A STUDENT SATISFACTION INDEX – MALAYSIAN CASE STUDY

Sub-Theme: Managing Education

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ABSTRACT

The paper provides an insight on student satisfaction in a higher education institution (HEI) within the context of a quasi-government environment. Studentsø opinions about factors related to academic life are sought in the form of a satisfaction feedback questionnaire. This survey aims to investigate issues viewed as important to students by seeking their opinion on a number of factors related to teaching, assessment and support provided by the HEI and its courses. A new model that is based on SERVQUAL framework is proposed that suited the quasi-government environment. The case study was conducted at a quasi-government HEI located in Pahang on the East Coast of Malaysia. Based on the results of this comprehensive study, it is clear that many of the physical aspects of the HEI services were viewed as important relating to student satisfaction. Student feedback confirms that they do receive high quality teaching from staff with high levels of expertise in their various academic disciplines. The lecture and tutorial are considered as the core service provided by the HEI. Students are prepared to tolerate largely deficiencies in the physical aspects of the facilities as long as the teaching they receive is perceived to be at the acceptable level. The concept of the service-product bundle is a valid and reliable tool for the design of a satisfaction survey and segments a HEI's service offering in such a way as to allow management to target resources at those areas that are perceived to be low satisfaction and high importance. This research model can be utilized in most HEIs establishments.

Keywords: Customer satisfaction, Service levels, Higher Education Institutions; Students; Surveys; Malaysia

1.0   Introduction

The tertiary education sector has, over recent years experienced rapid growth and is still growing. A pattern can be observed in the delivery of tertiary education programmes. It began in the context of nation building but has evolved into an expensive educational commodity in recent years. This is evident through the recognition of education as a commodity by the World Trade Organization (WTO). In view of this latest development, education has been treated as a business enterprise and is therefore governed by a business approach in a business environment (Gibbs, 2001; Abdullah, 2006). Tertiary institutions are no longer merely focused on societal values in relation to the skills and abilities of their graduates (Lawson,1992; Chevaillier, 2002; Nguyen, et. al., 2004) but are also seeking to assess studentsø feelings about their educational experience (Athiyaman, 2000). These switch of focus call for the management of tertiary institutions to incorporate student satisfaction as an integral component of their management process in addition to their traditional areas of academic standards, accreditation, teaching and research (Abdullah, 2006).

In relation to this development, students are not viewed merely as participants in the process but as customers of the process. Given the current situation, student satisfaction in the process of knowledge acquisition and delivery has gained interest within the research community. Student satisfaction has been defined in various ways (Hausknecht, 1990; Giese and Cote, 2000; Wiers-Jenssen et al., 2002), e.g. as õan overall feeling, or attitude, a person has about a product after it has been purchasedö (Solomon, 1994). Elliot and Healy (2001) indicate that student satisfaction is a short-term attitude that results from the evaluation of their experience with the education service received. Students' satisfaction is satisfaction with course quality, with instructor interaction and peer collaboration, and with support services (Zhao, 2003).

...lity has been a main issue pursued by researchers. It is because, ...dents' assessments of the service quality provided by universities and ...d work on service quality of higher education has concentrated on ...quality of courses and teaching (Athiyaman, 1997; Cheng and Tam, ...colleges and universities should try to build up their quality in an area of importance that promotes their well-being. Many researchers (Brigham, 1993; Susan, 1995; Koch and Fisher, 1998; Chevaillier, 2002, and Peat et al., 2007) feel that the principles of Total Quality Management (TQM) can definitely contribute to the improvement of service quality of higher education. Johnston (1996) explores how these get addressed when there is quality in teaching.

In the late 1980s and early 1990s, forces such as increasing global competition, the struggle to survive, increasing costs, demands for accountability and rising customer expectations about quality, has driven Malaysian Higher Education Institutions (HEIs) as with the rest of Higher Education Institutions worldwide to undertake quality initiatives and embark on TQM implementation (Abdullah, 2006; Sadiq Sohail et al., 2003, 2006; Shields, 1999; Fincher, 1994; Sallis, 1993; Johnston, 1996; Lozier and Teeter, 1996). There has been a strong push for adopting TQM in educational organizations though TQM has its roots in industry (Sadiq Sohail et al., 2003, 2006; Owlia and Aspinwall, 1996; Moreland and Clark, 1998; Srikanthan and Dalrymple, 2004; Telford and Masson, 2005). There is also a growing international competition with regard to student enrolments, faculty expertise and research achievements (Sadiq Sohail et al., 2003, 2006). Competitive advantage, a concept alien to the higher education sector prior to the 1990øs is now creeping in swiftly as higher education institutions acknowledge that they are in a market place now (Gibbs, 2001; Abdullah, 2006).

The student satisfaction survey was designed to provide the administration, school, staff and students of the HEI with comprehensive data in student experiences while studying at the institution. The goal was to determine the importance of a variety of issues and the satisfaction level related to those issues. The paper provides an insight on student satisfaction in a HEI within the context of a quasi-government environment. Studentsøopinions about factors related to academic life are sought in the form of a satisfaction feedback questionnaire. This survey aims to investigate issues viewed as important to students by seeking their opinion on a number of factors related to teaching, assessment and support provided by the HEI and its courses. The reasons for collecting student feedback (Rowley, 2003) include:

- to provide auditable evidence that students have had the opportunity to pass comment on their courses and that such information is used to bring about improvements;
- to encourage student reflection on their learning;
- to allow institutions to benchmark and to provide indicators that will contribute to the reputation of the university in the marketplace; and
- to provide students with an opportunity to express their level of satisfaction with their academic experience.

A number of previous research studies (Galloway, 1998; Gonçalves & Inacio, 2004) on student perceptions of quality/satisfaction have utilized the SERVQUAL framework (Parasuraman et al., 1988). However, SERVQUAL has been much criticized over the years (Buttle, 1996; Gronroos, 1990; Mangold & Babakus, 1991). Taking these criticisms into consideration the questionnaire used in the satisfaction survey asked only for perceptions of performance of a range of service aspects as well as importance but did not aim to collect data associated with expectations. A new research model is proposed that suited the quasi-government environment.

2.0 SERVQUAL Model

Parasuraman, Zeithmal and Berry are the innovators of SERVQUAL that provides a technology for measuring and managing service quality since 1985. Service quality has become an important research topic because of its obvious relationship to costs (Crosby, 1979), profitability (Rust & Zahorik, 1993), customer satisfaction (Bolton & Drew, 1991; Boulding et al., 1993), customer retention (Reichheld & Sasser, 1990) and a positive word of mouth (Buttle, 1996). Service quality is widely regarded as a driver of corporate marketing and financial performance.

SERVQUAL is founded based on customersø assessment of service quality. The assessment is conceptualized as a measurement of gap between what the customers expect and their perceptions towards the performance of a particular service provider. There are five dimensions of SERVQUAL used to measure customersø gap in service quality: reliability, assurance, tangibles, empathy and responsiveness. Table 1 presents the definitions for each dimension. The instrument is administered twice in different forms, first to measure expectations and second to measure perceptions.

	Definition
	...form the promised service dependably and accurately
	...and courtesy of employees and their ability to convey trust and...
	...of physical facilities, equipment, personnel and communication materials
Empathy	The provision of caring, individualized attention to customers
Responsiveness	The willingness to help customers to provide prompt service

Source: Buttle (1996)

3.0 Criticisms on SERVQUAL Model

Buttle (1996) criticize SERVQUAL model from theoretical and operational perspectives. The criticism from theoretical perspectives includes: i) paradigmatic objections - SERVQUAL is based on a disconfirmation paradigm rather than an attitudinal paradigm, and it fails to draw on established economic, statistical and psychological theory; ii) gaps model - there is little evidence that customers assess service quality in terms of Perceptions ó Expectations gaps; iii) process orientation - SERVQUAL focuses on the process of service delivery, not the outcomes of the service encounter; and iv) dimensionality - SERVQUALøs five dimensions are not universals, the number of dimensions comprising service quality is contextualized, items do not always load on to the factors which one would a priori expect, and there is a high degree of inter correlation between the five RATER dimensions.

As for the operational perspectives, it covers: i) expectations - the term expectation is polysemic; consumers use standards other than expectations to evaluate service quality, and SERVQUAL fails to measure absolute service quality expectations; ii) item composition - four or five items can not capture the variability within each service quality dimension; iii) moments of truth (MOT) - customersø assessments of service quality may vary from MOT to MOT; iv) polarity - the reversed polarity of items in the scale causes respondent error; v) scale points - the seven-point Likert scale is flawed; vi) two administrations - two administrations of the instrument causes boredom and confusion; and vii) variance extracted - the over SERVQUAL score accounts for a disappointing proportion of item variances.

Buttle (1996) criticism of SERVQUAL model has been agreed by other researchers that the instrument mainly focuses on the service delivery process (Gronroos, 1990; Mangold & Babakus, 1991; Richard & Allaway, 1993). However, there is no general agreement to the nature or content of the service quality dimensions (Brady & Cronin, 2001). Nevertheless, there is a general perspective that service quality is a multidimensional or multi-attribute construct (Cronin & Taylor, 1992; Gronroos, 1990; Parasuraman et al., 1985, 1988). While, the contemporary studies on service quality seemingly focused on the process of service delivery. Additional aspects to be considered have already been suggested especially by European scholars. Gronroos (1990) noted that the quality of a service as perceived by customers has three dimensions: functional (process) dimension, technical (outcome) dimension and image. In addition, Saser et al. (1978) viewed quality service as service-product bundle because outcome of service delivery is a ÷bundleø of goods and services of product offering. The term ÷bundleø comprised of three elements: physical facilities, explicit service and implicit service.

4.0 Research Framework

There have been a few national consumer satisfaction indexes (CSIs) developed for domestically purchased and consumed products and services. These include the Swedish customer satisfaction barometer (SCSB) operating since 1989 (Fornell et al., 1996), the American customer satisfaction index (ACSI) since 1994 (Fornell et al., 1996), and the Norwegian customer satisfaction barometer since 1996 (Andreassen and Lindestad, 1998). However, there appeared to be very little empirical research into student satisfaction in HIE (Hill et al. 2003), on the construction of student satisfaction index, particularly in the quasi-government environment. Elliot and Healy (2001) indicate that student satisfaction is a short-term attitude that results from the evaluation of their experience with the education service received. Whereas, Zhao (2003) feels students' satisfaction is satisfaction with course quality, with instructor interaction and peer collaboration, and with support services. It is interesting to reflect upon the relationship between the student satisfaction concept and the various interpretations of õacademic qualityö that are usually measured through student assessments (Wiers-Jenssen et al.., 2002). The relationship between perceived quality and satisfaction is relatively new within the university scope (Athiyaman, 1997). The scarce studies made regarding the university education service show that perceived quality is an antecedent of customer satisfaction (Browne et al., 1998; Guolla, 1999). This reflects the reason as to why most literatures on quality in HIE are generally preaching two basic tenets. Firstly that students are active participants of the service delivery process (Lovelock & Young, 1979; Mills & Morris, 1986; Kelly et al., 1990; Schneider & Bowen, 1995; Zeithaml & Bitner, 1996; Rodie & Kleine, 2000) and secondly that the quality of the service experience as perceived by the students is dependent on the extent to which their expectations of the service are met (Gronroos, 1984, 1990; Parasuraman et al., 1985).

...atisfaction in HEI setting. He focuses on the links between faculty, ...re considered critical in influencing students' experience with a ...ent satisfaction. Herzberg et al. (1967) uses a modified version of ...onsiders the impact of unique set of variables to explain part of the ...cannot see a service but they can see and experience various tangible elements associated with the service, the Keaveney and Young's 1997 model is most suitable (Herzberg et al., 1967). Owlia and Aspinwall (1997) construed that student experience in a HEI should be a key issue of which student satisfaction indicators need to be addressed. Thus it becomes important to identify determinants or critical factors of service quality from the standpoint of students being the primary customer. Previous findings by Schneider and Bowen (1995) and Hill et al. (2003) all of whom found that the most important aspects of a university's service offerings were associated with the core service, i.e. the lecture, including the attainment of knowledge, class notes and materials and classroom delivery. Furthermore, the findings also confirm the research of Price et al. (2003) in that it seems that the HEI's physical facilities influence students' choice.
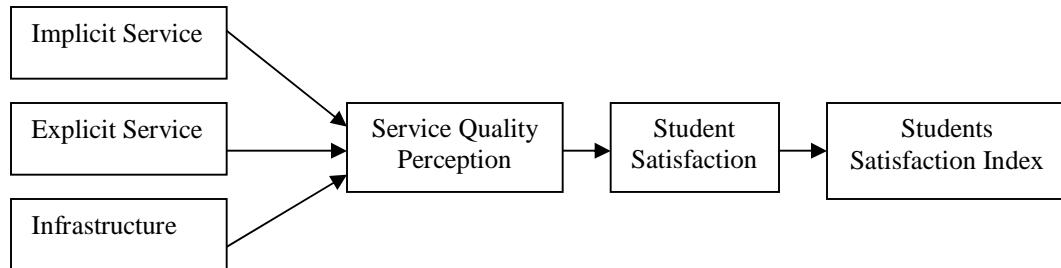
Sasser et al., (1978) study is designed around factors associated with variables students consider to be essential, which move away from measuring teaching quality only, and towards an understanding of the elusive holistic evaluation that is the student experience. It comprised of three elements:

1. the physical or facilitating goods;
2. the sensory service provided ó the explicit service; and
3. the psychological service ó the implicit service.

For a HEI the facilitating goods include the lectures and tutorials, presentation slides, supplementary handout documents/materials and the recommended module text. It also includes the physical facilities such as the lecture theatres and tutorial rooms and their level of furnishing, decoration, lighting and layout as well as ancillary services such as catering and recreational amenities. The explicit service includes the knowledge levels of staff, staff teaching ability, the consistency of teaching quality irrespective of personnel, ease of making appointments with staff, the level of difficulty of the subject content and the workload. The implicit service includes the treatment of students by staff, including friendliness and approachability, concern shown if the student has a problem, respect for feelings and opinions, availability of staff, capability and competence of staff. It also includes the ability of the HEI's environment to make the student feel comfortable, the sense of competence, confidence and professionalism conveyed by the ambiance in lectures and tutorials, feeling that the student's best interest is being served and a feeling that rewards are consistent with the effort put into course-works/examinations

Given the absence of studies that may establish a grouping of dimensions of student satisfaction, we conducted a student satisfaction survey base on the same factors as done by Sasser et al. (1978). However, for this study, the terminology has been borrowed from Sasser et al. (1978), but the items that these dimensions contain, have been changed to adapt to the needs of a quasi-government HEI. Parasuraman et al. (1988) do suggest that some adaptation of scale may be desirable when a particular service is investigated. Our student satisfaction survey and the Student Satisfaction Index (SSI) incorporate the three elements as structured by Sasser et al., (1978), yet elements derived from the education, service quality and satisfaction literature are also included. These variables is represented in eight sections: course or program and personal information, admission and registration, teaching, learning and assessment, student affairs services, resource center services, ICT services, college environment and general section. All these variables are categorized under three elements proposed by Sasser et al. (1978). Figure 4.1 present our research framework for this study.

Figure 4.1: SSI Research framework

facilities, explicit service and implicit service are three of the most ... EI experience and overall satisfaction. It is known that satisfaction ... n service performance as perceived by the customer and what the ... Although there are a significant number of variables that could ... hence satisfaction/dissatisfaction (e.g. student services and activities, ... ion are typically quality service-product bundle because outcome of service delivery is a ‑bundle‑of goods and services of product offering. Accordingly, the three elements are the key factors that this study focuses on to gain insight into student perceptions of performance of a range of services aspects with HEI.

5.0 Methodology

The case study was conducted at a quasi-government HEI located in Pahang on the East Coast of Malaysia. The first draft of the survey questions was prepared by the Quality Management Department through browsing samples of student satisfaction survey from other universities. Later, the head of departments were also asked to identify the topics, issues and concerns they felt should be included in the student satisfaction survey. The final draft of the survey, then were tested by a group of students.

A quantitative survey was later designed based on the analysis of the issues raised in the focus group interview to elicit student satisfaction levels across the HEI's service offerings. The questionnaire consisted of 66 closed ended questions and seven open ended and subdivided into the various categories of the service-product bundle including, lecture and tutorial facilities, ancillary facilities, the facilitating goods, the explicit service and the implicit service. At the end of the questionnaire, students were asked for their overall satisfaction rating and whether they would recommend the HEI to a prospective student. The satisfaction questions were preceded by a series of demographic questions that would allow the sample population to be segmented. These included questions regarding gender, age, level of study, mode of study and country of origin.

Participation in the survey was entirely voluntary and anonymous, consists of 468 students from every academic programs. This is approximately 50% from the student¢s population. The determinants of satisfaction were weighted by their importance because different attributes may be of unequal importance to different people (Harvey, 1995; Patterson & Spreng, 1997). Hence, in this study both satisfaction and importance were measured.

6.0 Findings and Discussions

The result of the survey is present in the order of performance gap. Performance gap is the difference between the importance and satisfaction score. The importance and satisfaction score is the average of the importance and satisfaction level rated by 468 students participated in the survey. Please refer to Appendix for detail result of the survey and the calculation of determining the Student Satisfaction Index (SSI) for each section.

This study provided empirical findings to understand student satisfaction with HEI. The survey tends to confirm that they do receive high quality teaching from staff with high levels of expertise in their various academic disciplines. The findings indicate that students placed more importance on the outcome of the lecture (the lecturer comes to class on time, the lecturer¢s availability when needed, the lecturer¢s willingness to provide additional assistance, the lecturer¢s knowledge on the subject matter, the lecturer¢s feedback on assessment within the reasonable time span, the lecturer¢s presentation skill, the lecturer follows the course outline well, the teaching aids (e.g. lab, computers, LCD, etc) and the invigilation of the exam hall was secure and fair) than any other dimension. This supports the findings of Schneider and Bowen (1995) who deduced that the quality of the core service influences the overall quality of the service perception. For HEI the core service delivery method is still the lecture.

The lecture and tutorial are the core service provided by the HEI and it is what goes on in these classrooms that determine student satisfaction with the explicit service. Students of HEI are prepared to tolerate to a large extent deficiencies in the physical aspects of the facilities as long as the teaching they receive is perceived to be at an acceptable level. The perceived overall quality of a HEI is determined fundamentally by the perceived quality of the core service (Nguyen et al., 2004). The perceived quality of the peripheral services on the perception of overall quality is weaker, but always significant (Schneider & Bowen, 1995).

7.0 Conclusion

The students¢ satisfaction survey is one way to register students¢ views on their academic experience and contribute what they considered as their values and what they thought of as important in an educational experience. Numerous studies on feedback questionnaires, including Marsh (1987) and Ramsden (1991) reported that student satisfaction survey is a valid and reliable indicator of teaching and learning quality. Students¢ survey contains important signals from our customers who expect high quality service and sometimes unfortunately do not get it. Collection of

ing towards their learning experiences reflect good information from
...mance and student satisfaction in HEI.

...seven elements that make the SSI are admission and registration;
...affairs services; resource centre services; ICT services; college
...cts the success of the institution in satisfying studentsø expectations
according to the number of attributes most important to them. The SSI remains a measure of the same question although the questionnaire may change in the future due to changes in studentsø priorities.

Studentsø views on all aspects of their HEI experiences are now being widely canvassed and regarded as essential to the effective monitoring of quality in HEIs. As indicated by the survey, once students have enrolled, it is the quality of the teaching and learning that will cause satisfaction or dissatisfaction and they are prepared to tolerate, to a large extent, õwobbly tablesö and paint flaking off walls as long as the teaching they receive is at an acceptable level. Therefore, HEIs that would like to improve their level of student satisfaction should focus their impact on the administration of the essential service and not on the services that could be called peripheral, such as enrolment or infrastructures. Thus, administrative efforts should be directed at selecting the appropriate professors, applying the appropriate teaching methods and fulfilling the established educational objectives. An improvement of these aspects would increase the value of the offer provided, thereby allowing HEIs to use this new educational offer, with special characteristics, as a differentiating element from their competition. This may have implications for management responsible for resource allocations to various areas of the college services and infrastructure. It is recommended in this study that the changing nature of the HEIs marketplace encourages college administrators to apply the customer-oriented principles that are used by profit-making institutions.

8.0 Acknowledgements

9.0 References

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nline higher education through measurement. Quality Assurance in

Appendix

Question	Importance Score (A)	Satisfaction Score (B)	Weighting (average of 1) (C = A/F)	Weighted Score (D = B*C*10)	Performance Gap (E = A – B)
The information you received from the college before your registration	8.5	6.3	1.01	63.75	2.2
The procedures for your registration with the college	8.6	6.6	1.02	67.57	2.0
The usefulness of information provided during the orientation week	8	6.5	0.95	61.90	1.5
The general arrangements for orientation and welcome	8	6.4	0.95	60.95	1.6
The helpfulness and politeness of staff involved in registration process	8.5	6.5	1.01	65.77	2.0
The helpfulness and politeness of staff involved in the Collection Unit	8.4	6.2	1.00	62.00	2.2
The helpfulness and politeness of staff involved in the Sponsor Unit	8.5	6.5	1.01	65.77	2.0
The clarity of bills and payment requirements	8.5	5.9	1.01	59.70	2.6
The arrangements for providing student accommodation	8.6	5.4	1.02	55.29	3.2
Average (F)	8.4	6.3	Average (SSI)	63	2.1

2. SSI for Teaching, Learning and Assessment

Question	Importance Score (A)	Satisfaction Score (B)	Weighting (average of 1) (C = A/F)	Weighted Score (D = B*C*10)	Performance Gap (E = A – B)
The lecturer comes to class on time	9.1	8.1	1.00	80.70	1.0
The lecturer's availability when needed	9.2	8.2	1.01	82.60	1.0
The lecturer's willingness to provide additional assistance	9	8	0.99	78.83	1.0
The lecturer's knowledge on the subject matter	9.3	8.4	1.02	85.53	0.9
The lecturer's feedback on assessment within the reasonable time span	9.1	8.2	1.00	81.70	0.9
The lecturer's presentation skill	9.3	8.1	1.02	82.48	1.2
The lecturer follows the course outline well	9.2	8.2	1.01	82.60	1.0
The teaching aids (e.g. Lab, computers, LCD, etc)	8.9	7.5	0.97	73.08	1.4
The invigilation of the exam hall was secure and fair	9.1	8.2	1.00	81.70	0.9
Average (F)	9.1	8.1	Average (SSI)	81	1.0

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Question	Importance Score (A)	Satisfaction Score (B)	Weighting (average of 1) (C = A/F)	Weighted Score (D = B*C*10)	Performance Gap (E = A – B)
The activities organized by the student affairs	8.2	6	0.97	58.14	2.2
The provision of student clubs and societies	8.3	5.5	0.98	53.94	2.8
The sports and recreational facilities	8.4	5.5	0.99	54.59	2.9
The space/area for study and social activities	8.7	5.9	1.03	60.66	2.8
The availability of careers counseling and advising	8.5	6.4	1.00	64.28	2.1
The quality of the personal counseling given by the counselor	8.5	6.3	1.00	63.28	2.2
The college response to the interests and concerns of students	8.5	5.6	1.00	56.25	2.9
The college's commitment to ensure equality for all students	8.6	5.4	1.02	54.88	3.2
Average (F)	8.5	5.8	**Average (SSI)**	**58**	2.6

4. SSI for Resource Centre Service

Question	Importance Score (A)	Satisfaction Score (B)	Weighting (average of 1) (C = A/F)	Weighted Score (D = B*C*10)	Performance Gap (E = A – B)
The resource center opening hours	9	7.5	1.00	74.88	1.5
The helpfulness and politeness of the resource center staff	9	7.5	1.00	74.88	1.5
The availability of recommended books	9	6.4	1.00	63.90	2.6
The availability and suitability of study places	9	6.9	1.00	68.89	2.1
The "up-to-date" of books	9	6.4	1.00	63.90	2.6
The availability of photocopiers	9.1	6.9	1.01	69.66	2.2
The range of books	9	6.6	1.00	65.90	2.4
Average (F)	9.0	6.9	**Average (SSI)**	**69**	2

5. SSI for ICT Services

Question	Importance Score (A)	Satisfaction Score (B)	Weighting (average of 1) (C = A/F)	Weighted Score (D = B*C*10)	Performance Gap (E = A – B)
The opening hours of the computing labs	8.9	6.3	1.00	62.90	2.6
The number of workstations provided	8.9	6.1	1.00	60.90	2.8
The speed of the computer systems	8.8	5.5	0.99	54.29	3.3
The physical environment of the computing labs	8.9	6.6	1.00	65.89	2.3
The availability of the internet access	9	6.4	1.01	64.62	2.6
The helpfulness and politeness of the IT staff	8.9	6.7	1.00	66.89	2.2
The availability of computers for students use	9	5.7	1.01	57.55	3.3
Average (F)	8.9	6.2	**Average (SSI)**	**62**	2.7

	Importance Score (A)	Satisfaction Score (B)	Weighting (average of 1) (C = A/F)	Weighted Score (D = B*C*10)	Performance Gap (E = A – B)
The physical environment of campus	9.1	6.6	1.01	66.98	2.5
The comfort of class rooms	9.1	6.6	1.01	66.98	2.5
The maintenance and cleanliness of washroom facilities at campus	9.1	7.2	1.01	73.07	1.9
The maintenance and cleanliness of campus	9.1	6.2	1.01	62.92	2.9
The arrangements for your physical safety and security within the campus	9	6.6	1.00	66.25	2.4
The college's transportation services	8.9	4.8	0.99	47.64	4.1
The availability of parking for students	8.8	5.7	0.98	55.94	3.1
The availability of food service at campus	8.9	6	0.99	59.55	2.9
The physical environment of hostel	8.9	5.5	0.99	54.59	3.4
The feeling of safety in hostel	9	5.7	1.00	57.21	3.3
The availability of food service at hostel	8.8	5.8	0.98	56.92	3.0
The helpfulness of maintenance and transport staff	8.9	5.4	0.99	53.60	3.5
Average (F)	9.0	6.0	**Average (SSI)**	**60**	3

7. SSI for General Issues

Question	Importance Score (A)	Satisfaction Score (B)	Weighting (average of 1) (C = A/F)	Weighted Score (D = B*C*10)	Performance Gap (E = A – B)
The college's website	8.9	7	1.00	69.90	1.9
The cost of attending, in relation to the quality of education received	8.9	6.3	1.00	62.91	2.6
The overall quality of the diploma/degree you will be receive	9	7.1	1.01	71.70	1.9
The extent to which you have increased your level of self confidence while at IKIP	8.9	6.7	1.00	66.91	2.2
The extent to which you have enhanced your communication skills while at IKIP	9	6.9	1.01	69.68	2.1
The extent to which I feel you have gained valuable knowledge and skills in you chosen areas of study	9	7	1.01	70.69	2.0
The college creating a sense of õbelongingö for students	8.7	6.4	0.98	62.47	2.3
The overall college experience	8.9	6.7	1.00	66.91	2.2
Average (F)	8.9	6.8	**Average (SSI)**	**68**	2