Service Quality in higher educational institutions

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Due to the rising competition between higher educational institutions, there is an increasing awareness of the importance of enhancing service quality to ensure the institutions continuous survival and success in the competitive market. However providing precise and adequate services to the customers from various backgrounds in the stakeholders list (e.g. faculty, student, parent, and employer) became great challenges to the higher educational institution nowadays. This paper empirically examines issues and some critical aspects concerning the development of service quality measures for educational institution that include various members of stakeholders as customers. This paper is expected to give a better understanding of service quality's improvement strategies in higher educational sector.

Keyword: Higher Education, Satisfaction, Service Quality, Stakeholders, Trends in Education

1. Introduction

There has been consistent recent growth in higher educational institutions (HEIs) worldwide and it is happening extensively in Asia. In most countries, the HEIs predicted to contribute to the growth of the country and provide vast job opportunities to the local and expatriates. However, descriptions of the HEIs environment provide cause for considerable concern of the prominent issue in service quality (Pereda, Airey and Bennett, 2007).   In particular, an emphasis on service quality is reported to be an expense of stakeholders' satisfaction, performance, loyalty and retention (Pezeshki, 2009). Such findings from the existing studies on HEIs' service quality have limited focus on the perception scope of service quality. Most of the studies mainly examine the service quality from students perceptive. However, there is little guidance in the literature about other stakeholder's perception of service quality and their subsequent satisfaction to the providing HEIs. Furthermore, the service quality measurements for HEIs are underdeveloped and its measurements nature appears to be adopted from studies examining vary industries. This paper therefore reports on a study that compares the students and academic staff perception as members of stakeholder toward the quality of service offered by administrate staff at the HEIs.

2. Higher Education Growth in Malaysia

The higher educational institution in Malaysia can be classified as public and private institutions as shown in Table 1. An analysis of the trends from 2000 to 2008 shows that the HEIs in Malaysia is growing rapidly. However the number of private HEIs is declining while the number of public HEIs is increasing. This change occurs because in recent years many private HEIs in Malaysia has been upgraded as public HEIs due to the quality recognized and accredited obtained for the programs offered in the private HEIs.

Table 1 *Higher Education Institutions in Malaysia*

2008	2005	2000	Institution - Public
20	18	11	University
24	20	11	Polytechnic
37	34	0	Community College
81	**72**	**22**	**Total**
			Institution – Private
37	27	8	University/ University College/ Branch Campus
487	532	632	College
524	**559**	**640**	**Total**
605	**630**	**662**	**TOTAL**

Throughout the years, the number of enrollment in the public HEIs and private HEIs has increased tremendously as shown in Table 2. These enrollments comprise local and international students. In the mid 1980s, only about 12 percent of the 17-23 age cohorts had access to higher education. By 2000, this figure increased to nearly 23 percent and by the end of 2006, this ratio has increased further to 29.9 percent. It was the aim of the Malaysian government to increase the ratio of 17-23 cohort groups in tertiary education to 40 percent by 2010. The Ministry also aimed to increase the ratio of science and technical students to 60 percent by 2010. And these aims were achieved respectively.

Table 2 *Enrollment in Higher Educational Institutions in Malaysia by Study Programs*

2010	2009	2008	**Enrollment in Public HEI**
17,718	14,669	12,243	Ph.D
49,676	44,880	36,094	Masters
-	6,230	2,956	Advance Diploma
274,690	272,012	270,156	Bachelor
94,026	82,208	83,833	Diploma
20,196	12,115	10,242	Matriculation
1,725	1,426	1,249	Professional
1,581	3,880	2,561	Others
459,612	**437,420**	**419,334**	**Total of Enrollment in Public HEI**
			Enrollment in Private HEI
3,804	2,278	1,331	Ph.D
14,038	13,372	8,540	Masters
220,299	198,760	151,591	Bachelor
1,787	1,548	-	Advance Diploma
216,788	190,689	177,773	Diploma
83,711	77,011	60,662	Certificate
1,202	683	-	Professional
541,629	**484,377**	**399,897**	**Total of Enrollment in Private HEI**

Source *Malaysia Higher Education Statistic, 2008-2010 (MOHE)*

As to ensure that the quality of education given to the increasing number of enrolment is assured, the numbers of academic staff are also being increased. More teaching staff with PhD and Masters Qualification are being recruited as academic staff in the HEIs (see Table 3).

Table 3 *Academic Qualification of Academic Staff*

2010	2009	2008	**Public HEI**
8,031	7,060	6,601	Ph.D
15,986	14,803	13,800	Masters
4,247	4,551	4,165	Bachelor
134	133	9	Diploma
173	133	509	Others
28,571	**26,700**	**25,084**	**Total Staff in Public HEI**
			Private HEI
2,449	2,360	2,116	Ph.D
14,344	11,755	10,370	Masters
11,228	9,880	8,485	Bachelor
1,271	1,239	2,342	Diploma
3,700	3,789	483	Others
32,992	**29,023**	**23,796**	**Total Staff in Private HEI**

Malaysia's Higher Education Development Plan (2011-1015) under 10th Malaysia Plan has set goals to attain competencies in 3 key areas presented briefly as below:

- To improve the competence of graduates.
- The quality of academic staff will be improved by increasing the number with PhDs, with a target of 75 percent in research universities and 60 percent in other public universities.
- The higher education institutions in the country will play a pivotal role in moving and providing the impetus for research, development and commercialization activities.

In this regard, the Government will implement holistic measures to strengthen education and training systems, starting from early childhood to tertiary education. Aside from providing the best teaching and learning infrastructure, the Government will also ensure that the quality of teachers and educators are of a high level (10th Malaysia Plan).

3. Branding of Higher Education in Malaysia

Branding is powerful in providing competitive advantages. Stensaker (2005) indicates some benefits of branding to higher educational institutions such as attracting students from high income families, provide information and image, improves institutional cooperation, instigates internal change, and re-discovering what they are and their basic purposes. Several studies have been done in the academic field referring to the phenomenon of repositioning or revitalising the brand.

Rosenthal (2003) in his study claimed that the literature of marketing in HEIs has been discussed since the early 1980s pertaining the significant areas of the branding process and the change process within the educational institutions' settings. Kotler and Fox (1995) have indicated the importance of branding in educational and believed that "branding can add value to an educational institution and to provide more satisfaction for the consumers". In fact, Whisman (2007) states that in today's complex and highly competitive marketplace, universities and colleges have turned to branding as a solution in dealing with today's global challenges.

In 2002, a dedicated Ministry of Higher Education was created in Malaysia and was given the responsibility to formulate policies and regulations and implement strategies and programmes on tertiary education. One of the foremost changes brought by this ministry is in recent years as to rebrand the public universities to achieve various visions, the public universities are being categories as Research Universities, Comprehensive Universities and Focus Universities. As to rebrand the public universities to achieve visions including world class university, the public universities are being categories as *Research Universities* that focuses on research activities and teaching based on research and development (R&D), *Comprehensive Universities* which offers courses in various fields of studies for all levels of education including pre-undergraduate, undergraduate, and post graduate degrees and *Focused Universities* which is focusing on specific fields such as technical, education, management and defense (Aziz, 2006).

Table 4 *Branding of Public Universities in Malaysia*

Focus Universities	Comprehensive Universities	Research Universities
Universiti Teknologi Malaysia Universiti Utara Malaysia Universiti Pendidikan Sultan Idris Universiti Tun Hussien Onn Malaysia Universiti Teknikal Malaysia Melaka Universiti Utara Malaysia Perlis Universiti Utara Malaysia Terengganu Universiti Utara Malaysia Pahang Universiti Pertahanan Nasional Malaysia	Universiti Teknologi MARA Universiti Islam Antarabangsa Malaysia Universiti Malaysia Sabah Universiti Malaysia Sarawak Universiti Sains Islam Malaysia Universiti Darul Iman Malaysia Universiti Malaysia Kelantan	Universiti Malaya Universiti Sains Malaysia Universiti Kebangsaan Malaysia Universiti Putra Malaysia

The categorization of the university is depicted in Table 4. On top of these three categories, one university in Malaysia has been chosen and given Accelerated Programme for Excellence (APEX) status for the first time. Universiti Sains Malaysia (USM) was inducted into the APEX status in 2008. APEX is a transformation plan to uplift the standard of public universities in Malaysia one step higher. USM has been selected and given additional assistance to compete with the top ranked global institutions and to build its image as Malaysia's first world-class university, which, in turn, will serve as a catalyst to help other local higher education institutions (HEIs) achieve excellence.

4. Internationalization of Higher Education

It was only in the mid-1980s that higher education in Malaysia was liberalized and opened to the private sector involvement. However the 1990s saw a significant shift in the development of tertiary education in Malaysia where efforts are made to internationalize Malaysian higher education. By 2006, there were about 42,000 foreign students in Malaysia.

The Malaysian government has taken a new initiative to make Malaysia as a Regional Centre of Educational Excellence. In line with this effort, the Government set up education promotion offices in four countries including China, Vietnam, Indonesia and Dubai. Malaysia Ministry of Higher Education (MOHE) also established Malaysian Education and Promotion Council to promote Malaysian higher education abroad. Visa arrangement for foreign students was simplified and other incentives were given to these students. Government also provides subsidies and incentives for universities and colleges to promote in overseas markets. The incentives are important to encourage branding of Malaysia education to be enhanced and up-lifted in overseas markets.

Seven Broad Thrusts of the education system to meet the challenges of globalization and the emergence of the K-economy are as below:

- Expanding the supply of highly skilled and knowledgeable manpower.
- Increasing accessibility to quality education and training.
- Improving the quality of education and training delivery system.
- Promotion of lifelong learning.
- Increasing the supply of science and technology manpower.
- Developing and promoting Malaysia as a regional centre of educational excellence.
- Reinforcing positive values.

Consequently, private universities and colleges have been playing a very significant role in complementing and supplementing the efforts of public sector in its social responsibilities of providing higher education opportunities and accessibility to quality education to Malaysians, and more recently to foreign students. In recent years (between 2008 and 2010) the number of international students' enrollment in public and private HEIs have increased from 69,164 to 86,919 and within the 3 years a total number of 236,833 international students have registered as tertiary students in HEIs in Malaysia (see Table 5).

Table 5 *Enrollment of International Students in Higher Educational Institutions in Malaysia*

Total	Private Higher Education	Public Higher Education	Enrollment of International Students
69,164	50,679	18,485	2008
80,750	58,294	22,456	2009
86,919	62,705	24,214	2010
236,833	**171,678**	**65,155**	**TOTAL**

Source *Malaysia Higher Education Statistic, 2008-2010 (MOHE)*

5. Service Quality in Higher Educational Institutions

With the changing scenario of higher education towards globalization and world class recognition, service quality issue became an important concern. Every HEIs need to take the necessary steps to ensure that the service quality are being offered at satisfactory levels to all the stakeholders of the respective HEIs as to ensure that the aim of the education ministry in transforming the educations sectors in Malaysia can be achieved in a short period of time.

There are many assumed stakeholders for higher education, and based on previous research, the service quality and its dimensions have to be determined by higher education organization's stakeholders including students, their parents and family, academic and administration staff, and society, (Ruben, 1995; Quinn, Lemay, Larsen and Johnson, 2009). Stakeholders' demands and expectations for service quality vary in terms of their

attitudes, needs and experiences.The various stakeholders can be differentiated as being the students who are the primary customers who receive the educational services, while other customers are parents who pay for their children's education, corporations who hire the students and faculty members who teach students the knowledge needed to perform the job (Quinn, et al., 2009). As to meet the demand and expectations of the stakeholders, it is necessary to identify the stakeholders' perception of the quality of services provided before attempting to improve them.

One of the sources of revenue in higher education is earned from the students as the customers therefore, understanding the service factor used by the customer to evaluate service quality is vital. If we accept students as customers, we have to stress the importance of the relationship between the students and the academic staff and administrative staff (Sines and Duckworth, 1994). The academic staff also vastly depends on the administrative staff to perform their task. In this study, the researcher believes that the service quality of administrative staff should not only be studied from students' perspective but should also examine it from academic staff perspective. Thus, the aim of the study is to compare the students' and academic staff's perception toward the quality of service offered by administrative staff in a reputable higher educational institution.

6. Service Quality and Satisfaction

Services have been described as a business deal that takes place between the service provider and the customer to achieve an expected outcome that satisfies the customer (Ramaswamy, 1996; Nadiri, Kandampully and Hussain 2009). The service quality model suggests that service quality is the gap between the customer's expectations and their perception of the service provider's performance. Parasuraman's (1985) SERVQUAL model, have undertaken significant work to measure service quality across a broad range of businesses including higher education institutions (Parasuraman, Zeithmal and Berry, 1985; 1988). Researchers found that the SERVQUAL model is useful when evaluating performance in higher education institutions (Soutar and McNeil, 1996; Quinn, et al., 2009; Gallifa, and Batalle, 2010). The SERVQUAL model, applied the expectancy-disconfirmation theory, which is a popular instrument for measuring service quality. Initially, Parasuraman et al.'s (1985) SERVQUAL scale for assessing customers' perceptions of service quality included 22 dimensions, but after two stages of scale purification, Parasuraman et al.'s (1988) revised and redefined the service quality scales into five dimensions, viz.

- **Tangibility** – physical facilities, equipment, and appearance of personnel;
- **Reliability** – ability to perform the promised service dependably and accurately;
- **Responsiveness** – willingness to help customers and provide prompt service;
- **Assurance** – knowledge and courtesy of employees and their ability to inspire trust and confidence; and
- **Empathy** – caring, the individualized attention the firm provides its customers.

Service quality is a predictor of customer satisfaction. Based on previous studies there is positive and significant relationship between tangibility (Mostafa, 2005), reliability (Wisniewski and Wisniewski, 2005), responsiveness (Wisniewski and Wisniewski, 2005), assurance (Andaleeb and Conway, 2006; Nadiri and Hussain, 2005), empathy (Andaleeb and Conway, 2006; Nadiri and Hussain, 2005), and customer satisfaction. These studies showed a positive relationship between service quality dimensions and customer satisfaction while their result indicates that service quality should be considered as an antecedent of customer satisfaction.

## 7. Gaps Model Analysis of Service Quality in Higher Educational

The basic objective of the responsibility center in a higher educational institution is to develop the strategies in such a way that in can influence the student's expectation and perception so that all the gaps as listed below take place due to the differences in expectations and perceptions can be filled up. In this study provider refers to responsibility centre, the faculty or school.

- **Provider Gap 1:** Not knowing what the students and academic staff expect.
- **Provider Gap 2:** Not selecting the right service designs and standards.
- **Provider Gap 3:** Not delivering to service standards.
- **Provider Gap 4:** Not matching performance to promise.
- **Provider Gap 5:** Not knowing what the responsibility center delivers
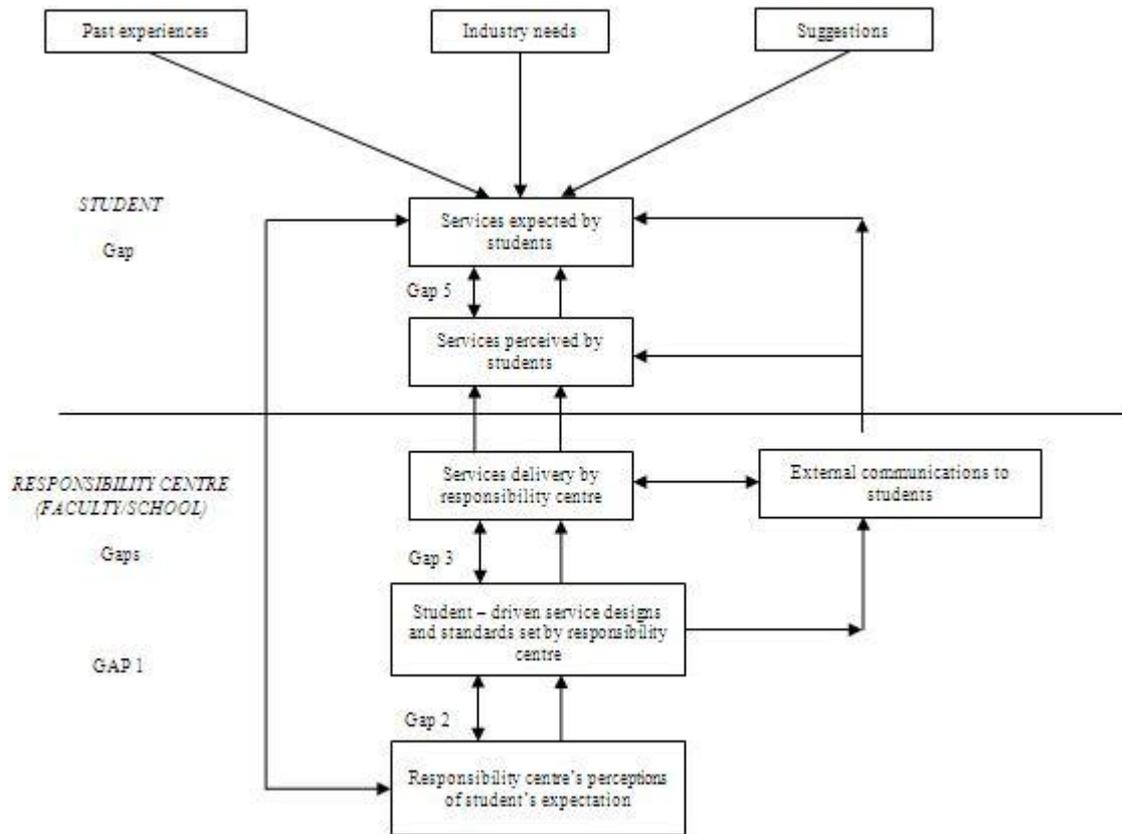
Source *Modified and extended from Rajasekharan, Muninarayanappa & Reddy (2009)*
Figure 1 *GAP Model of Service Quality in Higher Educational Institutions for Students*
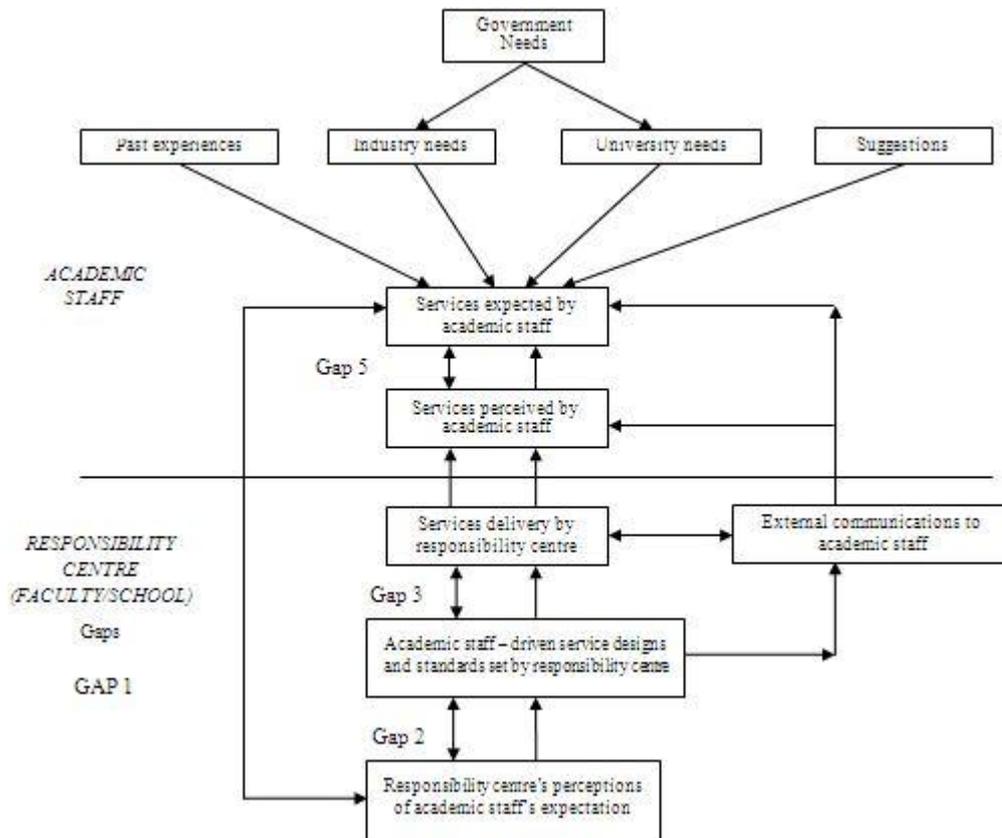
Source *Modified from Rajasekharan, Muninarayanappa & Reddy (2009)*
Figure 2 *GAP Model of Service Quality in Higher Educational Institutions for Academic Staff*

8. Methodology

A questionnaire was developed and piloted, using scales for service quality and satisfaction developed based on relevant literature. Data were collected in one of the public university chosen to become the model of world class university in future in Malaysia.

In order to assess its students and academic staff's perception towards the service quality of administrative staff, two sets of questionnaire was developed. The first set aims to investigate the students' perceptions towards the service quality offered by administrative staff. The questionnaire contained 25 variables related to the service offered by the administrative staff to the students. The questionnaire was targeted at local and international students pursing undergraduate and postgraduate studies, either full-time or part-time. Altogether 1,533 questionnaires were distributed, and 1468 usable questionnaire were returned with a usable response rate of 95.8 percent. While the second set of questionnaire aim to investigate the perceptions of academics on the service quality offered by administrative staff. It has 24 variables related to service offered by the administrative staff to the academic staff. A total of 500 questionnaires were distributed and 372 returned with usable response rate of 74.4 percent. The non-probability convenience sampling was employed for this study.

In both questionnaire, care was taken to include items that correspond to the five SERVQUAL dimensions identified by Parasuraman et al. (1988) with the addition of *accessibility* as a new measure. Some of the items in the questionnaire are modified to ensure the accuracy in measuring the services offered by administrative staff to students and to academic staff since their job task are not similar. All the items were measured on a 5-point Liker-type scale that varied from 1= strongly disagree to 5= strongly agree. The data was analyzed using Statistical Package for Social Sciences (SPSS Version 16.0). Statistical analysis such as frequencies, descriptive analysis and cross tabulations analysis were used.

9. Results and Discussion

Overall, the perceptions of academic staff towards the service quality offered by administrative staff at their responsibility center are below the expectations of the students at the same responsibility center (see Table 6). This is due to the higher expectation of the students towards the higher education institution compared to the academic staff.

Table 6 *Comparison Analysis on Students' and Academic Staff's Perception for Quality of Service Offered by Administrative Staff*

Academic Staff Perception [N = 372] Mean	Students Perception [N = 1468] Mean	Service Quality Dimensions
3.59	3.80	Tangibility
3.49	3.60	Reliability
3.50	3.64	Responsiveness
3.55	3.66	Assurance
3.44	3.66	Empathy
3.43	3.59	Accessibility

Table 7 *Students and Academic Staff Extend of Satisfaction with the Quality of Service Offered by Administrative Staff*

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Variable (Satisfaction)
132[9]	679 [46]	490 [33]	143 [10]	24[2]	Students (N=1468)
45[12]	207[55]	90[24]	27[7]	3[0.8]	Academic Staff (N=372)

Note *Figure [ ] stands for Percentage of Total*

Since the students have higher expectation towards the service offered by administrative staff, the satisfaction of the students is lower compared to the satisfaction of the academic staff for the quality of service offered by the administrative staff (see Table 7).

10. Trend of Evolving Perception of Student's on Service Quality in Higher Education

Obviously, student expectations and perception for service quality have changed over the last four decades significantly. In the 1970s, student at higher education level have expected a place of scholarly reflection to

obtain degree, enhanced employment prospects and very few expectations of teaching quality (Tricker, 2003). However, during 1980s and 90s were period of considerable change. The changes may be due to increase level of new generation of student entering to postgraduate level and had new set of expectations. Introduction of tuition fees caused students act more like customers and expect value for money (Tricker, 2003). Further, later on during 2000s, student expectation from service quality enriched to higher level and according to (Davies, 2002), they are as following:

- Flexibility and choice in the delivery of education
- Access to cutting edge technology
- A two way communication process between themselves and with the university
- To be consulted about the learning experience
- Accurate information about their courses, assessment procedures, complaints process, etc
- Honesty with respect to whether their needs can be met or not

   Measuring student perception of service quality is important since it determines how they assess the service within academic institutions. Since expectations are dynamic in nature, therefore, their perception and also evaluation from service quality might change over time to time (Kimani, Kagira, & Kendi, 2011). In addition, technology is one of the reasons which cause changes of student's expectation and perception from their perceived service quality during last few decades. The students can easily communicate with academic staff via online channels and view the all information through website. If the educational institutions do not prepare a proper technology based teaching tools that are required to transfer information, then it may not be the taste of students, especially postgraduate's student who uses many online database in order to conduct their study (Jamie, 2011). Thus service quality offered by the staff at the HEIs need to be enhanced and supported with technology.

11. Conclusion

In the context of this study students and academic staff expectation are the standards of or reference points for performance against which responsibility experience are compared, and are often formulated in terms of what a student or a staff as stakeholder members believes should or will happen as to improve quality of service in HEIs. To conclude, by going through literature, there are some key factors which affect changes of students' perception on service quality in higher education. The factors include; the rise of the student as a customer, rise of part time postgraduate students and therefore asking for flexible environment, and growth of technology which increase level of their expectation toward using information and inline databases. HEIs need to conduct more studies in the area of service quality among other stakeholders to evaluate the service quality and to identify some strategies to enhance the service quality at HEIs level as to upgrade it as world Class University in future.

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