

QUALITY IN HIGHER EDUCATION: WHAT SAY THE UNDERGRADUATES?

*M.A.T.K Munasinghe & U.A.H.A Rathnasiri,
Faculty of Commerce and Management Studies, University of Kelaniya,
Kelaniya, Sri Lanka*

amila@kln.ac.lk & hashika_aroshini@yahoo.com

ABSTRACT

All over the world, as tertiary education grows rapidly and its cost continues to rise in both public and private sectors there is increasing interest in quality aspects of education.

Quality is one of the many concepts in the social sciences that are extremely difficult to define. Given the difficulties in defining quality, literature suggests to take all competing views of stakeholders into account in defining the quality in higher education. Literature suggests four main stakeholders in higher education as “Providers, Users of products, Users of outputs and the employees of the sector. All these parties are customers of the education system with diverse requirements.

This study was based on questionnaires distributed among 100 undergraduates of the Faculty of Commerce and Management studies of the University of Kelaniya, Sri Lanka to provide a view of quality in higher education from the perspective of critical stakeholder group-Users of products (Undergraduates).

Based on factor analysis, quality dimensions were defined and five dimensions of quality; Resource Availability, Information and Responsiveness, Competence of academic staff, Corporate Collaboration, Assessment and Monitoring were together accounted for 69.5 percent of the total variance. The dimension of Competence of academic staff reserved the highest and Assessment and Monitoring was placed as the least perceived quality dimension from undergraduates’ perspective.

Keywords: Quality, Higher education, Undergraduates

INTRODUCTION

In recent years, quality assessment has become a feature of the higher education landscape. Despite numerous studies in the field of general service quality, little work has been concentrated on public services and particularly in higher education.

In respect of service quality, the focus has been very much on satisfying the customer. In services, an additional complication is that the customer often needs to actively participate in the production of the service and such participation needs to be encouraged and guided. (Eiglier and Langeard, 1993). Thus it is important to find what factors give rise to customer satisfaction (Gronroos, 1990). In higher education, the definition of customer is quite different from the other aspects since groups such as students, employers, academic staff, government and families are all customers of the education system with a diversity of requirements. There are many stakeholders for whom the quality of higher education is vital. Srikantan and Dalrymple (2003) present the four main stakeholders in higher education. “Providers (Funding bodies and community at large) Users of products (Current and prospective students) Users of outputs (the employers) and the employees of the sector (Academics and the Administration). All these parties are customers of the education system with diverse requirements”.

Literature suggests (*Lagrosen. S et al 2004*) several quality dimension frameworks of quality in higher education. This study attempts to address the question of what dimensions constitutes quality from the perspective of critical stakeholder group: undergraduates. The main objective of the study is to identify whether the dimensions proposed in the literature are of actually the dimensions concerned by the undergraduates as quality.

The next section reviews the literature relating to different quality dimensions, definitions, the second section explain our approach of the study followed by the findings and conclusion.

LITERATURE REVIEW

Service quality dimensions

Scholars have tried to define general quality dimensions, particularly concerning services. The most well-known set of dimensions has been proposed by Parasuraman *et al.* (1985) Zeithaml *et al.* (1990).

- (1) Reliability – the service is carried out in the way it is promised.
- (2) Responsiveness – services are carried out promptly according to the needs of the customers.
- (3) Competence – the staff of the service provider have the knowledge and skills required for delivering the service in a proper way.
- (4) Access – concerns, e.g. opening hours, physical location, etc.
- (5) Courtesy – the staff are polite, friendly, respectful, etc.
- (6) Communication – keeping the customers informed in a language that they can understand and listening to them.

- (7) Credibility – the service provider is trustworthy, believable and honest.
- (8) Security – freedom from danger, risk or doubt.
- (9) Understanding the customer – the service provider makes an effort to understand the needs and wants of the individual customers.
- (10) Tangibles – physical objects that are needed for carrying out the service such as facilities, equipment, etc.

In an alternative framework, Gronroos (2000) presents a compilation of seven criteria of service quality perceived as good. He claims that these criteria are an integration of available studies and conceptual work.

- (1) Professionalism and skills - The service provider has the knowledge and skills required to solve the customer's problem.
- (2) Attitudes and behaviour - The service employees are concerned about the customers and their problems.
- (3) Accessibility and flexibility - It is easy to get access to the service and the provider is prepared to adjust to the demands and wishes of the customers.
- (4) Reliability and trustworthiness - Customers can rely on the service provider to keep promises and perform with the best interest of the customers at heart.
- (5) Service recovery - Whenever something goes wrong, the service provider will take action to find a new, acceptable solution.
- (6) Serviscape - The physical surrounding and other aspects of the environment support a positive experience.
- (7) Reputation and credibility - The service provider can be trusted, gives adequate value for money and stands for values, which can be shared by the customer.

Although, these general quality dimensions and criteria have an important value for conceptual understanding of services, they may not be sufficient, as it is important to study quality in each specific situation (Lagrosen, 2001). For this reason, the review of specific quality dimensions in higher education is presented below.

Quality in higher education

Quality in higher education may even be more difficult to define than in most other sectors. Discussing quality in higher education, Harvey and Green (1993) propose five discrete but interrelated ways of thinking about quality:

- (1) Quality as exceptional - Quality is regarded in terms of excellence, which means something special or exceptional. High standards are exceeded.
- (2) Quality as perfection or consistency - The focus is on processes and specifications that are aimed to be perfectly met. Excellence, in this case, means “zero defects”, i.e. perfection.
- (3) Quality as fitness for purpose - Quality has meaning only in relation to the purpose of the product. In traditional quality management, the “fitness for purpose” notion is related to the customers (Juran, 1988). In higher education, however, Harvey and Green see the view of quality as “meeting customer requirements” as problematic due to the contentiousness of the notion of “customer” and the difficulty for, e.g. students to specify what is required.

- (4) Quality as value for money - Quality is equated with levels of specifications and is directly related to costs.
- (5) Quality as transformation - The process should ideally bring about a qualitative change, a fundamental change of form such as the phase transition when water transforms into ice as the temperature is lowered. This view can be found in the thinking of major Western philosophers as well as in Eastern philosophies. In education, the transformation can take the form of enhancement and empowerment.

Various methods of defining or categorizing ways of thinking about quality have evolved in the literature. One particular approach that has gained prominence is referred to as “the stakeholder approach” (Watty K, 2003). In early attempts to define quality in higher education, Harvey *et al.*(1993) noted that there are many ways to define quality in higher education and that any definition of quality in higher education is “stakeholder relative”.

Accordingly the following section explains our approach of obtaining undergraduates perception.

METHODOLOGY

The research design chosen consisted of two phases.

- 1) A review of quality dimensions from the literature.
- 2) The development of a questionnaire instrument compiled from the established framework of quality values. This questionnaire instrument was applied to randomly selected final year 100 undergraduates of four different departments of the Faculty of Commerce and Management studies of the University of Kelaniya.

Operationlising variables

The construct, ‘quality’, was measured by using following five dimensions which are commonly identified dimension of quality in higher education by many researchers’ in their frame works.

Five dimensions are Resource Availability, Information and Responsiveness, Competence of academic staff, Assessment and Monitoring, Corporate collaboration.

Six items were generated to measure Resource Availability, The dimension Information and Responsiveness was tested using seven items. The dimension Competence of academic staff was tested using five items. Five items for Assessment and Monitoring, Nine for Corporate collaboration. Altogether thirty two items were generated. All items were assessed through respondents’ perceptual evaluation on a five point liker scale; the respondents were asked to mark on a five-level interval scale the importance that they attach to different dimensions. The extremities of the scale were “Strongly disagree” and “Strongly agree”.

FINDINGS

To define a workable set of quality dimensions, factor analysis was carried out. The latent root criterion, implying that factors should have an Eigen value higher than one to be considered significant (Hair et al .1998) was used. This resulted in generating five dimensions. In order to simplify the columns Varimax orthogonal rotation (Hair et al .1998) was performed. Normally, loadings of at least 0.5 are considered to be practically significant (Hair et al .1998). Items which did not load sufficiently on any of the dimensions were deleted from further analysis. The dimensions are presented in Table 1.

Table 1 - Factor Analysis of the quality dimensions (Extraction method: Principal component analysis, loadings after Varimax Rotation with Kaiser Normalization, only loadings greater than 0.5 with Eigen value more than one).

	Component				
	1	2	3	4	5
Personal attention to students	.877				
Willingness to help	.835				
Understanding student needs	.778				
Content of the curriculum	.581				
Defined course and module structure	.579				
Guided reading	.557				
Ability to contribute to the corporate world		.819			
Courses created in cooperation with business		.778			
Outsiders perception about quality of degree programmes		.775			
Provision of internship facilities in related fields		.681			
Computer laboratory			.777		

Knowledge dissemination techniques						.739	
Teaching and learning aids						.673	
Basic campus facilities						.613	
Sufficient staff						.480	
Professional qualifications							.766
Practical experience / exposures							.759
Up to date knowledge							.703
Lecturers commitment							.918
Use of research in teaching							.843
Research skills of staff							.807
Availability of modern communication equipments							.715
Two way communication during lectures							.627
Continuous assessment							.602
Percentage of variance explained	7%	14%	9%	39%			0.48%

Table 2 - The labels for the quality dimensions

Component Number	Quality Dimensions
1	Information & Responsiveness
2	Corporate Collaboration
3	Resource Availability
4	Competence
5	Assessment & Monitoring

ANALYSIS

Validation of measurements

Unidimensionality :

The quality dimensions were arrived at a priori and factor analysis is carried out to provide a strong test for the theoretically specified dimensionality taking each dimension at a time. The Kaiser –Meyer-Olkin (KMO) and Bartlett’s Test measure of sampling adequacy were performed to examine the appropriateness of factor analysis.

Table 3 - KMO and Bartlett's Test –Dimensions of Quality

Dimension		Resource Availability	Assessment & Monitoring	Information & Responsiveness	Competence	Corporate Collaborator
Kaiser-Meyer-Olkin Measure of sampling adequacy		0.788	0.555	0.836	0.647	0.863
Bartlett's Test of Sphericity	Approx. Chi-Square	148.14	47.834	259.187	129.731	359.419
	df	10	3	15	3	21
	Sig.	0.000	0.000	0.000	0.000	0.000

The results shown in Table 2 indicate that the factor analysis is appropriate (KMO values are on an above 0.5) and that variables are uncorrelated in the population (approx. Chi-Square values are significant at 0.000 levels). The minimum value is represented for the dimension Assessment and Monitoring and the dimension Corporate Collaboration assign .863 highest value.

Reliability:

The internal consistency of the quality construct and dimensions of the same was tested through Cronbach’s Alpha. The results are shown below in the Table 4.

Table 4 - Reliability Statistics-Quality Dimensions

Dimension	Resource Availability	Assessment & Monitoring	Information & Responsiveness	Competence	Corporate Collaboration
Cronbach's Alpha	0.801	0.077	0.856	0.812	0.883
N of items	5	3	6	3	7

Results show that the Alpha for each dimension exceeds the criterion (0.7) except quality dimension “Assessment and Monitoring” which shows a poor reliability. All other dimensions

hold significant reliability test values. Of all these dimensions Corporate Collaboration again reserves the highest figure of Cronbach Alpha value.

Table 5 - Ranking of the Quality dimensions

Quality Dimensions	Mean Value	Rank
Resource Availability	2.06	3
Assessment & Monitoring	1.36	5
Information & Responsiveness	2.00	4
Competence	3.55	1
Corporate Collaboration	2.12	2

The rankings show that Competence is considered as the most important dimension of quality while the dimension; Assessment & Monitoring reserves the least priority.

CONCLUSION AND RECOMMENDATIONS

This research was carried out to examine what dimensions constitute quality in higher education from the perspective of undergraduates. This resulted in identification of five dimensions of quality from undergraduates' perspective. The results show that all the quality dimensions together accounted for 69.48 percent of the total variance and the contribution of the dimension, Assessment and Monitoring is very insignificant. The dimension Competence of academic staff is perceived as the most important dimension of quality by undergraduates. However since this study was limited only to undergraduates' perspective further research in this arena from the perspective of other stakeholders should be valuable.

REFERENCES

- Eiglier, P. & Langeard, E. 1993. *Servuction, Le Marketing des Services*, 5th ed., Ediscience International, Paris.
- Gronroos, C. 1990. *Service Management and Marketing: Managing the Moment of Truth in Service Competition*, Maxwell Macmillan, Singapore.
- Gronroos, C. 2000. *Service Management and Marketing, A Customer Relationship Management Approach*, Wiley, Chichester.
- Harvey, L. & Green, D. 1993. *Defining Quality*, Assessment and Evaluation in Higher Education, 18(1), 9-34.
- Hair, J.F., Anderson, R.E., Tatham, R.L. & Black, C.B. 1998. *Multivariate Data Analysis*, 5th ed., Prentice Hall Inc., Upper Saddle River.
- Juran, J.M. 1988. *Juran on Planning for Quality*, The Free Press, New York, NY.
- Lagrosen, S. 2000. *Born with quality, TQM in a maternity clinic*, The International Journal of Public Sector Management, 13(5), 348-354.
- Mohomad, S.O. & Elaine, M.A. 1996. *A framework for the dimensions of quality*, Quality Assurance in Education, 29(2), 115-34.
- Neave, G. 1994. *The politics of quality: Developments in higher education in Western Europe*, European journal of education, 29(2) 115-34.
- Parasuraman, A., Zeithaml, V.A. & Berry, L.L. 1985. *A conceptual model of service quality and its implications for future research*, Journal of Marketing, 49, 41-50.
- Srikanthan, G. and Dalrymple, J. 2003. *Developing alternative perspectives for quality in higher education*, The International Journal of Educational Management, 17(3), 126-36.
- Stefan, L., Roxana, S.H. & Leitner, M. 2004. *Examination of the dimensions of quality in higher education*, Journal of Quality Assurance in Education, 12(2), 61-69.
- Telford, R. & Masson, R. 2005. *The congruence of quality values in higher education*, Quality Assurance in Education, 13(2), 1000-1009.
- Watty, K. 2003. *When all academics learn about quality*, Quality in Higher Education, Carfax Publishing, London, 9(3), 213-221.