

# Dimensions to Measure Service Quality in Private Higher Education Institutions

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## Introduction

Service quality has become an important component of businesses in the service industries across the world. The educational services sector has gone through drastic changes over the decades in realising the vision and mission towards achieving the highest service quality standards to meet its growing customer needs. The modern education has to look to its future survival, beyond its current disciplinary organisation and quality of standards. This involves identifying new modes of providing service quality to enhance the institutions' competitive advantage and performance.

Private higher education institutions in Malaysia have to develop the confidence of a number of stakeholders to ensure successful operations. Among them, students perhaps are the key stakeholder because all other stakeholders are geared to serve the students as customers (Schmidt, 2002). These institutions would not be able to serve the students well if they do not take the initiative to measure the students' expectations and perceptions of services provided (Shanahan & Gerber, 2004). The process of measurement should involve how the customers are treated during the period of service interaction (Altman & Hernon, 1998) and the outcome is the actual end result as experienced by the customer (Arambewela & Hall, 2006).

However, students' perceptions of service quality depend highly on what they receive rather than on what was given. Under these circumstances, there is an urgent need for the private higher education institutions to measure the perceptions and expectations of students on the quality of services received. Educators will benefit to a great extent by understanding students' perceptions on the quality and delivery of educational services by creating better opportunities and outcomes beyond the traditional boundaries. Policy makers in the private higher education institutions will be able to modify their existing policies and procedures to suit students' expectations.

According to Mathew, Mehenna and George (2005), service quality is directly related to student satisfaction. Furthermore, high satisfaction level will also lead to high customer loyalty (Roediger, Thornsten & Isabelle, 2007). Taylor and Baker (1994) in their study on the relationship between service quality and satisfaction have noted that there is a strong correlation between the two. In this respect, it can be postulated that high service quality will eventually lead to high student satisfactions.

## The Definition of Service Quality

The characteristics of service quality, which is intangible, heterogeneity, inseparability and perishability (Parasuraman, 1985), cannot be measured objectively (Patterson & Johnson, 1993). However, many researchers stated that service quality can be measured by making the comparisons between customers' expectations and perceptions (Zeithaml, Parasuraman & Berry, 1990). The authors have distinguished the service quality into four types namely expected service; desired service; adequate service; and predicted service.

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Expected services refer to the services customers intend to obtain from the service provider. Desired services are the level of services which the customer wishes to obtain. Adequate service refers to the minimum level of services expected from the service provider and finally, predicted services are what the customers believe the company will perform. O'Neil and Palmer (2004) also define service quality as the difference between what a student expects to receive and his/her perceptions of actual delivery. This definition is similar to the one advocated by Zeithaml et al. (1990).

In the context of higher education, students' perceived quality is an antecedent to student satisfaction (Browne et al., 1998). It is noted that positive perceptions of service quality can eventually lead to student satisfaction, and therefore, satisfied student would attract potential students through word-of-mouth communications.

## Dimensions of Service Quality

The main concern in developing the dimensions of service quality is the range of areas that should be included in the survey of the research. Different dimensions of service

quality are used in different industries to fulfil various objectives. However, there are some similarities on the chosen dimensions (Lagrosen, Roxana & Markus, 2004). Many authors have developed service quality dimensions according to their customers' preferences. Researchers agree that there is no single dimension which can be applicable to all the service sectors (Carman, 1990; Brown, Churchill & Peter, 1993; Cronin & Taylor, 1994). They also agree that customers must be the determinant of the service quality dimensions rather than the management or the academic staff of the respective university (Parasuraman, Zeithaml & Berry, 1988; Cronin & Taylor, 1994; Carman, 1990; Lagrosen et al., 2004; Madsen & Carlsson, 1995; Lee, Lee & Yoo, 2000).

The initial ten dimensions of service quality developed by Parasuraman et al. 1988 are reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding the customer and tangibles. Through an empirical test, the authors later condensed the ten dimensions into five (Parasuraman & Berry, 1992; Zeithaml et al., 1990). These dimensions are tangibility, reliability, responsiveness, assurance and empathy.

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Quality dimensions, according to Gronroos (1990), can be classified into three groups: technical quality, functional quality and corporate image. This is similar to those proposed by Lehtinen and Lehtinen (1991), i.e. physical quality, interactive quality and corporate quality. The dimensions associated with technical quality are those that can be measured objectively regardless of customers' opinion. Those concerned with functional quality are related to the interaction between the provider and recipient of the service and are often perceived in a subjective manner.

Carney (1994) proposed a comprehensive list of twenty variables/attributes in studying a college's image i.e. student qualification (academic), student qualities (personal), faculty-student interaction, quality instruction (faculty), variety of courses, academic reputation, class size, career preparation, athletic programmes, student activities (social life), community service, facilities and equipment, location,

physical appearance (campus), on-campus residence, friendly, caring atmosphere, religious atmosphere, safe campus, and cost/financial aid. Although the variables were developed under the context of college image, most of the variables noted are highly relevant to the measurement of service quality.

Athiyaman (1997) used eight characteristics to examine university education services namely, teaching students well, availability of staff for student consultation, library services, computing facilities, recreational facilities, class sizes, level and difficulty of subject content and student workload. Athiyaman (1997: 532) further noted that “consumer satisfaction is similar to attitude, but it is short-term and results from an evaluation of a specific consumption experience”. Lee et al. (2000) explained that the two of the total quality experience variables ‘overall impression of the school’ and ‘overall impression of the education quality’ are the determinant variables in predicting overall satisfaction.

Sangeeta et al. (2004) noted that it is necessary to identify customers' requirements and the design characteristics that make up an educational system. The authors have highlighted the importance of comparing the perceptions of the customers relating to those requirements and characteristics with their expectations and thus, determine service quality. As far as customer requirements were concerned, the tests for validity and reliability identified a total of 26 items, which were grouped under five factors/constructs: competence, attitude, content, delivery and reliability.

Hadikoemoro (2002) identified 35 items of service quality after two focus group interviews conducted in private and public universities. A total of 28 items were identified through factor analysis using varimax rotation. Based on a second factor analysis, these items were categorised into five dimensions: academic services, readiness and attentiveness, fair and impartial, tangible and general attitudes.

Owlia and Aspinwall (1996), developed 30 attributes called “quality characteristics” after conducting thorough literature reviews on service quality research papers. Based on the similarities, the service quality attributes were grouped into six dimensions that include tangibles, competence, attitude, content, delivery and reliability.

### **Service Quality Dimensions in the Private Higher Educations**

Developing a service quality model to measure the student's perception on quality is a very complex and tedious task because the service quality dimensions at the higher education institutions cover many areas and therefore, only important elements of dimensions included in the survey (Hadikoemoro, 2002). The dimension of service quality in the private higher education in general varies according to researchers. Following are the dimensions used by different academic researchers (Table 1).

**TABLE 1** Dimensions used by academic researchers

No.	Athiyaman, 1997	Brooks, 2005	Sangeeta, 2004	Hadikoemoro, 2002	Owlia & Aspinwall (1996)
1	Level and difficulty of subject content and student workload	Reputation; program features; career outcome	Reliability, orientation towards achievement	Readiness and attentiveness	Content, reliability
2	Library services, computing and recreational facilities, class size	Financial support	Physical facilities; adequate and appropriate classroom	Tangibles	Tangibles
3	Teaching quality, consultation	Faculty research; teaching assistantship; fellowship grant; instructions;	Sufficient staff, access to staff and teachers	Readiness and attentiveness	Delivery
4	-	Interaction with faculties	Faculty expertise and sufficient staff	Fair and impartial	Competence
5	-	-	Effective problem solving	General attitude	Attitude

The following summarises the comparisons between different dimensions of service quality discussed above:

- There are significant differences in the dimensions of service quality developed and used by various researchers.
- Each of the developed dimensions is unique, therefore it supports the hypothesis that there is no single set of dimension of service quality that is applicable and suitable for all types of service quality research.
- Service quality dimension varies according to customers, research objectives, institution, situation, environment and time.

## Conclusion

In Malaysia, private universities spend millions of ringgits annually on marketing activities in attracting students to their respective institutions. Fulfilment of the service quality criteria set by the students would enable the respective private institutions to gain competitive advantage over the other institutions. By achieving high standards in service quality, the universities will have more opportunity to select better qualified students into their institutions. Dimensions of service quality may vary according to different university settings so it is necessary to select the most appropriate dimensions for further service improvements. Due to the intensity of the competition among private universities, it is high time these universities invest their resources and energy in identifying the factors that would contribute towards providing quality services to their current and potential students.

## References

- Altman, E. & Herson, P. (1998). Service quality and customer satisfaction do matter. *American Libraries*, 29(7), 53.
- Arambewela, R. & Hall, J. (2006). A comparative analysis of international education satisfaction using servqual. *Journal of Services Research*, 6, 141-163.
- Athiyaman, A. (1997). Linking student satisfaction and service quality perceptions: The case of university education. *European Journal of Marketing*, 31(7), 528.
- Brown, T. J., Churchill Jr., G. A. & Peter, J. P. (1993). Research note: Improving the measurement of service quality. *Journal of Retailing*, 69(1), 127.
- Browne, B., Kaldenberg, D., Browne, W., & Brown, D. (1998). Student as customers: Factors affecting satisfaction and assessments of institutional quality. *Journal of Marketing for Higher Education*, 8(3), 1-14.
- Carman, J. M. (1990). Consumer perceptions of service quality: An assessment of the SERVQUAL dimensions. *Journal of Retailing*, 66(1), 33.
- Carney, R. (1994). *Building an image*. Paper presented at the Proceedings Symposium for the Marketing of Higher Education, New Orleans, Louisiana: American Marketing Association.
- Cronin Jr., J. J. & Taylor, S. A. (1994). SERVPERF versus SERVQUAL: Reconciling performance-based and perceptions-minus-expectations. *Journal of Marketing*, 58(1), 125.

- Gronroos, C. (1990). *Service management and marketing*. Lexington, MA, Lexington Books.
- Hadikoemoro, S. (2002). *A comparison of public and private university students' expectations and perceptions of service quality in Jakarta, Indonesia*. Unpublished D.B.A., Nova Southeastern University, United States -- Florida.
- Lagrosen, S., Roxana, S. H. & Markus, L. (2004). Examination of the dimensions of quality in higher education. *Quality Assurance in Education*, 12 (2), 61.
- Lee, H., Lee, Y. & Yoo, D. (2000). The determinants of perceived service quality and its relationship with satisfaction. *Journal of Services Marketing*, 14 (2/3), 217.
- Lehtinen, U. & Lehtinen, J. R. (1991). Two approaches to service quality dimensions. *The Service Industries Journal*, 11 (3), 287.
- Madsen, O. N. & Carlsson, R. (1995). Total quality in education: a case study. *Total Quality Management*, 6(5&6).
- Marilyn, R. (2005). Marketing education: A review of service quality perceptions among international students. *International Journal of Contemporary Hospitality Management*, 17 (1), 65.
- Mathew, J., Mehenna, Y., & George, S. (2005). An educational institution's quest for service quality: Customers' perspective. *Quality Assurance in Education*, 13 (1), 66.
- O'Neil, M. & Palmer, A. (2004). Cognitive dissonance and the stability of service quality perceptions. *The Journal of Services Marketing*, 18(6), 433-449.
- Owlia, M. S. & Aspinwall, E. M. (1996). A framework for the dimensions of quality in higher education. *Quality Assurance in Education*, 4 (2), 12.
- Parasuraman, A. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing (pre-1986)*, 49(000004), 41.
- Parasuraman, A. & Berry, L. L. (1992). Prescriptions for a service quality revolution in America. *Organizational Dynamic*, Spring, 5-15.
- Parasuraman, A., Berry, L. L. & Zeithaml, V. A. (1991). Understanding customer expectations of service. *Sloan Management Review*, 32 (3), 39.
- Parasuraman, A., Zeithaml, V. A. & Berry, L. L. (1988). SERVQUAL: a multiple-item scale for measuring consumer perc. *Journal of Retailing*, 64 (1), 12.
- Patterson, P. G. & Johnson, L. W. (1993). Disconfirmation of expectations and the gap model of service quality: an integrated paradigm. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 6(90-9).
- Roediger, V., Thorsten, G. & Isabelle, S. (2007). Service quality in higher education: The role of student expectations. *Journal of Business Research*, 60 (9), 949.
- Sangeeta, S., Banwet, D. K. & Karunes, S. (2004). Conceptualizing total quality management in higher education. *The TQM Magazine*, 16 (2), 145.
- Schmidt, R. (2002). A student's initial perception of value when selecting a college: an application of value added. *Quality in Education*, 10 (1), 37-38.
- Shanahan, P. & Gerber, R. (2004). Quality in university student administration. *Stakeholder conceptions*, 12 (4), 166-174.
- Taylor, S. A. & Baker, T. L. (1994). An assessment of the relationship between service quality and customer satisfaction in the formation of consumers' purchase intentions. *Journal of Retailing*, 70 (2), 163-178.
- Zeithaml, V. A., Parasuraman, A. & Berry, L. L. (1990). *Delivering quality service: Balancing customer perceptions and expectations*. New York, Free Press.