

## Assessment of Students' Satisfaction of Service Quality in Takoradi Polytechnic: The Students' Perspective.

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### Abstract

Higher educational institutions are increasingly placing greater emphasis on meeting students' expectations and needs as student perceptions of higher educational facilities and services are becoming more important. To investigate students' satisfaction of service quality at the Takoradi Polytechnic, a study was conducted using the SERVQUAL instrument for measuring expectations and perceptions according to five quality dimensions. One hundred and eighty-eight students were sampled using the SERVQUAL questionnaire. The study shows that students' perceptions of service quality exceeded their expectations on four service quality dimensions namely tangibility, responsiveness, assurance and empathy, while their expectations for reliability exceeded their perceptions. It is recommended that, the management of Takoradi Polytechnic must maintain or improve if possible their tangibility, assurance, empathy and responsiveness. Nevertheless, the institution must take urgent measures to tactically tackle their reliability dimension.

**Key Words:** Service quality, Expectations, Perceptions, Takoradi Polytechnic

### 1.0 Introduction

Interest in the quality tertiary education has grown considerably over the last decade in Ghana. Strong interest in the phenomenon has been stimulated and sustained by a range of factors. Students need accurate information about educational quality to help them choose between the different programmes of study. Institutions need information about quality to help them benchmark their activities and market their products. Governments and other funding bodies need information to assist with funding, policy development and accountability. For these reasons, quality assurance has become vital in higher education (Coates, 2005). Takoradi Polytechnic as a tertiary institution operates under the supervision of the National Council for tertiary Education with direct governance and management vested in the Polytechnic Council and Academic Board respectively. Even though the Polytechnic offers 20 tertiary-level programmes and 4 final technician programmes, it has a strategic policy directed towards expansion and improvement of tertiary level programmes. There is the need for management of the Polytechnic to ensure quality service delivery in the institution.

### 1.1 Research Objectives

To determine the quality gap between students' expectations and perceptions of service delivery at Takoradi Polytechnic. The following objectives were chosen:

1. To identify students' expectations with respect to services delivery.
2. To assess the perceptions of students about service delivery at Takoradi Polytechnic.

### 1.2 Scope of the Study

The study is focused on second and third year Higher National Diploma students at the Takoradi Polytechnic. This was so because, it assumed that, the first year students were new and that, their appreciation of quality service in the Polytechnic may be limited.

### 1.3 Significance of the Study

The study is to create a foundation for quality service delivery in higher education through the assessment of students' satisfaction at the Polytechnic. The study was also designed for a thorough and detailed work to be conducted towards the development of an invaluable document not only for Takoradi Polytechnic, but also for other service and educational institutions in Ghana. The outcome would therefore, be useful to the Polytechnic to continuously improve the quality of service rendered to students and enhance quality teaching and learning as well as research services delivered by Takoradi Polytechnic.

## **2.0 LITERATURE REVIEW**

### **2.1 Quality in higher education**

According to Heck et al. (2000), higher education is under pressure to improve value in its activities and the present view for enhancing educational value is to spend effort on continuous improvement, focused on stakeholder interests especially student satisfaction. Student satisfaction is often used to assess educational quality, where the ability to address strategic needs is of prime importance (Cheng, 1990). Similarly, Tan et al. (2004) state that quality in education can be determined by the extent to which students' needs and expectations are satisfied.

### **2.2 A Conceptual framework.**

Based on literature review of three approaches on quality in higher education, Owlia and Aspinwall (1996) present a conceptual framework that covers six criteria depicting quality dimensions. These are tangible, competence, attitude, content, delivery and reliability as shown in table 2.1. These dimensions are indicative of the areas that should be of concern to ensure quality in higher education.

### **2.3 Service quality**

Service quality, from the organisation's perspective, means establishing requirements and specifications. Once established, the quality goal is based primarily on satisfying customers' needs. From the customers' perspective, service quality means how well the goods/services provided by the organization meet or exceed customer expectations (Mc Coll et al., 1998). In the context of this study, the service organization is the Takoradi Polytechnic and the customers are the students attending the institution.

Service quality is a concept that has stimulated considerable interest and debate in research literature because of the difficulties in both defining and measuring it, with no consensus on either (Wisniewski et al., 1996). Asubonteng (1996) defines service quality as the extent to which a service meets customers' needs or expectations. Service quality can thus be defined as the difference between customer expectations of service and perceived service. If expectations are greater than performance, then perceived quality is less than satisfactory and, therefore, customer dissatisfaction occurs (Parasuraman et al., 1985).

Outstanding service quality can give an organisation a competitive advantage which leads to superior sales and profit growth (Canning, 1999). Similarly, Kotler (1996) points out that if the perceived service of a given organisation exceeds expected service, customers are likely to use the service provider again or recommend the service provider to others. The Takoradi Polytechnic, as a service provider, is also likely to be evaluated on a similar basis. If students at the institution view perceived service as exceeding expected service, they would possibly further their studies at the institution or highly recommend it to potential students contemplating enrolling at the institution.

### **2.4 Service Quality dimensions in Higher Education**

The service dimension of quality is probably more akin to the educational process. Unlike physical goods, services are ephemeral in the extent that they can be consumed only as long as the activity or the process continues. Thus, there is inseparability of production and consumption. Thus, in higher education, this framework is more applicable to teaching and learning. Parasuraman et al (1985) identified the following dimensions of service quality.

#### **2.4.1 Reliability: Delivering on promises**

Ziethaml et al. (2003) describe reliability as the ability to perform the promised service dependably and accurately. Past research has shown reliability to be the most important determinant of perception of service quality among consumers. Ziethaml et al. (2003) suggest that customers want to do business with organizations that keep their promises. Similarly, all service providers need to be aware of customers' expectations of reliability. Examples of reliability in the context of this study would include students receiving services from the Polytechnic at the time it was promised to them, the Polytechnic showing sincere interest in solving students' problems as they arise, performing services to students correctly the first time and insisting on error-free records.

**Table 1 Quality Dimensions in Higher Education.**

<b>Dimension</b>	<b>Characteristics</b>
Tangible	<ul style="list-style-type: none"> <li>• Sufficient equipment/facilities</li> <li>• Modern equipment/facilities</li> <li>• Ease of access</li> <li>• Visually appealing environment.</li> <li>• Support services (accommodation, sports...)</li> </ul>
Competence	<ul style="list-style-type: none"> <li>• Sufficient (academic) staff.</li> <li>• Theoretical knowledge, qualification.</li> <li>• Practical knowledge.</li> <li>• Up to date.</li> <li>• Teaching expertise, communication</li> </ul>
Attitude	<ul style="list-style-type: none"> <li>• Understanding students needs</li> <li>• Willingness to help</li> <li>• Availability of guidance and counseling</li> <li>• Giving personal attention</li> <li>• Emotional courtesy</li> </ul>
Content	<ul style="list-style-type: none"> <li>• Relevance of curriculum to the future jobs of students</li> <li>• Effectiveness</li> <li>• Containing primary knowledge/skills</li> <li>• Completeness, use of computers</li> <li>• Communication skills and team working</li> <li>• Flexibility of knowledge, being cross-disciplinary</li> </ul>
Delivery	<ul style="list-style-type: none"> <li>• Effective presentation</li> <li>• Sequencing, timeliness</li> <li>• Consistency, fairness of examination</li> <li>• Feedback from students</li> <li>• Encouraging students.</li> </ul>
Reliability	<ul style="list-style-type: none"> <li>• Trustworthiness</li> <li>• Giving valid award</li> <li>• Keeping promises, match to the goals</li> <li>• Handling complaints, solving problems.</li> </ul>

Sources: Owlia and Aspinwall (1996)

#### **2.4.2 Responsiveness: Being willing to help**

Ziethaml et al. (2003) define responsiveness as the willingness to help customers and to provide prompt service. This dimension focuses on attentiveness and promptness in dealing with customer requests, questions, complaints and problems. Responsiveness is communicated to customers by the length of time they have to wait for assistance or attention to their problems. Responsiveness captures the notion of flexibility and ability to customize the service to the customers' needs. It is important that the service organization examines the process of service delivery from the customer's point of view, rather than the company's point of view.

For example, Polytechnic students' standard for prompt service delivery may differ significantly from management's standards at the institution. Examples of responsiveness in the context of this study would include Polytechnic employees telling students exactly when services will be performed, employees giving prompt service to students as well as being willing to help students when required to do so.

#### **2.4.3 Assurance: Inspiring trust and confidence**

Ziethaml et al. (2003) define assurance as employees' knowledge and courtesy and the ability of the service organization to inspire trust and confidence. This dimension is important for services which the customers perceive as involving high risk, or about which they feel uncertain about their ability to evaluate the outcomes, such as medical and legal services. This dimension of service quality refers to knowledge and courtesy of employees and their ability to instill trust and confidence. Trust and confidence may be embodied in the person that links the customer to the company, for example, in the Polytechnic context; this could be the lecturer who links the student to the campus. Examples of assurance in the context of this research would include the behaviour of employees at a Polytechnic instilling confidence in the students, students feeling safe in their transactions with the institution, employees of the Polytechnic being courteous with students as well as employees having the knowledge to answer students' questions.

#### **2.4.4 Empathy: Treating customers as individuals**

Ziethaml et al. (2003) define empathy as the caring, individualized attention a firm provides its customers. The essence of empathy conveys the message that customers are unique and special.

Examples of empathy, in the Polytechnic context, would include the institution giving students' personal attention and understanding the specific needs of their students.

#### **2.4.5 Tangibles: Representing the service physically**

Ziethaml et al. (2003) define tangibles as the appearance of physical facilities, equipment, personnel, and communication material. Tangibles provide physical representations of the service that customers use to evaluate quality. Although tangibles are often used by service companies to enhance their image, provide continuity and signal quality to customers, most service companies combine tangibles with another dimension to create a service quality strategy, for example, in the Polytechnic context, responsiveness and tangibles could be combined by delivering efficient service in clean, well equipped lecture facilities.

### **3.1 Population of the Study**

The entire students of Takoradi Polytechnic constituted the population for the study. Available data obtained from the Planning Unit of the Polytechnic indicated that the student enrolment strength is eight thousand nine hundred and six (8906) comprising three thousand, one hundred and seventy two (3172) first year students (2092 males and 1080 females), three thousand one hundred and ninety (3190) second year students, (2146 males and 1044 females), and two thousand, five hundred and forty-four (2544) third year students, (1767 males and 777 females). Codes were used to hide the identity of the students and make categorization easier. The first year students were omitted as they were new in the system and might therefore be limited in their understanding of service quality in the institution.

### **3.2 Research Sample and Sampling**

Since it was not possible to reach out to every individual in the Polytechnic, a sample was selected. Stratified sampling method was used to select respondents and this was done by putting the entire population into four main strata; comprising four schools. Five percent (5%) of the second and third year students from each school were chosen as respondents. The sample from each was further divided into male and female categories. Simple random sampling technique was then used to select the stipulated number of respondents from each category. The selected respondents were then put together to form sample for the research. The simple random sampling technique was appropriate because it gives each member in the population an equal chance of being selected.

### **3.3 The Research Instrument**

A primary data was collected and used for the research. A questionnaire was developed to elicit information on students' expectations and perceptions of service quality with particular reference to Takoradi Polytechnic. The

items were divided into two sections; section A of three items for students, sought information on students' expectations of service quality, section B dealt with students' perceptions of service quality.

A semi-structured questionnaire was used for the data collection. Questionnaires were personally administered with the help of research assistants to three hundred and seventeen (317) participants. Questionnaires were used because data collected using questions can be stable, constant and has uniform measure without variation. It also reduces bias caused by the researcher's presentation of issues.

### 3.4 Data Analysis Techniques

Out of the 317 questionnaires sent, 188 were retrieved. The quantitative data was analysed with Microsoft Excel and the Statistical Package for Social Science (SPSS) 16.0. The results were presented using descriptive statistics (percentage frequencies, graphs and charts).

### 4.1 Results and Discussions of Student's Response

This section presents questions used to elicit further information on some delicate issues affecting the total performance of students and their view on service encounters at the Takoradi Polytechnic.

**Table 2: Programmes of Study**

Programme of Study	Frequency	Percent
Building Technology	7	3.7
Civil Engineering	7	3.7
Furniture Design	4	2.1
Electrical/Electronic Engineering	10	5.3
Mechanical Engineering	11	5.9
Hotel, Catering & Institutional Management	8	4.3
Statistics	9	4.8
Accountancy	29	15.4
Marketing	25	13.3
Purchasing & Supply	25	13.3
Secretaryship & Management studies	6	3.2
Fashion Design	8	4.3
Ceramics	4	2.1
Graphics	15	8.0
Painting	4	2.1
Textiles	9	4.8
Sculpture	7	3.7
Total	188	100.0

**Source: Author's Field Survey, January, 2014**

The programme of study in any public or private institution is essential. This is due to the fact that it is the very ingredient for accreditation and ranking of the schools.

### 5.1 Findings on Service Quality

#### 5.1.1 Tangibility Dimension

Most students (94 percent) agreed that polytechnics must have state-of-the-art equipment, to aid employees to provide efficient service to students. Students' expectations were very high regarding the appearance of physical facilities in a polytechnic. The majority of respondents (85 percent) agreed that materials such as library books and handouts, which provide information to students, must be visually appealing. Most respondents (91 percent) agreed that polytechnics should have internet supported research facilities. Students' expectations regarding user friendly physical facilities were also consistently high. Students look at tangibles as quality indicators of the service quality in a polytechnic.

Employee image portrays the image of the institution therefore; Takoradi Polytechnic employees have to be well groomed and professional. The majority of the respondents (64 percent) agreed that Takoradi Polytechnic

employees are smart and neat-appearing. The design of the external and internal building can be used by customers to compare the quality of service from one institution to another (Palmer, 2001). Only 37 percent of the respondents agreed that Takoradi Polytechnic has state-of-the-art equipment. Physical evidence of service includes all the tangible representations of the service such as books and pamphlets (Parasuraman et al., 1988). Slightly less than half (48 percent) of the respondents agreed with the statement that materials such as books and pamphlets associated with the service at Takoradi Polytechnic are visually appealing. All these contributed to a higher grading of the tangibility dimension of the institution.

### **5.1.2 Reliability Dimension**

The highest expectation score for reliability related to a polytechnic showing sincere interest in solving students' problems. This score means that respondents expect polytechnic employees to show sincerity in solving their problems. Reliability is defined by Lovelock et al. (2004) as the ability to perform the promised service dependably and accurately. Polytechnic employees are expected to help students.

It was found out that, a slightly less than half (41 percent) of the respondents agreed that Takoradi Polytechnic insists on error-free records. A minority of respondents (43 percent) agreed that Takoradi Polytechnic shows sincere interest in solving students' problems and slightly more than half (57 percent) disagreed with the statement, creating an area of concern that needs to be addressed by the Polytechnic. Accuracy means that staff must actively attempt to do things correctly the first time as mistakes cost time and money (Dorian, 1996). Again, the minority of respondents (41 percent) agreed that Takoradi Polytechnic performs services correctly the first time, while 59 percent of the respondents disagreed that services at Takoradi Polytechnic services are performed correctly the first time and sometimes repeated effort was required in completing the service. Aggregately it shows that the perception of the general reliability was low beyond the expectation of the students.

### **5.1.3 Responsiveness Dimension**

To meet expectations of customers, staff should make provision for timely services (Parasuraman et al., 1988). Regarding the performance of service, the majority of respondents (68 percent) expect employees in a polytechnic to tell students exactly when a service will be performed, while 86 percent of the respondents expect that polytechnic employees will never be too busy to respond to students requests and the majority of respondents (87 percent) expect employees to give prompt service to students at all times.

### **5.1.4 Assurance Dimension**

Trust and confidence may be expected to be embodied in the person who links the customer to the company (Parasuraman et al., 1988). Polytechnic employees are expected to be consistently courteous with students and 84 percent of the respondents reinforced this point.

On the perception, it was found that majority of the respondents (60 percent) agreed that Takoradi Polytechnic designs academic curriculum that is relevant to the demands and trends of the current job market. Assurance is the ability of the company and its employees to inspire trust and confidence in what they give to their customers (Parasuraman et al., 1988). 43 percent of the respondents agreed that Takoradi Polytechnic employees consistently show courtesy to students, while 22% disagreed. The positive raring of these factors contributed to the higher rating of the assurance dimension of service quality at the Takoradi Polytechnic.

### **5.1.5 Empathy Dimension**

The highest expectation score for empathy was rated for students expecting the polytechnic to have students' interest at heart. Employees must understand the students' needs and be willing to meet their requirements efficiently. Empathy implies that employees will pay attention, listen, adapt and be flexible in delivering what individual customers need (Ziethaml et al., 2003). The majority of respondents (77 percent) felt that a polytechnic should have operating hours convenient to all students. One of the empathy dimensions was the willingness of Takoradi Polytechnic employees to advice and guide students in decision making. Majority of the respondents (60 percent) were satisfied with this attitude of employees, while only 21 percent of the respondents disagreed. Thirty-four percent of the respondents agreed with the statement that Takoradi Polytechnic gives individual attention to students, while 53 percent of the respondents disagreed and felt more individual attention is necessary from the institution. Thirty-one percent of the respondents agreed with the statement that Takoradi Polytechnic has employees that give personal attention to students, while 56 percent disagreed that employees at the polytechnic give students' personal attention, linking back to the sheer size and number of the student base. Empathy implies that employees will pay attention listen, adapt and be flexible in delivering what individual customers need (Ziethaml et al., 2003). The dimension of empathy is difficult to evaluate especially when the Takoradi Polytechnic employees have vast numbers of students to deal with and deliver individual attention. Time and resource constraints could hamper any large Polytechnic delivering exceptional service in this area.

## 5.2 Conclusions

The results have shown that students' perceptions about the service they receive from Polytechnics exceed their expectations. These results present challenges to staff and management of the Takoradi Polytechnic as the institution is expected to offer their students excellent service at all times and consistently improve or maintain the quality of services rendered. Excellent service can happen if management and staff employ teamwork, excellent communication and share ideas on improving service quality, which will result in improving students' satisfaction.

## 5.3 Recommendations

Based on the findings from the study, the following recommendations were made to the management of the Polytechnic:

### 5.3.1 Systems restructuring and employee training

It is recommended that management investigate and re-structure the delivery of quality service in the institution. Key contributing factors to this include role ambiguity which requires that the correct information and training be provided to all staff enabling them to handle students' requests and problems, employee-job fit which relates to the match between the skill of employees and the jobs they are required to perform. Technology-job fit could include all Takoradi Polytechnic employees being trained in computer literacy, thereby boosting efficiency and performance standards, regular review of the academic curriculum need to be pursued to meet the demands and trends of the current job market.

### 5.3.2 Decentralization of problem solving

Problem solving should be decentralized such that students find solutions to their problems without encountering any difficulty in channeling their grievances. If the Polytechnic staff do not have the mandate to solve problems of students and are forced to deal with multiple layers of management before student issues are resolved, perceived assurance as a quality dimension for students may prove to be negative.

### 5.3.3 Teamwork and support services improvement

It is also recommended that, management and employees of Takoradi Polytechnic need to view servicing students as a team effort and a good support service for all student-contact personnel needs to be in place. Moreover, the dimensions which were rated as good should be maintained such as the tangibility, responsiveness, empathy and assurance. Those that need a critical look to maintain its quality delivery; measures should be put into place to address some of the criteria under the reliability dimension to improve its quality. Reliability dimension includes delivering on your promise, showing sincere interest in solving students' problems, performing service right the first time, insisting on error-free records and ensuring fairness in examinations at all levels.

### 5.3.4 Facilities and equipments improvement

It is also recommended that management focus attention and resources on the purchase of new and state-of-the-art equipment to support research and ensure that the facilities that students utilize are well maintained and visually-appealing as well as keeping a serene environment conducive for academic work. Since new staff join the institution each academic year, it would be prudent that capacity building training is organized at least once a year for the staff to be abreast with their duties.

## References

- Asubonteng, P., McCleary, K. J. and Swan, J. E. (1996). SERVQUAL revisited: a critical review of service quality. *Journal of Services Marketing*, Vol. 10, No. 6, pp. 62-81.
- Canning, V. (1999). *Being successful in customer care*. Dublin: Blackhall.
- Cheng, Y. C. (1990). Conception of school effectiveness and models of school evaluation: a dynamic perspective. *Education Journal*, Vol. 18, No. 1, pp. 47-62.
- Coates, H. (2005). The value of Student Engagement for Higher Education Quality Assurance. *Quality in Higher Education*, Vol. 11, No. 1, pp. 25-36.
- Dorian, P. (1996). *Intensive Customer Care*. Sandton: Zebra Press.

Heck, R.H. & Johnsrud, L.K. (2000). Administrative effectiveness in higher education: improving assessment procedures. *Research in Higher Education* Vol. 41, No. 6, pp. 663 -85.

Kotler, P. (1996). *Marketing Management*. 7 Edition. New Jersey: Prentice-Hall.

Lovelock, C.H., & Wirtz, J. (2004). *Services Marketing*. 5<sup>th</sup> Edition. New Jersey: Prentice-Hall.

Mc Coll, R., Callaghan, B and Palmer, A. (1996). *Services Marketing: a managerial perspective*. Boston: McGraw-Hill.

Owlia, M.S., and Aspinwall, E.M., (1996). A framework for the dimension of quality in higher education; *Quality Assurance in Education*. 4 (2), 12-20.

Palmer, A. (2001). *Principles of service marketing*. 3 Edition. Berkshire: McGraw-Hill.

Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1988). SERVQUAL: A multiple item scale for measuring customer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.

Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, Vol. 49, pp. 41-50.

Tan, K.C. & Sei, W.K. (2004). Service Quality in Higher Education using an enhanced SERVQUAL Approach, *Quality in Higher Education*, Vol. 10, No. 1, pp. 17-24.

Wisniewski, M. and Donnelly, M. (1996). Measuring service quality in the public sector: the potential for SERVQUAL, *Total Quality Management*, Vol. 7, No. 4, pp. 357-365.

Zeithaml, V.A & Bitner M.J. (2003). *Services Marketing: Integrating customer focus across the firm*. 3<sup>rd</sup> Edition. New York: McGraw-Hill.