

# Impact of Service Quality on Students' Satisfaction in a Ghanaian Public Tertiary Institution

Eshun, E. F. (corresponding author)

Department of Communication Design Faculty of Art

College of Art & Built Environment

Kwame Nkrumah University of Science & Technology, Kumasi, Ghana

E-mail: [efeshun.art@knust.edu.gh](mailto:efeshun.art@knust.edu.gh)

Badu, A. K.

Department of Communication Design Faculty of Art

Commission for Architecture and the Built Environment

Kwame Nkrumah University of Science & Technology, Kumasi, Ghana

Korwu, P.

Department of Communication Design Faculty of Art

Commission for Architecture and the Built Environment

Kwame Nkrumah University of Science & Technology, Kumasi, Ghana

Received: July 31, 2018    Accepted: September 1, 2018    Published: September 7, 2018

doi:10.5296/ijld.v8i3.13447

URL: <https://doi.org/10.5296/ijld.v8i3.13447>

## **Abstract**

This study aims at exploring the relationship between service quality dimensions and overall service quality dimensions (tangibility, responsiveness, reliability, assurance and empathy) and students satisfaction. Additionally, this study also looks at the critical factors in service quality dimensions that contribute most to the satisfaction of the students. The data was collected using a set of questionnaire from 798 undergraduate students who offered various

bachelor degrees in a public higher education institution in Ghana. The study provides empirical evidences of these relationships. The results of this study affirms the results of Parasuraman's SERVQUAL (1985) study, which related to the factors contributing to students' satisfaction. The outcome of the study amplifies the assertion that service quality (tangibility, responsiveness, reliability, assurance and empathy) has a positive impact on student's overall satisfaction.

**Keywords:** Service quality, SERVQUAL, Public higher education, student's satisfaction.

## 1. Introduction

Several studies such as Perez (2002), Psacharopoulos and Patrinos (2002; 2004), UNESCO (2011) and others have asserted that investing in education is a productive and an important venture that always yields multiple results. This is because such investment leads to a very effective and dynamic educational system that leads to better student performance, a prerequisite for human capital development. Also, the World Bank (2010) strongly argues that quality and relevant higher education is a very necessary key in stimulating innovations in science and technology, discovery of new resources and sources of sustainable energy and solutions to many other problems that have plagued especially developing countries especially Sub-Sahara Africa. Association of African Universities (AAU) (2015) has also argued that for Africa to achieve integration, peace, prosperity and peerage in the global economy, it is imperative that the human resource capital of the continent is developed. This, the AAU claimed, can only be achieved through quality higher education.

However, as posited by The World Bank (2010), Beaumont (2012), Tsevi (2014) and others, university funding cuts in many countries the world over and challenges of dealing with increasing student numbers (Henard & Rosevere, 2012; Materu, 2007) have resulted in a situation where researchers, players in the educational sector and industry executives tend to criticize the quality of service delivery at higher educational institutions especially in developing countries. The major concerns of these critics usually bother on poor funding of the institutions, leading to poor quality delivery, proliferation of private institutions (some of which lack accreditation from national regulatory bodies), infrastructural concerns, course content, relationship between the disjoint between academia and industry and others (Tsevi, 2014).

LeBlanc and Nguyen (1997) and Rowley (1996) argue that there is the need for authorities of higher educational institutions to guard the academic preferences, knowledge, quality of service in order not to only meet expectations of students but to also ensure that they (higher educational institutions) become more progressive and effective in the service they offer. This is especially important because, as Beaumont (2012) and Yarimoglu (2014) put it, the service provided by higher educational institutions is an extremely intangible service. These calls seem to have attracted the attention of stakeholders in the higher educational sector in most countries as it was asserted by Palli and Mamilla (2012) that most institutions of higher learning, especially in developing countries are now more concerned with offering quality service in order to improve educational standards.

The above assertions bring to the fore the need to evaluate the quality of educational service provided by higher educational institutions. Measurement of service quality has so many advantages for organisations (including higher educational institutions): customer satisfaction, customer loyalty, customer retention, positive word of mouth and ultimately, increased profitability (Blixrud, 2002; Davis, Lu, & Veale, 2009; Daymond, 2015; Voss, Gruber, & Szmigin, 2007).

Based on the above, the current exploratory study sought to much the level of students' satisfaction with the quality of service offered at the KNUST. This assessment is necessary considering the large number of mostly private institutions of higher education that have sprung up in Ghana over the past few years as demand for higher education has risen in the country.

The study was guided by the following research questions:

RQ1: Does perceived service quality have an impact on learner's overall satisfaction?

RQ2: What is the nature and strength of relationship between service quality dimensions and satisfaction among the learners in a public tertiary institution?

RQ3: What are latent factors in service quality that contribute most to the learners' satisfaction?

## **2. Literature Review**

### *2.1 Higher Educational Sector in Ghana*

There has been increased in the number of institutions of higher learning in Ghana in recent years. These institutions are broadly classified into four: universities, technical universities, polytechnics and university colleges. While the universities are made up of both private and public ones, almost polytechnics and technical universities are public institutions of higher learning while most university colleges are private institutions are affiliated to the public universities in the country.

According to the National Accreditation Board information, as of 2017 Ghana can boast of ten (10) public universities, six (6) technical universities, seventy-four (74) private tertiary institutions offering degree programmes, four polytechnics, and several other institutions of higher learning. With the explosion of these institutions of learning, a number of studies Utaka (2008), Tsevi (2014), Esia-Donkoh and Antwi (2015) and industry watchers have expressed concern about the quality of service delivered at these institutions, especially with regards to quality of teaching and learning.

Such concerns are usually based on arguments such as the competence of the teaching staff (Tettey, 2006; Mayer & Wilde, 2015), large class sizes which does not allow individual attention from lecturers (Benbow, Mizrahi, Oliver, & Said-Moshiro, 2007; Esia-Donkoh & Antwi, 2015) and poor or inadequate infrastructure in these institutions (Tsevi, 2014; Esia-Donkoh & Antwi, 2015), the gap between industry and academia (Amu & Offei-Ansah, 2011; Attah, 2017; Avoronyo, 2013; Mustafa, 2012) and others. These concerns bring to the fore the need to establish what the acceptable standards are when it comes to quality service

delivery in an institution of higher education.

### *2.2 Higher Education and Quality Service*

According to several authorities on service quality, in order to ensure good quality service at an institution of higher learning, several steps needed to be in place. These include improving quality assurance in teaching and learning, building teachers proficiencies, involving learners, curriculum and pedagogical alignment towards quality service delivery, highlighting innovation and periodic assessment of impacts (Bess & Dee, 2008; ENQA, 2009; Gibb, 2010; Henard & Rosevere, 2012).

It has also been asserted by Ewell (2010) and Hall, Swart and Duncan (2012) that as major business enterprises, institutions of higher education needed to strengthen their customer-oriented approaches as they grapple with new challenges such as emphasis on students as customers, challenges with faculty, managing student expectations, dealing with competitive markets (other institutions) and maintaining very high standards of higher learning. In addition, Wright and O'Neil (2002) and Nair, Mertova and Murdoch (2012) insisted that there is the need for institutions of higher education to periodically assess their performance and examine their approaches to quality management to enable improvement and benchmarking. These informed the decision by several authors assess the quality of service offered in higher educational institutions, usually from the perspective of the students. These were done in an attempt to identify students' expectations from their institutions.

### *2.3 Quality Service*

Service quality has been defined severally by different authors, basically as a result of the lack of consensus among researchers as to what exactly constitutes service quality. For instance, Parasuraman, Zeithaml and Berry (1985) view service quality as the difference between customer expectations and perceptions of service quality, while Gefen (2002) argues that service quality is subjective assessment that a customer makes between the quality of the service they want to receive and what they actually think they got. Regardless of whichever way service quality is defined, Juran and De Feo (2010) and Crosby (1979) asserted that service quality can be seen from two angles: that of the service provider and that of the customer. These authors expressed the view that while quality means "conformity to requirements" to the service provider, it means "fitness for use" to the customer. Based on this argument, Lovelock and Wirtz (2011) and Yarimoglu (2014) insisted that the appropriate term to use when assessing service quality is "perceived service quality"; since measuring service quality is as a result of comparison of perceptions about the delivery of a specific service to a specific customer (whose perceptions of the quality of the service would most likely differ from that of another customer).

There are several measurement models, developed by different researchers, for use in assessing the quality of a service. Some of these include the SERVPERF model (Cronin & Taylor, 1992), the Evaluated Performance (EP) model (Teas, 1993), the IPA model (Martilla & James, 1977) and the HEdPERF model (Abdullah, 2006). However, the SERVQUAL instrument, which is based on the research of Parasuraman, Zeithaml and Berry (1985), is arguably one of the most popular service quality assessment models and it is used to assess

customers' satisfaction with a product or service as a result of the difference between customer expectations and product/service performance. In other words, it is used to assess the differential between quality potentials and actual perceptions of service quality.

#### 2.4 The SERVQUAL Instrument

The SERVQUAL, a portmanteau of “service quality” is an instrument which was primarily developed by Parasuraman, Zeithaml and Berry (1985). It has since been widely used by many other researchers such as Kumar, Kee and Manshor (2009), Javadi and Gol (2011), Aydin and Yildirim (2012), Penceliah, Noel and Adat (2015) and many others to measure service quality. The instrument typically has five main dimensions (independent variables) which are usually used to assess service quality and customer satisfaction (both of which serve as dependent variables). The table below presents the five dimensions of the SERVQUAL instrument and what each dimension measures.

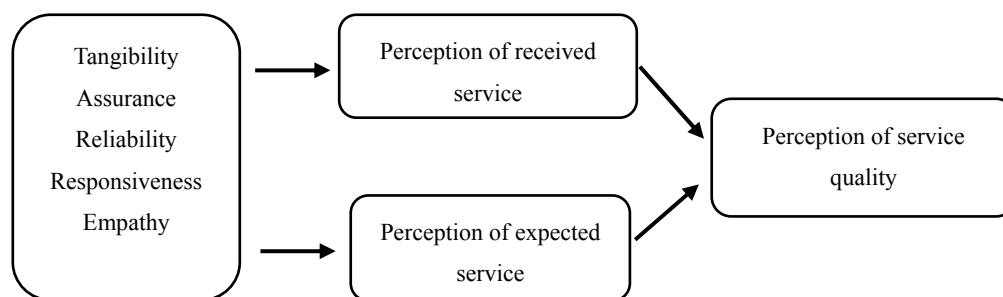


Figure 1. Conceptual framework of the study

Based on: Parasuraman, et al., (1985); Beaumont (2012)

The framework used for the study was based on those developed by Parasuraman, et al., (1985) and Beaumont (2012). The framework is based on the idea that a customer's perception of the quality of a service offered by an organisation is determined by two factors: what they expected and what they got. A comparison of this two leads the customer to form a perception of service quality at the particular organisation (in this case, a tertiary institution). Service quality, however, is determined by the five components of the SERVQUAL instrument, which this study adopted. Thus, the framework starts with the determinants of service quality, which are used by the customer to assess both received service and expected service, both of which in turn leads to the formation of a perception of the service.

### 3. Materials and Methods

The population of the study consisted of conveniently sampled students from five colleges in Kwame Nkrumah University of Science & Technology (KNUST), Kumasi, Ghana. The sample size was considered equal to the population (N= 9800). The data was collected using modified traditional SERVQUAL questionnaire developed by (Parasuraman et al., 1988, 1991) and Satisfaction questionnaire developed by Visoci and Chrom's (1998). The data was collected in three steps. First, a demographic data sheet was used to collect the data on

personal information including age, level of education and gender. Second, service quality questionnaire was administered to the participants. The scale consists of 44 items on a 5-point Likert scale. Third, school satisfaction questionnaire was administered to the participants who were conveniently drawn from various colleges. Refer to Table 1 for dimension description. The scale comprises 6 items on a 5-point Likert scale. The reliability of the questionnaires was also calculated using Cronbach alpha formula, which yielded a reliability coefficient of  $\alpha=0.930$  for service quality questionnaire and  $\alpha=0.922$  for school satisfaction questionnaire. As to the statistical measures, descriptive statistics including frequency, percentage, mean, standard deviation and tabulations were used to describe the data. Inferential statistics including Pearson correlation formula was used in response to research questions.

Table 1. Description of Dimension items

Domain	Definition	Items
Tangibility	The appearance of physical facilities, equipment, and personnel.	14
Assurances	The knowledge and courtesy of employees and their ability to inspire trust and confidence.	9
Reliability	The ability to perform the promised service dependably and accurately.	7
Responsiveness	The willingness to help customers and provide prompt service.	7
Empathy	The level of caring and individualized attention the firm provides to its customers.	7
Satisfaction	The level of student's satisfaction of the programme.	6

### 3.1 Reliability of Instrument

Reliability coefficients of the service quality variables are presented in Table 2.

Table 2. The mean scores and reliability

Dimensions	Mean	Cronbach Alpha	Hassan et al 2008
Tangibility	3.020	.836	0.908
Assurance	3.165	.833	0.887
Reliability	3.109	.740	0.874
Responsiveness	3.101	.809	0.854
Empathy	2.994	.813	0.881
Satisfaction	3.515	.922	0.938
Service Quality	3.050	.930	

All dimensions scored alpha coefficients above 0.74. The result compares with that of previous study by Hassan et al. (2008): tangibility 0.83 (0.908), assurance is 0.833 (0.887), reliability is 0.740 (0.874), responsiveness is 0.809 (0.854) and empathy is 0.813 (0.881).

### 3.2 Data Analysis

The data was analyzed using descriptive statistics (mean, median and standard deviation). For inferential statistics, correlation and ANOVA analysis was done since data used were interval in nature and did not violate normality assumption. Non-parametric test was also used for some data, which was transformed into categorical data.

### 3.3 Demographic and Profile of the Respondents

Table 3 shows statistics of respondents according to the year of study and courses for each of degree programme. The respondents from College of Engineering (ENG) represented 12.5 percent of the undergraduate student of, 26.9 percent (College of Science (SCI), 21.6 percent (College of Health), 12.8 percent (School of Business) and 26.2 percent (College of Arts & Social Sciences. Table shows that the majority of the respondents were Ghanaians (92.2%) and non-Ghanaians represented (<10%). Therefore, the percentage of nationality involved in the study is considered sufficient to represent the portion of the students based on nationality. The gender distribution were as follows, the male were 55.5 percent and the female were 44.5 percent. The ratio of gender was also deemed appropriate since the majority of the undergraduate students' population were males.

Table 3. Summary of descriptive statistics showing demographic and profile of the respondents

Demographic Variables	Category	Frequency Valid	Percentage (%)
Year	1st year	309	38.7
	2nd year	297	37.2
	3rd year	123	15.4
	4th year	69	8.6
College	Engineering (ENG)	100	12.5
	Science (SCI)	215	26.9
	Business (BUS)	102	12.8
	Health (HEALTH)	172	21.6
	Social Sciences (CASS)	209	26.2

Table 3.1. Summary of descriptive statistics showing demographic and profile of the respondents

Demographic Variables	Category	Frequency Valid	Percentage (%)
Gender	Male	443	55.5
	Female	355	44.5
Age	18-21	595	74.6
	22-25	180	22.6
	26-29	13	1.6
	Above 30	10	1.3
Nationality	Ghanaian	736	92.2
	Non-Ghanaian	62	7.8

Table 3.2. Stratified sample allocation

Student Status	Colleges					TOTAL
	ENG	SCI	BUS	HEALTH	SOC	
Male	79	172	68	0	124	443
Female	21	43	34	172	85	355
Total	100	215	102	172	209	798
Ghanaian	85	200	82	169	200	736
Non-Ghanaian	15	15	20	3	9	62
Total	100	215	102	172	209	798

*Engineering – ENG; Science – SCI; Business – BUS; Social Science - SOC*

## 4. Findings/Discussions

### 4.1 Descriptive Statistics

Means and standard deviations for all service quality items in higher education are presented in Table 4 shows that the mean scores for dimensions namely tangibility, assurance, reliability, responsiveness and empathy are between 2.9 and 3.5 and the mean score of service quality in education (which is the overall score of the five dimensions) was 3.06. The reliability of the dimensions was high ( $> 0.8$ ). Thus, it is reliable to conclude that the level of service quality in education for the students to be moderate.



Table 4. Summary of descriptive statistics showing the delivery of student related services in the study (n=798)

S/N	Dimension	Mean	SD
1	Tangibility	2.985	.6800
2	Assurance	3.192	.7635
3	Reliability	3.090	.7621
4	Responsiveness	3.086	.7775
5	Empathy	2.919	.8185
	Overall Quality	3.055	.5940

\* Group= 798

#### RQ 1: Impact of perceived service quality on student's overall satisfaction

The findings show that perceived service quality has a positive impact on student overall satisfaction (Table 5). Students' perception of the various aspects of service quality within the colleges correlated highly with overall satisfaction. This study show that to maintain students' overall satisfaction with higher education, university administrators should focus attention on the various aspects of service quality dimensions in order of priority. These aspects are the quality of administrative staff, academic staff, facilities (library, classrooms, and computing facilities) and student support.

Table 5. Comparison of mean scores across colleges

S/N	Dimension	ENG	SCI	BUS	HEALTH	SOC	Total Mean
		M	M	M	M	M	
1	Tangibility	2.80	2.96	3.39	2.83	3.03	2.99
2	Assurance	2.90	3.30	3.43	3.06	3.22	3.19
3	Reliability	2.83	3.16	3.41	2.95	3.10	3.09
4	Responsiveness	2.75	3.23	3.32	2.93	3.12	3.09
5	Empathy	2.67	3.04	3.23	2.75	2.90	2.92
6	Satisfaction	3.22	3.69	3.80	3.30	3.66	3.65
	Overall Quality	2.79	3.14	3.36	2.90	3.07	3.07

#### RQ 2: Nature and strength of relations between service quality dimensions and satisfaction

The Pearson's r correlation coefficient was applied to investigate the relationship between the student's satisfaction and studied independent variables. The statistics from Table 6 indicate

significant and positive relationship between service quality items (tangibility, assurance, reliability, responsiveness, and empathy) and overall service quality to students' satisfaction. Again from the statistics, assurance has the strongest correlation with satisfaction followed by responsiveness, reliability, empathy and tangibility in that order. The correlation between tangibility and student satisfaction is  $r=0.382$  implying that tangibility has a moderate relationship toward satisfaction similar with empathy ( $r=0.438$ ), reliability ( $r=0.460$ ) and responsiveness ( $r=0.472$ ). Only assurance show a stronger relationship with satisfaction with  $r=0.551$ . The relationship between overall service quality and students' satisfaction is  $0.591$  meaning that the relationship is stronger than moderate. Additionally, the output show that all the dimensions are highly correlated and very significant with one another. Consequently, the results established that the service quality dimensions (tangibility, assurance, responsiveness, reliability and empathy) have a significant relationship with students' satisfaction. These findings are consistent with those of Badu et al., (2016), Hassan et al., (2008) and Malik et al (2010) studies, in which tangibility, assurance, reliability, empathy and responsiveness are highly correlated and very significant with one another.

Table 6. Correlation results

Dimension Type	Y	X1	X2	X3	X4	X5	X6
Dependent	1						
Y=Satisfaction							
X1-Tangibility	.382**	1					
X2-Assurance	.551**	.607**	1				
X3-Reliability	.460**	.506**	.613**	1			
X4-Responsiveness	.472**	.461**	.601**	.581**	1		
X5-Empathy	.438**	.416**	.400**	.464**	.490**	1	
X6-Overall Quality	.591**	.750**	.821**	.810**	.806**	.721**	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

RQ 3: What are critical factors in service quality that contribute most to the satisfaction of the students?

Multiple linear regression was conducted to predict the explained variance of the student's satisfaction (dependent variable) based on some predictors (independent variables). As shown in Table 7 multiple correlation coefficient was 0.612 and F value 94.851 and it's significant at 0.01 and R square value was 0.375 meaning that the studied independent variables explain about 38% from the variance of student's satisfaction (as dependent variable). In the initial model, all five scales and Overall Quality were forced into the model with Students' satisfaction as the dependent variable. Items were then removed in order of the smallest contribution to explained variation. The initial model produced a statistically significant R2

and explained approximately 38% of the variance in Students' satisfaction. However, the Tangible variable produced a significant coefficient (beta=-.184) and this coefficient was in the opposite direction from that expected and significant at 0.05 level. Variables were removed until only statistically significant variables remained.

As figured at Table 7 the standardized coefficient (Beta) of assurance was positive and significant at 0.01 level whereas t values were 3.841. The standardized coefficient (Beta) of reliability was negative and not significant at 0.05 level, whereas t value was -.365. The final model yielded two service quality dimensions that produced a statistically significant relationship with Students' satisfaction. Again, Tangibility produced a significant but negative beta (-.184). However, Assurance produced a statistically significant, positive beta (.350) indicating that this dimension of perceived service quality was associated with increased Students' satisfaction.

Table 7. Multiple linear regression results

Dimension Type	Beta	t-value	Sig
X1-Tangibility	-.184	-2.275	.023
X2-Assurance	.350	3.841	.000
X3-Reliability	-.032	-.365	.715
X4-Empathy	.115	1.476	.140
X-Overall Quality	.780	2.901	.004

F = 94.851;

Multiple correlation coefficient = 0.612;

R square = 0.375.

## 5. Conclusion

This study suggests that the impact of service quality on the students in public tertiary institution seemed visible. As expected, assurance component of the SERVQUAL instrument. Also, reliability, responsiveness, tangibility, and lastly empathy dimensions SERVQUAL instrument. In particular, the findings of this study show that the students of the College of Engineering, College of Science and the School of Business have a moderate positive perception of service quality in the university. It further came to light that students from the School of Business have a better perception of service quality in the university than students of College of Engineering and College of Science. Overall, the College of Engineering students were also most satisfied with the assurance component and least satisfied with the empathy component. The students of the College of Science were most satisfied with the responsive component and least satisfied with the tangibility component.

One of the significant arguments of the service quality in higher education institutions contends

that service quality should mirror the growth of academic institution of higher learning, because it is an embodiment of essential components that shape academic environment. The higher education is influenced by technological developments as well as tangibility, assurance, reliability, empathy and responsive conditions and, in turn, strengthen customer-oriented approaches are reflected in service quality. In line with the arguments from the school psychosocial environment viewpoint, this study supports the thesis that the influence of the teaching and learning conditions was reflected in mainstream service quality. Consequently, the results amplify the assertion that service quality (tangibility, responsiveness, reliability, assurance and empathy) has a positive impact on student's overall satisfaction.

However, interpretation of the results of this type of exploratory study always requires a special caution. Rarely are there single-cause phenomena. Perceptibly, there would be some other factors that might explain the changes in the dimensions of service quality. Innovative institutional policies might have contributed to this trend in that they emphasized student engagement, quality materials, sound curriculum alignment and, importantly, improving teaching excellence and research. Technological development and awareness of quality assurance measures would also be considered as important variables.

While this study could not wholly attribute the variations in the use of SERVQUAL exclusively to the service quality conditions, nevertheless it appears reasonable to conclude that at least part of the changes were attributable to them. The function of service quality can be explained in two ways: managing students' expectations and customer-oriented approaches. As far as the latter is concerned, the changes in national economic status are worth considering as positive forces that would have affected the higher education and, as a result, altered what had been contained in this study.

## **6. Recommendations**

The fact that the students have a moderate positive perception of service quality in the university implies that the university needed to do more to improve its service quality especially in the areas of empathy and tangibility. While the poor showing in the empathy component may be attributed to large class sizes (a problem that needed to be tackled), that of tangibility just reinforces the need for the university to improve its infrastructure. More specifically, while it is necessary for the university to work more towards the improvement of student satisfaction with all components of the instrument, it has to do more to improve the tangibles (infrastructure) in the Colleges of Engineering and Science.

## **References**

- Abdullah, F. (2006). The development of HEdPERF: A new measuring instrument of service quality for the higher education sector. *International Journal of Consumer Studies*, 30(6), 569-581. <https://doi.org/10.1111/j.1470-6431.2005.00480.x>
- Amu, M. E. K., & Offei-Ansah, C. (2011). Linking tertiary institutions to industries: Evidence from the Vocational and Technical Education Department of the University of Cape Coast. *International Journal of Vocational and Technical Education*, 2(5), 53-60. Retrieved from <http://www.academicjournals.org/IJVTE>

Association of African Universities (AAU) (2015). *Towards Innovative Models for Funding Higher Education in Africa*. Accra, Ghana: AAU.

Attah, O. (2017). *UG moves to bridge gap between industry, academia*. Online news article. Retrieved September 7, 2017 from <http://thebftonline.com/business/education/24287/ug-moves-to-bridge-gap-between-industry-academia.html>.

Avorny, R. (2013). Bridging the gap between the tourism industry and tertiary institutions offering tourism in Ghana: a case study of Cape Coast. *European Scientific Journal*, 2, 312-320.

Aydin, K., & Yildirim, S. (2012). The Measurement of Service Quality with Servqual For Different Domestic Airline Firms In Turkey. *Serbian Journal of Management*, 7(2), 219-230. <https://doi.org/10.5937/sjm7-1317>

Badu, A. K., Appiah, E., & Eshun, E. F. (2016). Service quality practices and students Satisfaction towards the department of Communication design. *Journal of Science and Technology*, 36(3), 86-95. <http://dx.doi.org/10.4314/just.v36i3.11>

Beaumont, J. (2012). *Service Quality in Higher Education: The students' viewpoint. Unpublished dissertation, University of Manchester School of Business, Manchester, England, UK*. Retrieved from <https://ughandbook.portals.mbs.ac.uk/Portals/0/Docs/my.../Dan%20Beaumont.pdf>

Benbow, J., Mizrahi, A., Oliver, D., & Said-Moshiro, L. (2007). *Large Class Sizes in the Developing World: What Do We Know and What Can We Do?* Washington DC: USAID. Educational Quality Improvement Program, Classroom, Communities, Schools & USAID. American Institutes for Research under the EQUIP LWA.

Bess, J. L., & Dee, J. R. (2008). *Organisational change in Higher Education*. Virginia: Sterling.

Blixrud, J. C. (2002). *Evaluating library service quality: use of LibQUAL*. 23rd Annual IATUL Meeting, Kansas City, KS. Retrieved from <http://www.libqual.org/documents/admin/blixrud.pdf>

Cronin, J. J. Jr., & Taylor, S. A. (1992). Measuring service quality: a re-examination and extension. *Journal of Marketing*, 56, 55-68. Retrieved May 13, 2017 from <https://doi.org/10.2307/1252296>

Crosby, P. B. (1979). *Quality is free*, New York: McGraw-Hill.

Davis, P., Lu, N. T., & Veale, R. (2009). Importance of Service Quality across Different Services Types: An Exploratory Study of Australian and Chinese Consumers. *Australian and New Zealand Marketing Academy*, 1-9.

Daymond, J. (2015). *Five reasons why customer service is important*. Blog post. Retrieved September 6, 2017 from <https://www.daymondjohnssuccessformula.com/launch-pad/five-reasons-why-customer-service-is-more-important-than-anything-else/> (September 6, 2017).

ENQA (2009). *Standards and Guidelines for Quality Assurance in the European Higher Education Area*. Helsinki: European Association for Quality Assurance in Higher Education (ENQA).

- Esia-Donkoh, K., & Antwi, T. (2015). Instructional, psychological and social effects of large classes on students of the Department of Basic Education, University of Education, Winneba, Ghana. *European Journal of Research and Reflection in Educational Sciences*, 3(3), 63-78. ISSN 2056-5852
- Ewell, P. (2010). Twenty Years of Quality Assurance in Higher Education: What's Happened and What's Different? *Quality in Higher Education*, 173-175. <https://doi.org/10.1080/13538322.2010.485728>
- Gefen, D. (2002). *Reflections on the Dimensions of Trust and Trustworthiness among Online Consumers*.
- Gibb, G. (2010). *Dimensions of quality*. Higher Education Academy, September 2010.
- Hall, C., Swart, W., & Duncan, S. (2012). Balancing Customer Needs and Standards in Higher Education. *Quality Approaches in Higher Education*, 3(1), 1-8.
- Hasan, H. F. A., Ilias, A., Rahman, R. A., & Razak, M. Z. A. (2008). Service quality and student satisfaction: A case study at private higher education institutions. *International Business Research*, 1(3), 163-175. <https://doi.org/10.5539/ibr.v1n3p163>
- Henard, F., & Rosevere, D. (2012). *Fostering Quality Teaching in Higher Education: Policies and Practices*. Paris: Organisation for Economic Co-operation and Development (OECD).
- Javadi, M.H., & Gol, R. (2011). Service quality evaluation in general department of health insurance of Fars Province using a Servqual model (case study: Shiraz), *Interdisciplinary Journal of Contemporary Research in Business*, 3(4), 118-125.
- Juran, J. M., & De Feo, J. A. (2010). *Juran's Quality Handbook: A Complete Guide to Performance Excellence*. New York: Mc Graw Hill.
- Kumar, M., Kee, F. T., & Manshor, A. T. (2009). Determining the relative importance of critical factors in delivering service quality of banks; An application of dominance analysis SERVQUAL model. *Managing Service Quality*, 19(2), 211-228. <https://doi.org/10.1108/09604520910943198>
- LeBlanc, G., & Nguyen, N. (1997). Searching for excellence in business education: An exploratory study of customer impressions of service quality. *International Journal of Educational Management*, 11(2), 72-79. <https://doi.org/10.1108/09513549710163961>
- Lovelock, C., & Wirtz, J. (2011). *Services Marketing: People, Technology, Strategy* (7th ed.). New Jersey: Pearson.
- Malik, M.I., Saleem, F., & Ahmad, M. (2010). Work Life Balance and Job Satisfaction Among Doctors in Pakistan. *South Asian Journal of Management*, 17(2), 112-123. Retrieved from <https://www.questia.com/library/journal/1P3-2125409871>
- Materu, P. (2007). *Higher Education Quality Assurance in Sub-Saharan Africa: Status, Challenges, Opportunities, and Promising Practices*. World Bank Working Paper No. 124; Africa Human Development Series. Washington, DC: World Bank. <https://doi.org/10.1596/978-0-8213-7272-2>
- Martilla, J. A., & James, J. C. (1977). Importance-Performance Analysis. *Journal of Marketing*, 41(1), 77-79. <https://doi.org/10.2307/1250495>

- Mayer, P., & Wilde, M. (2015). *Managing Change at Universities – A selection of case studies from Africa and Southeast Asia – Volume II*. Osnabruck: University of Applied Sciences.
- Mustafa, M. H. (2012). The non-consonance between tourism universities' programs and the needs of tourism employment in Jordan. *International Education Studies*, 5(1), 448 - 482.
- Nair, C. S., Mertova, P., & Murdoch, N. (2012). An Integrated Approach to Quality Enhancement in a Multi-Campus University. *Quality Approaches in Higher Education*, 3(1), 12 - 17. ISSN 2161-265X
- Palli, J. G., & Mamilla, R. (2012). Students' Opinions of Service Quality in the Field of Higher Education. *Creative Education*, 3(4), 430-438. <https://doi.org/10.4236/ce.2012.34067>
- Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 4(4), 41 – 50. <https://doi.org/10.2307/1251430>
- Parasuraman, N., 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. Retrieved from <https://search.proquest.com/openview/7d007e04d78261295e5524f15bef6837/pdf>
- Penceliah, D. S., Noel, D. T., & Adat, N. 2015. Customer satisfaction within pharmacies in a supermarket: a South African perspective. *Problems and Perspectives in Management*, 13(2), 452-459.
- Perez, C. (2002). *Technological Revolutions and Financial Capital: The Dynamics of Bubbles and Golden Ages*. Cheltenham, UK: Edward Elgar. <https://doi.org/10.4337/9781781005323>
- Psacharopoulos, G., & Patrinos, H. (2002). *Returns to Investment in Education: A Further Update* (Policy Research Working Paper 288). Washington, DC: World Bank.
- Psacharopoulos, G., & Patrinos, H. (2004). *Returns to Investment in Education: A Further Update*. Washington, DC: Taylor & Francis Ltd.
- Rowley, J. (1996). Motivation and academic staff in higher education. *Quality Assurance in Education*, 4, 11-16. <https://doi.org/10.1108/09684889610125814>
- Tetty, W. J. (2006). *Staff retention in African Universities: elements of a sustainable strategy*. Washington DC: World Bank.
- The World Bank (2010). *Financing Higher Education in Africa*. Washington DC: The World Bank. <https://doi.org/10.1596/978-0-8213-8334-6>
- Teas, R.K. (1993). Consumer expectations and the measurement of perceived service quality. *Journal of Professional Services Marketing*, 8(2), 33–54. [https://doi.org/10.1300/J090v08n02\\_05](https://doi.org/10.1300/J090v08n02_05)
- Tsevi, L. (2014). Private Higher Education's Quality Assurance in Ghana. *International Higher Education*, 75, 22-24. <https://doi.org/10.6017/ihe.2014.75.5437>
- UNESCO (2011). *Transforming Education: The Power of ICT Policies*. Paris: UNESCO.
- Utaka, G. (2008). *The Emergence of Private Higher Education and the Issue of Quality Assurance in Ghana, the Role of National Accreditation Board (NAB)*.

Voss, R., Gruber, T., & Szmigin, I. (2007). Service quality in higher education: The role of student expectations. *Journal of Business Research*, 60(9), 949-959. <https://doi.org/10.1016/j.jbusres.2007.01.020>

Wright, C., & O'Neil, M. (2002). Service Quality in the Higher Education Sector: An Empirical Investigation of Students' Perceptions. *Higher Education Research and Development*, 21(1), 23-29. <https://doi.org/10.1080/07294360220124639>

Yarimoglu, E. K. (2014). A review on dimensions of service quality models. *Journal of Marketing Management*, 2(2), 79-93.

### **Copyright Disclaimer**

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).