations) and output (e.g. employability, academic placement). Students view quality as relating to the educational process (e.g. courses and pedagogies) and outputs. Teachers perceive quality as relating to the whole education system. Employers view quality as primarily related to the output (e.g. the skill set that the student brings to the workplace). Thus, in order to achieve equilibrium each stage of quality management process should be given utmost important.

7.2. Scope for future study

This section presents various themes for future studies. First, we note that existing HEI research follows the pattern observed in industry driven research on quality, therefore there is a need to incorporate views of academicians and societal actors to carve out a balanced perspective of quality in higher education. This might be formalized in comparative surveys of HEI academics, managers and national funding bodies. Secondly, there is a need to formalise measurements for each quality dimension and analyse their validity and scale reliability across different HEIs. These will allow comparative analysis of quality to indicate which practices are more successful in a HEI environment and analyses which barriers affect QM implementation. Thirdly, exploration of quality initiatives and their impact on academic performance might be another area of research. Dovetailing of private actor's interests and societal goals such as access, equity, and inclusiveness needs to be explored further so as to develop capacity to deliver quality higher education.

REFERENCES

Abdullah, F. (2006). Measuring Service Quality in Higher Education: HEdPERF Vs. SERVPERF. *Marketing Intelligence and Planning,* 24(1), 31 – 47.

Ali, N.A., Mahat, F. and Zairi, M. (2010).Testing the criticality of HR TQM factors in the Malaysian higher education context. *Total Quality Management and Business Excellence*, 21, 1177 – 1188.

Anderson, J. A. (2005). Accountability in Education, UNESCO, Retrieved from www.iaoed.org/files/Edpol1.pdf. Accessed On May 2022.

Arambewala, R. and Maringe F. (2012). Mind the gap and post graduate perceptions of student experience in higher education. *Higher Education Review*, 44(2), 63 – 83.

Badri, M.A., Selim, H., Alshare, K., Grandon, E.E., Younis, H. and Abdulla, M. (2006). The baldrige education criteria for performance excellence framework. Empirical test and validation. *International Journal of Quality & Reliability Management*, 23, 1118-1157.

Bayraktar, E., Tatoglu, E. and Zaim, S. (2008). An instrument for measuring the critical factors of TQM in Turkish higher education. *Total Quality Management & Business Excellence*, 19(6), 551-574.

Becket, N. and Brookes, M. (2008). Quality management practice in higher education - What quality are we actually enhancing?. *The Journal of Hospitality, Leisure, Sport and Tourism Education*, 7(1), 40-54.

Bilen, C. (2010). Total quality management in higher education institutions: Challenges and future directions. *International Journal of Productivity and Quality Management*, 5(4), 473-492.

Borahan, N.G. and Ziarati, R. (2002). Developing quality criteria for application in the higher education sector in Turkey. *Total Quality Management*, 13(3), 913-926.

Cahill, J., Turner, J. and Barefoot, H. (2010). Enhancing the student learning experience: the perspective of academic staff. *Quality Assurance in Education*, 12(4), 375 – 396.

Calvo-Mora, A., Leal, A. and Roldán, J. L. (2006). Using enablers of the EFQM model to manage institutions of higher education. *Quality Assurance in Education*, 14(2), 99-122.

Campatelli, G., Citti, P., and Meneghin, A. (2011). Development of a simplified approach based on the EFQM model and Six Sigma for the implementation of TQM principles in a university administration. *Total Quality Management & Business Excellence*, 22(7), 691-704.

Campbell, J. and Li, M. (2008). Asian students voice: an empirical study of Asian students' learning experience at a New Zealand University. *Journal of Studies in International Education*, 12(4), 375 – 396.

Chahal, H. and Devi, P. (2013). Identifying satisfied/dissatisfied service encounters in higher education. *Quality Assurance in Education,* Vol. 21, No. 22, pp. 233 – 245.

Chen, C. Y., Chen, P. C., and Chen, P. Y. (2014). Teaching quality in higher education: An introductory review on a process-oriented teaching-quality model. *Total Quality Management and Business Excellence*, 25(2), 36-56.

Chen, S., Yang, C. and Shiau, J. (2006). The application of a balanced scorecard in the performance evaluation of higher education. *The TQM Magazine*, 18(2), 190-205

Colling, J. (2003). Demystifying the clinical nursing research process: the literature review. *Urol Nurs* 23(4), 297–309.

Cruickshank, M. (2003). Total Quality Management in the higher education sector: A literature review from an international and Australian perspective. *Total Quality Management & Business Excellence*, 14(10), 1159-1167.

Cullen, J., Hasall, T., and Broadbent, M. (2003). Quality in Higher Education: From Monitoring to Management. *Quality Assurance in Education*, 11(1), 5 – 14.

Davies, J. (2008). Integration: Is it the key to effective implementation of the EFQM Excellence Model?. *International Journal of Quality and Reliability Management*, 25(4), 383-399.

Dereli, T., Durmusoglu, A., Delibas, D. and Avlanmaz, N. (2011). An analysis of the papers published in Total Quality Management & Business Excellence from 1995 through 2008. *Total Quality Management & Business Excellence*, 22, 373-386.

Dill, D. (2000). Designing Academic Audit: lessons learned in Europe and Asia. *Quality in Higher Education*, 6(3), 251 – 267.

Doherty, G. (2008), "On quality in education", Quality Assurance in Education, Vol. 16 No. 3, pp. 255-265.

Douglas, J., McClelland, R. and Davies, J. (2008). The development of a conceptual model of student satisfaction with their experience in higher education. *Quality Assurance in Education*, 16(1), 17 – 40.

Duarte, P. O., Raposo, M. B. and Alves, H. B. (2012). Using a satisfaction Index to compare students' satisfaction during and after higher education service consumption. *Tertiary Education and Management*, 18(1), 17- 40.

Ehlers, U. D. (2009). Understanding quality culture. *Quality Assurance in Education*, 17(4), 343-363.

Ellis, R. A., Calvo, R., Levy, D. and Tan, K. (2004). Learning through discussions. *Higher Education Research and Development*, 23(1), 77 – 89.

Evans, J. R. (1996). What should higher education be teaching about quality?. *Quality Progress*, 29(8), 83-88.

Ferrin, B. G., Landeros, R., and Reck, R. F. (2001). Integrated supply matrix management: A TQM approach for curriculum development. *International Journal of Physical Distribution and Logistics Management*, 31(7), 520-536.

Freeman, I., and Thomas, M. (2005). Consumerism in Education – A comparison between Canada and the United Kingdom. *International Journal of Educational Management*,19(2),153 – 177.

Garrett-Jones, S., and Aylward, D. (2000). Some recent developments in the evaluation of university research outcomes in the United Kingdom. *Research Evaluation*, 9(1), 69-75.

Garvin, D. A. (1987). Competing on the Eight Dimensions of Quality. "*Harvard Business Review*, 65(6).

Ginns, P., Marsh, H. W., Behnia, M., Cheng, J. H. S. and Scalas, F. (2009). Using post graduate students' evaluationsof research experience to benchmark departments and faculties issues and challenges. *The British Journal of Educational Psychology*, 79(3), 577 – 598.

Grace, D., Weaven, S., Bodey, K., Ross, M. and Weaven, K (2012). Putting student evaluations into perspective: the Course experience quality and satisfaction model (CEQS). *Studies in Educational Evaluation*, 38(2), 38 – 43.

Grant, D. Mergen, E., and Widrick, S. (2004). A comparative analysis of quality management in US and International Universities. *Total Quality Management*, 15(4), 423 – 438.

Goertz, E., Duffy, C. and Le Floch, K. (2001). Assessment and Accountability systems in the 50 states: 1999-2000. Retrieved from www.cpre.org/images/cpre-pdf. On December 2022.

Helms, M., Williams, A. and Nixon, J. (2001). TQM Principles and their relevance to higher education: the question of tenure and post tenure review. *International Journal of Educational Management*, 15(7), 322 – 331.

Henderson, J., McAdam, R., and Leonard, D. (2006). Reflecting on a TQM-based university industry partnership: Contributions to research methodology and organizational learning. *Management Decision,* 44(10), 1422-1440.

Hides, M., Davies, J., and Jackson, S. (2004). Implementation of EFQM Excellence Model Self – assessment in the UK Higher Education Sector – lessons learned from other sectors. *The TQM Magazine*, 16(3), 194 – 201.

Hill, Frances M. (1995). Managing service quality in higher education: the role of the student as primary consumer. *Quality assurance in education*, 3(3), 10-21.

Ho, S. K. and Wearn, K. (1996). A TQM model for enabling student learning. *Innovations in Education and Training International*, 33(3), 178-184.

Houston, D. (2007). TQM and higher education: A critical systems perspective on fitness for purpose. *Quality in Higher Education,* 13(1), 3-17.

Jaafar, B. S. and Earl, L. (2008). Comparing Performance-Based Accountability models: A Canadian example. *Canadian Journal of Education*, 31(3), 697-726.

Jenkins, A., Jones, L. and Ward, A. (2001). The Long-term Effect of a Degree on Graduate Lives. *Studies in Higher Education*, 26(2), 147–162.

Kanji, G. K. and Tambi, A. M. B. A. (1999). Total quality management in UK higher education institutions. *Total Quality Management*, 10(1), 129-153.

Leveille, D. E. (2005). An emerging view on accountability in American higher education. Center for Studies in Higher Education Research & Occasional Paper Series No. CSHE.8.05. Berkeley, CA: University of California, Berkeley.

Liao, S. H., Chang, W. J., and Wu, C. C. (2010). Exploring TQM-innovation relationship in continuing education: A system architecture and propositions. *Total Quality Management and Business Excellence*, 21(11), 1121-1139.

Lola, C.D. (2013). A framework for analyzing performance in higher education. Working Paper 13 – 24 , Business Economic Series – 03 : UNIVERSIDAD CARLOS III de MADRID, Spain.

Lomas, L. (2007). Are students' customers? Perceptions of academic staff. *Quality in Higher Education*, 13(1), 31-44.

London, C. (2011). Measuring how the head of department measures up: Development of an evaluation framework for the head of department role. *Quality in Higher Education*, 17(1), 37-51.

Marginson, S., & Rhoades, G. (2002). Beyond national states, markets, and systems in higher education: A glonacal agency heuristic. *Higher Education*, 43(3), 281–309.

Marques, J. F. (2007). The interconnectedness between leadership and learning: A reaffirmation. *Journal of Management Development*, 26(10), 918-932.

Mazzarol, T., Soutar, G. and Seng, M. (2003). The third wave: future trends in international education. *International Journal of Educational Management*, 17(3), 90 - 99.

Mc Adam, R. and Welsh, W. (2000). A Critical Review of the Business Excellence Quality Model Applied to Further Education Colleges. *Quality Assurance in Education*, 8(3), 120 – 130.

Meirovich, G. and Romar, E.J. (2006). The difficulty in implementing TQM in higher education instruction. The duality of instructor/student roles. *Quality Assurance in Education*, 14, 324-337.

Mok, J. (2002). From Nationalization to Marketisation: Changing Governance in Taiwan's Higher Education System. *Governance: An International Journal of Policy, Administration, and Institutions*, 15(2), 137 -159.

Morley, L. (2003). Quality and power in higher education. Philadelphia: Society for Research into Higher Education.

Motwani, J. and Kumar, A. (1997). The Need for Implementing Total Quality Management in Education. *International Journal of Educational Management*, 11(3), 131 - 135.

Nair, C.S., Patil, A. and Mertova P. (2011). Enhancing the quality of engineering education by utilizing student feedback. *European Journal of Engineering Education*, 36(1), 3 – 12.

Olssen, M and Peters, M.A. (2005). Neoliberalism, higher education and the knowledge economy from the free market to knowledge capitalism. *Journal of Education Policy*, 20(3), 313 – 345.

Osseo-Asare, A. E., Longbottom, D. and Murphy, W. D. (2007). Leadership best practices for sustaining quality in UK higher education from the perspective of the EFQM excellence model. *Quality Assurance in Education*, 13(2), 148-170.

Owlia, M.S. and Aspinwall, E.M. (1996). A framework for measuring quality in engineering education", *Total Quality Management*, 9(6), 501-518.

Parahoo K (2006). Nursing Research – principles, process and issues. Palgrave, Houndsmill, 2nd edition.

Parasuraman, A., Zeithaml, V. A., and Berry, L. L. (1988). SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing*, 64(1), 12-40.

Popli, S. (2005). Ensuring Customer Delight: a quality approach to excellence in management education. *Quality in Higher Education*, 11(1), 17 - 24.

Robson,C. (2002). Real World Research. Oxford. Blackwell.

Romzek, B. S. (2000). Dynamics of public sector accountability in an era of reform. *International Review of Administrative Sciences*, 66(1), 21-44.

Rosa, M. J., Tavares, D. and Amaral, A. (2003). Institutional consequences of quality assessment. *Quality in Higher Education*, 12(2), 145-159.

Sahney, S., Banwet, M. and Karunes, S. (2004), "Conceptualising Total Quality Management in Higher Education", The TQM Magazine, Vol. 16 No. 2, pp. 145 - 159.

Sahney, S., Banwet, D.K. and Karunes, S. (2008). An integrated framework of indices for quality management in education: a faculty perspective. *The TQM Magazine*, 20, 502-519.

Sahu, A. R., Shrivastava, R. R. and Shrivastava, R. L. (2013). Critical success factors for sustainable improvement in technical education excellence: A literature review. *The TQM Journal*, 25(1), 62-74.

Sakthivel, P.B., Rajendran, G. and Raju, R. (2005). TQM implementation and students' satisfaction of academic performance. *The TQM Magazine*, 17, 573-589.

Scott, G., and Hawke, I. (2003). Using an external quality audit as a lever for institutional change. *Assessment and Evaluation in Higher Education*, 28(3), 323-332.

Simpson, O. (2003). Student retention in open and distance learning. London: Routledge Falmer.

Sirvanci, B. M. (2004). Critical Issues for TQM implementation in higher education. *The TQM Magazine*, 16(6), 382 – 386.

Smith, J., Mc Knight, A. and Naylor, R. (2000). Graduate employability: policy and performance in higher education in the U K. *The Economic Journal*. 110 (464), 382–411.

Sohail, M.S., Rajadurai, J. and Rahman, N.A.A. (2003). Managing quality in higher education: a Malaysian case study. *International Journal of Educational Management*, 17, 141-146.

Spencer-Matthews, S. (2001). Enforced cultural change in academe. A practical case study: Implementing quality management systems in higher education. *Assessment and Evaluation in Higher Educatio*n, 26(1), 51-59.

Srikanthan, G. and Dalrymple, J. (2007). A conceptual overview of a holistic model for quality in higher education. *International Journal of Educational Management*, 21(3), pp. 173-193.

Stetcher, B. and Camm, F. (2010). Toward a Culture of Consequences: Performance Based Accountability Systems for Public Services. Pittsburgh: RAND Corporation. Accessed on September 2022.

Sultan, P. and Wong H. Y. (2014). An integrated process model of service quality, institutional brand and behavioral intentions: the case of a university. *Managing Service Quality*, 24, 487 – 521.

Tam, M. (2002), "University Impact on Student growth: a quality measure?", *Journal of Higher Education Policy and Management*, 24(20), 211 - 218.

Tambi, A. M. B. A., Ghazali, M. C., and Yahya, N. B. (2008). The ranking of higher education institutions: A deduction or delusion?. *Total Quality Management and Business Excellence*, 19(10), 997-1011.

Tang, T. and Tang, C. (2004). College Tuition and Perceptions of Private University Quality, *International Journal of Educational Management*, 18(5), 304 – 316.

Tarí, J. J. (2006). An EFQM model self-assessment exercise at a Spanish university. *Journal of Educational Administration*, 44(2), 170-188.

Taylor, P., and Braddock, R. (2007). International university ranking systems and the idea of university excellence. *Journal of Higher Education Policy and Management*, 29(3), 245-260.

Teerovengadum, V., Kamalnabhan, T.J. and Seeblauck. A.K (2016). Measuring Service quality in higher education: development of a hierarchical model (HESQUAL). *Quality Assurance in Education*, 24(2), 244 – 258.

Telford, R. and Masson, R. (2005). The congruence of quality values in higher education. *Quality Assurance in Education*, 13(1), 17-36.

Thakkar, J., Deshmukh, S. G. and Shastree, A. (2006). Total quality management (TQM) in self-financed technical institutions. *Quality Assurance in Education*, 14(1), 54 - 74.

Tranfield, D., Denyer, D. and Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Academy of Management*, 14(4), 207-222.

Tsinidou, M., Geroginnis, V., and Fitsillis, P. (2010). Evaluation of the factors that determine quality in higher education: an empirical study. *Quality Assurance in Education*, 18(3), 227 – 244.

Van Kemenade, E. A., Hardjono, T. W., and De Vries, H. J. (2011). The willingness of professionals to contribute to their organisation's certification. *International Journal of Quality and Reliability Management*, 28(1), 27-42.

Veiga, A., Rosa, M. J., Dias, D., and Amaral, A. (2013). Why is it difficult to grasp the impacts of the Portuguese quality assurance system?. *European Journal of Education*, 48(3), pp. 454-470.

Voss, C., Tsikriktsis, N., Funk, B. Yarrow, D. and Owen, J. (2005). Managerial choice and performance in service management-a comparison of private sector organizations with further education colleges. *Journal of Operations Management*, 23(2), 179-195.

Ward, M. E., Peters, G., and Shelley, K. (2010). Student and faculty perceptions of the quality of online learning experiences. *International Review of Research in open and Distance Learning*, 11(3), 57 – 77.

Weber, L. E., and Duderstadt, J. J. (2008). The globalization of higher education preface. In L. E. Weber & J. J. Duderstadt (Eds.), Glion Colloquium [Series (5): xi—xii]. London: Economica.

'Welsh, J. and Dey, S. (2002). Quality measurement and quality assurance in higher education. *Quality Assurance in Education*, 10(1), 17- 25.

Widrick, S. M., Mergen, E. and Grant, D. (2002). Measuring the dimensions of quality in higher education. *Total Quality Management*, 13(1), 123-131.

Wilensky, J. O., Galvin, C. K. and Pascoe, D. J. (2004). Educational Accountability Systems: Motivation or Discrimination? A survey of the Legal theories used to challenge and defend Educational Accountability Systems. Retrieved from www.hks.harvard.edu/pepg,PDF/events.pdf .

Wilkins, S. and Balakrishnan, M.S. (2013). Assessing student satisfaction in transnational higher education. *International Journal of Educational Management*, 28(3), 143 – 156.

Woodhouse, D. (1999). Quality and Quality Assurance. Quality and Internationalization in Higher, Education, OECD-IMHE

World Bank. (2002). Constructing knowledge societies: New challenges for tertiary education. Washington, DC: World Bank.

Yeo, R.K. and Li, J. (2012). Beyond SERVQUAL: the competitive forces of higher education in Singapore. *Total Quality Management and Business Excellence*, 25(1), 95 – 123.

Zineldin, M., Akdag, H. C. and Vasicheva, V. (2011). Assessing quality in higher education: New criteria for evaluating students' satisfaction. *Quality in Higher Education*, 17(2), 231-243.