

## **SERVICE QUALITY IN HIGHER EDUCATION: A REVIEW AND CONCEPTUAL MODEL**

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### **ABSTRACT**

*The higher education sector plays a significant role in socio-economic growth of the country. The pre-emptive role the government could play for quality in higher education sector. The government is finding the universities in violation but not enforcing the law. Although various regulatory bodies monitor the academic facilities of higher educational institutions with a view to ensure higher caliber is delivered. Yet the quality of higher education falls short of attaining the global level excellence. This paper focuses on body of literature and to present a holistic view of the factors that affect service quality in higher education.*

**Key words:** *Higher Education, Service Quality*

### **I.INTRODUCTION**

Service Quality plays a vital role in the success of higher education sector. It is essential for high standard of education and good image of an educational institution. Among all service sectors the higher education sector has direct bearing on society for socio-economic development. The quality of higher education is every body's concern today. Several studies and commission reports at official level has recognized the same and given recommendations for its improvement. Government and other constitutional agencies are taking necessary measures. Indian education system has made a significant progress in higher education from past two decades. Governments at the state and central levels with various regulatory and accreditation bodies, monitor the higher educational institutions with a vision to ensure quality in education yet the quality of higher education is struggling to attain the global level excellence in India. In addition the expansion of institutions with lack of infrastructure, funds from government and educational societies caused rapid increase of private institutions in India. Therefore, quality has become an important drive for socio- economic development and also, it becomes a competitive weapon for the institutions to attract the student as primary customer. Higher education sector is facing pressure to improve the quality in education. At present educational institutions are expanding their effort on continuous improvement and focus on student satisfaction. The student satisfaction is often used to evaluate the educational quality. Therefore students

have a wide range of options to choose the institution to pursue their degree. Higher education imparts in-depth knowledge and understanding so as to advance the students throughout their life. It develops the student aptitude to strive for truth and competent to critique on contemporary issues. It develops the intellectual power to the individual within a specialization, also gives a wider perception of the world around. Ronald Barnett states four principal concepts of higher education those are higher education as the production of qualified human resources, training for a research career, efficient management of teaching profession and matter of extending life chances.

### **1.1 Role of Higher Education in the Society**

Higher education is usually understood to cover teaching and research. The Scientific, technological and economic development of a country is dependent on higher education. Development of indigenous technologies and capabilities in agriculture, food security and other industrial areas are possible because of our world class higher education infrastructure. Higher education also provides opportunities for lifelong learning, allowing people to upgrade their skills and knowledge from time to time based on societal needs.

Increasing role of higher education in terms of socio-economic growth makes an obligation on the institutions for providing higher education to fulfill the criteria of quality education. For the purpose of quality assurance various national and international accreditations and recognitions plays an important role. In Indian context some autonomous accreditation bodies plays a vital role in providing quality certification to the higher education institutions. Among them National Assessment and Accreditation Council (NAAC) and National Board of Accreditation (NBA) are very standard. National Assessment and Accreditation Council (NAAC) is an autonomous body established by the University Grants Commission (UGC) of India to assess and accredit institutions of higher education in the country. National Board of Accreditation (NBA) was initially established by AICTE (All India Council of Technical Education). The objective of NBA is to assure the quality of education. The study of service quality in higher education is important to the institutions to provide information on the success of education plans and improvement programs.

## **II. NEED FOR THE STUDY**

After the globalization flourish growth of higher education institutions in India leads to hectic competition. The students evaluate the institutions through service quality to select their avenue of education. Even though, there are so many studies on service quality in various service sectors, only a few studies are related with the service quality of higher educational institutions. The previous research on the service quality and student satisfaction are not covering all aspects hence, the present study tries to fill the research gap.

### **III. OBJECTIVES OF THE STUDY**

- a) To develop a conceptual model of service quality in higher education.
- b) To discuss the importance of quality in higher education institutions.

### **IV. RESEARCH METHODOLOGY**

The prevalent challenge faced by any researcher while working in the area of service quality is the vast literature. A Systematic review of literature was done through electronic and library search. The online databases like emerald, Elsevier science were used to identify the articles and research papers in various journals, magazines, periodicals, newspapers and sought advices from experts in this field. The search approach concentrates on the service sector, particularly education sector. The searches yielded number of articles. Each one of the articles was examined to ensure that they were relevant to higher education service quality measurement.

### **V. MEASURES OF SERVICE QUALITY**

Parasuraman et al. (1988) developed “SERVQUAL” model to measure quality in service sector. He defined service quality as the difference between perception of experience and expectation. SERVQUAL basically configures the gap where the quality improvement is required (Ho and Wearn, 1996; Parasuraman, et al., 1988; Abdullah 2005, 2006). The major dimensions considered for measuring service quality gap in SERVQUAL scale was Tangibles: Physical facilities, equipment and appearance of personnel, Reliability: Ability to perform the promised service dependably and accurately, Responsiveness: Willingness to help customers and provide prompt service, Assurance: Knowledge and courtesy of employees and their ability to convey trust and confidence and Empathy: Caring individualized attention the organization provides to its customers. Cronin and Taylor (1992) proposed an improved version of service quality measurement model known as Service Performance (SERVPERF).

Higher Education Performance Model (HEdPERF) for further development of the Service Quality Measurement Models for HEI, in 2006, Abdullah developed model to measure specifically the quality in higher education institutions. The researcher has determined specific factors to measure service quality relying on the fact that students are the main customers of the service. It is an empirical study; reliability and validity test have been conducted to develop the model. According to the Abdullah the previous research on the perception of consumers is not covering all aspects. As stated by Abdullah (2006) the findings of previous researchers relied on six dimensions i.e. non-academic aspects, academic aspects, reputation, access, program issues and understanding. By consulting the previous literature, it is very important for the institution to differentiate among the important dimensions which directly affect the service quality. Even the adoption of specific dimension may attract the student, since direct contact of the student to the institution does make a difference.

Many studies have been done by adopting generic service quality models: SERVQUAL, SERVPREF, to evaluate students experience on service quality of higher education. Within these models, the SERVQUAL instrument has attracted the greatest attention to measure the perceived quality in higher education sector. Parasuraman, Zeithamal,

and Berry (1988) developed an instrument called “SERVQUAL” for quantifying customers’ assessment of service quality performance. The SERVQUAL instrument has evolved to become the most commonly used service quality measurement instrument in education. It contains 22 items for measuring service quality along five dimensions, namely, reliability, accessibility, tangibility, assurance and responsiveness. Although globally accepted and adapted in various service organizations, the SERVQUAL instrument is not without criticism.

### **5.1 Service Quality in Higher Education**

The application of service quality Gap model to evaluate the quality of blended learning by Patryk Babiarz, Maciej Poitrowski, Malgozata Wawrzyn kiewicz (2003), University of information technology and management Poland explains as the SERVQUAL applied to measure the service quality of the teaching process slightly changes the gaps defined in the traditional model. The new set of quality gaps, which will determine the overall service quality, would be as follows:

- Gap1: Difference between student expectations and university authority level perception of student expectations.
- Gap2: Difference between authority level perception of student expectations and service quality specifications.
- Gap3: Difference between service quality specifications and the service actually delivered.
- Gap4: Difference between service delivery and what is promised about the service to students.
- Gap5: Difference between student expectation and perception.

### **5.2 Service Quality Dimensions**

Author	Dimensions
Gronroos(1984)	Reputational Quality, Institution image ,Student Expectations, Perceived quality of non-human resources
Parasuraman, Zeithaml and Bery (1985)	Tangibility ,Reliability ,Responsiveness, Competence, Access, Courtesy, Communication, Credibility, Security, Understanding, Standards of organizations, Assessment and Feedback
Gronroos (1988)	Professionalism and skill , Attitudes and behavior, Access and flexibility, Reliability and trustworthiness, Recovery, Reputation and credibility
Gronroos (1990)	Technical Quality, Functional Quality, Corporate Image
Entwistle and Tait (1990)	Teacher’s enthusiasm and methodology, Relevance and interest of the material to students, Teacher’s interest in individual students, Explanation of study material, Difficulty, pace and quantity of workload, Willingness for class involvement, Physical quality, Interactive quality
Lehtinen and Lehtinen (1991)	Physical Quality, Interactive Quality, Corporate Quality

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Parasuraman et. Al. 1991 Service Quality Model (SERVQUAL)	Reliability, Responsiveness, Competence, Access, Courtesy, Communication, Credibility, Security, Understanding the customer
Parasuraman and Berry, 1991; Zeithaml et al, 1990 Service Quality Model (SERVQUAL)	Tangibles, Reliability, Responsiveness, Assurance, Empathy
Cronin and Taylor, 1992 Performance Only; Service Quality Performance Model (SERVPERF)	Tangibles, Reliability, Responsiveness, Assurance ,Empathy
Hampton (1993)	Social life-personal, Campus facilities, Effort to pass courses, Social life-campus, Student advising, Faculty, Reputation
Carney (1994)	Student Qualification (Academic), Student Qualities (Personal), Faculty-Student Interaction, Quality Instruction (Faculty), Variety of Courses, Academic Reputation, Class Size, Career Preparation, Athletic Programs, Student Activities (Social Life), Community Service, Facilities and Equipment, Location, Physical Appearance (Campus), On Campus Residence, Friendly and Caring Atmosphere, Religious Atmosphere, Safe Campus, Cost/Financial Aid
Owlia and Aspinwall(1996)	Tangibles: Sufficient equipment/facilities, modern equipment/facilities, ease of access, visually appealing environment, support services (accommodation, sports), Competence: Sufficient (academic) staff, theoretical knowledge, qualifications; practical knowledge, up to date, teaching expertise, communication, Attitude: Understanding student's need, willingness to help, availability for guidance and advisory, giving personal attention, emotion, courtesy, Content: Relevance of curriculum to the future jobs of students, effectiveness, containing primary knowledge skills, completeness, use of computer, communication skills and team working, flexibility of knowledge, being cross-disciplinary, Delivery: Effective presentation, sequencing, timeliness, consistency, fairness of examinations; feedback from students, encouraging students, Reliability: Trustworthiness, giving valid award, keeping promises, match to the goals, handling complaints and solving problems
Ho and Wearn, 1996, Higher education TQM	Leadership, Commitment, Total customer satisfaction , Total involvement Training education, Ownership of problem, Reward and recognition, Error prevention

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model of excellence; (HETQMEX)	and Teamwork
Athiyaman (1997)	Teaching Students Well, Availability of Staff for Student Consultation, Library Services, Computing Facilities, Recreational Facilities, Class Size Level and Difficulty of Subject Content, Student Workload
Leblanc and Nguyen (2001)	Physical evidence, Administration, Curriculum, Responsiveness Access to facilities, Technical quality, Functional quality
Sangeeta et.al (2004)	Competence: Appropriate physical facilities/infrastructure, faculty's expertise, faculty's teaching ability and skills, sufficient faculty/support staff , Attitude: Effective problem solving, orientation towards achievement, healthy competitive and collegial environment, Content: Learn to apply, clarity of course objectives, relevance of curriculum to future needs, flexibility of knowledge being cross disciplinary, Delivery: Ease of contract/access to teachers and administrative staff, effective classroom management, adequate and appropriate classroom, Reliability: Clearly specified values and aims, consistency of practice, clearly specified policies/guidelines, fairly and firmly-enforced rules and regulations, adherence to course objectives.
Brooks (2005)	Reputation, Faculty Research Productivity, Student Educational Experiences and Outcomes, Program Characteristics: Counts of degree issued, financial support, fellowship grant support, teaching assistantship, Program Effectiveness: Timeline of their program, proportion of students, completing their intended degree program, Student Satisfaction: Classroom, co-curricular activities, interaction with faculty and peers, instructions, campus life and, Student Outcome: Assessment of learning and career outcomes of educational programs
Firdaus Abdullah (2006); Higher education performance model; (HEdPERF)	Academic aspect, Nonacademic aspect, Reputation, Access, Program issue, Understanding
Voon (2006); Service driven market orientation model; (SERVMO)	Customer Orientation, Competitor Orientation, Inter-Functional Orientation, Performance Orientation, Employee Orientation, Long term Orientation
Pereda,Airey and Bennett (2007)	Sufficiency of resources, Quality of faculty, Tangibility, Reliability
Landrum et. Al (2008); Service quality and	Service Quality, Information Quality, System Quality, Users Involvement

information system success model (SERVCESS)	
Brochado (2009)	Responsiveness, Assurance, Empathy
Sangeeta Sahney (2010) Application of QFD on SERVQUAL	Customer focus/need based, Channels of communication, Instructional competence, Specific policies and procedures, Evaluation and control system, Curriculum design, Effective leadership, Periodic review, Resource allocation (as in contingencies), Operational planning

### **5.3 Studies on Service Quality in Higher Education**

Service quality is the most popular terminologies among the community of researchers. Numerous studies have been conducted on service quality in different areas like healthcare, retailing, banking, transport and communication services etc. The present study attempts to conceptualize service quality in higher education. Various studies have been conducted on service quality representing different factors affecting service quality in higher education. In the present competitive environment, quality improvement is identified as a key strategy for organizations to succeed Cronin and Taylor (1992), Parasuraman et.al (1988).

Trivellas and Dargenidou (2009) examined the influence of leadership roles on the quality of services provided in higher education. The study conducted on a sample of 134 faculty and administration members at the Technological Educational Institution (TEI) of Larissa. They developed a structured questionnaire to measure leadership roles and quality in services and internal processes. Eight leadership roles are analyzed in the study namely, Producer, director, coordinator, monitor, facilitator, mentor, innovator and broker. Results of the study indicated that different leadership roles are linked with different dimensions of higher education service quality. Teaching quality is mainly associated with two contradictory roles; innovator and monitor. Besides, the broker and the facilitator roles are the foundations for the enhancement of administration quality, referring to administration contact, reliability, confidence, understanding and caring. The producer, director and coordinator proved to be the most prevalent roles among administration staff, while the director, coordinator and mentor roles dominated among faculty members.

Jager&Gbadamosi (2009) proposed a process of developing a scale for the measurement of service quality in higher education in South Africa and also examines the relationship between the measures of service quality on the one hand and some other related variables such as intention to leave the university, trust in management of the university and the overall satisfaction with the university.

Higher Education TQM Model of Excellence (HETQMEX) Ho and Wearn (1996) developed a quality measurement model especially for the Higher education institutions (HEI). According to Ho and Wearn, quality is equally required in higher education institutions as in other organizations. Ho and Wearn explained that Total Quality Management (TQM) is essential for the maintenance of Quality in HEI. They stated that it should be used to formulate the mission statement for the services provided by higher education institutions; a generic mission

statement could provide quality education, research and related services to continuously satisfy stakeholders needs and achieve excellence through TQM. Application of Quality improvement model with respect to TQM is the main theme of the researchers. As stated by Samat, et al. (2006) TQM has been explained by many scholars as the most global advanced approach in the area of quality. TQM provides consumer loyalty and profitability to the organization. Ho and Wearn (1996) basically applied the Quality management process on the UK Higher Education Industry and explained the factors and organizations associated with the maintenance of quality in it and concluded the presence of TQM in service quality is essential.

Brewing service quality in higher education Characteristic of ingredients that makes up recipe in the Journal Quality Assurance in Education by Roland K. Yeo (2008), explains that one of the challenges for today's higher institutions is to identify and implement appropriate measures that will determine the sustainability of service quality. The intangibility of services has made it difficult for performance standards to be set, monitored and measured. As revealed in this study the fear, as reflected by most academics, is to have people reluctantly conform to the required practices just so that they can save themselves from unpleasant and problematic professional outcomes.

Service quality in postgraduate education" Robert J. Angell, Troy W. Heffernan and Phil Megicks (2008), in Journal of Quality Assurance in Education, provides insights into the service quality factors of postgraduates based upon an empirical analysis of a sample of UK students. Unlike previous studies, which have focused predominantly on the student segment, this research was designed to specifically target postgraduate students in which the questions regarding appropriateness of disconfirmation-based measures such as SERVQUAL, and equivalent performance-only measures such as SERVPERF has been proved most suitable. Through qualitative methods 20 service attributes were identified as important in the evaluation of service. Using quantitative analysis, these were reduced into four service quality factors: academic, leisure, industry links, and cost. These present a framework that other universities can adapt to their own needs when measuring service quality. The findings indicate that postgraduate students find academic and industry link aspects of the service to be more important than issues of cost and, particularly leisure.

#### **5.4 The Conceptual Model**

Incorporating the previous studies, theories and existing models, a structured review process is done and a number of relationships were captured among the factors which were most useful in conceptualizing our model and we developed with these seven dimensions that provide understanding of factors that measures the service quality in higher education. This model provides the basic idea for the government and promoters of higher education institutions as in which dimension they have to focus to deliver quality education. Giving quality education has become an important objective for most of the institutions and for those institutions the model would suggest for designing quality standards. The educational institutes would attract more students by offering quality educational services by focusing their core competencies on these dimensions of the model. This model provides guideline to

students that which component has to give highest and lowest priorities in selecting the institutions to pursue their degree.

## **VI.CONCEPTUAL MODEL OF SERVICE QUALITY IN HIGHER EDUCATION**



## **VII.CONCLUSION**

The significance of this paper lies in Extensive literature review was carried out to identify the key variables of service quality and its measurement techniques. Several researchers have attempted to define and measure the

quality of services on sale but it is not possible to arrive at clear conclusion and still it is a debatable issue because of certain attributes of services. Out of many instruments designed and validated by different researcher and scholars are available to measure service quality, a few instruments achieved desirable validity. It is imperative for higher education institutions to understand the various dimensions of service quality and the need of continuous improvement in service quality for achieving sustainable development along with a competitive advantage. In India instead of imparting moral education skill and knowledge, they help the students to pass exams and earn their degree. Thus institution must itself hold high morals and import moral education among students.

## **REFERENCES**

- [1] Parasuraman, A., Zeithaml, V. A. & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12–40.
- [2] Samuel K. Ho, Katrina Wearn, (1996) "A higher education TQM excellence model: HETQMEX", Quality Assurance in Education, Vol. 4 Iss: 2, pp.35 – 42.
- [3] Abdullah, F. (2005). HEdPERF versus SERVPERF: The quest for ideal measuring instrument of service quality in higher education sector. *Quality Assurance in education*, 13(4), 305-328.
- [4] Abdullah, F. (2006a), "Measuring service quality in higher education: HEdPERF versus SERVPERF", *Marketing Intelligence & Planning*, Vol. 24 No. 1, pp. 31-47.
- [5] Cronin J.Jand S.A. Taylor, (1992). Measuring service quality a reexamination and extension, *Journal of Marketing*, Vol. 56 pp. 193-218.
- [6] M Piotrowski, M Wawrzynkiewicz (2003)The Quality of Blended Learning—Customised SERVQUAL Model and Measuring Tools, *The Quality Dialogue*, pp 84-89.
- [7] Grönroos, C. (1984). A service quality model and its marketing implications. *European Journal of marketing*, 18(4), 36-44.
- [8] Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *The Journal of Marketing*, 41-50.
- [9] Gronroos, C. (1988). Service Quality: The Six Criteria Of Good Perceived Service. *Review of Business*, 9(3), 10.
- [10] Gronroos, C. (1990). Relationship Approach to Marketing in Service Contexts: The Marketing and Organizational Behavior Interface, *Journal of Busmess Research* Vol.20, 3-11
- [11] Noel Entwistle & Hilary Tait (1990), Approaches to learning, evaluations of teaching, and preferences for contrasting academic environments, Volume 19, Issue 2, pp 169–194.
- [12] Uolevi Lehtinen & Jarmo R. Lehtinen,(1991),Two Approaches to Service Quality Dimensions, Volume 11, issue 3,pp 287-303
- [13] Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1991). Refinement and reassessment of the SERVQUAL scale. *Journal of Retailing*, 67(4), 420-450.

- [14]Hampton, James (1993) Prototype models of concept representation. Categories and concepts: Theoretical views and inductive data analysis. San Diego, CA, US: Academic Press, viii, pp. 67-95.
- [15] Carney R. (1994) Building an Image symposium for the marketing of higher education, American marketing association.
- [16] Owlia, M.S. & Aspinwall, E.M. (1996). A framework for the dimensions of quality in higher education. *Quality Assurance in Education*, 4 (2), 12- 20.
- [17] Athiyaman, A. (1997) "Linking student satisfaction and service quality perceptions: the case of University education. European journal of marketing, Vol. 31(7/8), pp. 528-540.
- [18]Nha Nguyen, , Gaston Leblanc(2001) Corporate image and corporate reputation in customers' retention decisions in services ,Journal of Retailing and Consumer Services, Volume 8, Issue 4, July, PP 227-236
- [19]Sangeeta Sahney, D.K. Banwet, S. Karunes, (2004),A SERVQUAL and QFD approach to total quality education: A student perspective, International Journal of Productivity and Performance Management, Vol. 53 No. 2 , 143-166.
- [20] Brook R.L. (2005) Measuring university quality: Review of higher education, Vol. 29(1), pp. 1-21.
- [21] Voon. B.H, (2006),"Linking a service-driven market orientation to service quality", Managing Service Quality: An International Journal, Vol. 16 No. 6 , 595 – 619
- [22] M Pereda, D Airey, M Bennett (2007) Service Quality in Higher Education: The Experience of Overseas Students, Journal of Hospitality, Leisure, volume,6(2), pp: 55 – 67
- [23] Brochado.A (2009) Comparing alternative instruments to measure service quality in higher education, Quality Assurance in Education, Vol. 17 No. 2, 174-190
- [24] Sahney, S., Banwet, D. K., & Karunes, S. (2010). Quality framework in education through application of interpretive structural modeling: an administrative staff perspective in the Indian context. *The TQM Journal*, 22(1), 56-71.
- [25] Landrum, Hollis; Prybutok, Victor R; Kappelman, Leon A; Zhang, Xiaoni (2008), SERVCESS: A Parsimonious Instrument to Measure Service Quality and Information System Success, *The Quality Management Journal*; Milwaukee 15.3, pp : 17-25.
- [26] JagerJ.D. and Gbadamosi G.(2009) Specific remedy for specific problem: measuring service quality in South African higher education, Springer Science+Business Media B.V
- [27] Panagiotis Trivellas, Dimitra Dargenidou, (2009) "Organisational culture, job satisfaction and higher education service quality: The case of Technological Educational Institute of Larissa", *The TQM Journal*, Vol. 21 Iss: 4, pp.382 - 399
- [28] Roland K. Yeo, (2008) "Servicing service quality in higher education: quest for excellence", *On the Horizon*, Vol. 16 Iss: 3, pp.152 – 161
- [29] Robert J. Angell Troy W. Heffernan Phil Megicks, (2008),"Service quality in postgraduate education", *Quality Assurance in Education*, Vol. 16 Iss 3 pp. 236 - 254