

Measuring Customers' Experience: A Survey of Graduate Students' Satisfaction at Addis Abeba University

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Abstract

This study applies service quality and customer satisfaction theory to the field of education and particularly to postgraduate studies. The aim of the research presented here is to measure students' satisfaction at the Addis Ababa University across wide ranging educational experiences. A sample of 126 students was considered for analysis with an approach adopted from student satisfaction inventory by Noel-Levitz and graduate students satisfaction survey in European University was used in order to reach this aim. The necessary data was gathered from self-administered questionnaire and interview done with concerned parties. Descriptive method research was employed. The findings indicate that there is a high level of dissatisfaction among students particularly regarding infrastructural requirements and helpfulness of staff in various sections of the university. Areas of satisfaction are also highlighted. There is evidence to confirm that some issues raised in the focus group discussion of the strategic planning committee were addressed too. Various strengths and weaknesses are identified by students. Whilst the comprehensive range of data produced is very informative students suggest that the study should cover only few areas at a time.

Introduction

Studies reveal that a student's positive perceptions of academic programs and personal affiliations with faculty, staff, and other students contribute to a feeling of "student-centeredness" (Elliott, 2003). This phenomenon makes students feel connected to and welcomed by the institution he attend, making them more likely to remain in the institution and feel satisfied with their overall experience. AAU's mission and vision is to promote excellence in the production, growth and dissemination of

advanced scientific material production, through teaching and research activities, and is aligned with the fulfillment of the national goals of development and the effort to enhance Ethiopia's overall capacity of higher education. The current rapid expansion of graduate study programs in various fields is in response to the national goal of producing 10,000 MA and 2,000 PhD graduates in five years time, i.e. 2000-2005 EC. (Teaching and Learning in Graduate programs at AAU—Report on the current (AS-IS) Situation)

Statement of the problem

For many organizations in the public sector customer satisfaction is the measure of success. Various organizations are investing heavily in improving performance in areas that make a strong contribution to customer satisfaction, such as service quality and customer services. Continuous improvement is essential for any higher education institution that wants to be able to attract students in the future. All improvements of study programs, teaching and support services, etc; must of course be based on the voice of the customer, which in this case are the students. Measuring the students' perception of the “product” they receive, their satisfaction is thus the cornerstone of every improvement effort. Successful institutions tend to share three basic attributes: they focus on the needs of their students, they continually improve the quality of the educational experience, and they use student satisfaction assessment results to shape their future directions.

But how do we know if organizations are succeeding in satisfying their customers? The truth of the matter is that many organizations do not, including Addis Ababa University (AAU here after). It is a widely accepted adage in the quality world that “if you can't measure it you cannot manage it”. This principle applies equally to customer satisfaction as it does to thousands of components coming off a production line. Indeed, many

companies and organizations still do not measure customer at all—and many who claim to be measuring it do so in an inadequate way (Hill N. and Alexander J 2003). Thus, there seems to be a serious void in the research on graduate education since the degree of satisfaction experienced by the graduate student may be important not only for his level of performance but also for his remaining in graduate school and attaining his degree objective. To the best of the researcher's knowledge AAU is one of these organizations. What is often done in relation to measuring customer (students) satisfaction at AAU is students fill questionnaires about their respective instructors' performance.

Over the past few years, higher education institutions in Ethiopia have experienced dramatic changes, both in their funding and student numbers. With the advent of full fees for students, there is competitive pressure to provide value and quality education. Higher education institutions are increasingly devoting considerable time and resources to meet the expectations and needs of students. The challenge for management in these institutions is now not only to better meet student needs and wants *per se*, but also to monitor the changes in student needs over time. The fact seems to be actually still ignored at AAU. Thus, though, various problems can be identified, the study will attempt to address the following basic research questions.

1. What attributes of overall educational experience are considered most important by graduate students?
2. How are graduates satisfied with each attribute and overall educational experiences?
3. What areas of educational experience are students most satisfied & dissatisfied with?
4. How large the satisfaction gaps are for the most important attributes?
5. How effective is the University in handling students' complaints?

Objectives of the Study

In general, the objective of the thesis writing was to evaluate or measure AAU's post-graduate students' level of satisfaction. Specifically, the thesis writing was designed to address the following concerns:

1. To identify the importance of attributes of educational experiences at AAU.
2. To determine extent to which graduate students on the targeted campuses of the university are satisfied, dissatisfied, or delighted.
3. To identify the areas of educational experiences that contributed to the most satisfaction and dissatisfaction.
4. To investigate the gaps between the most important attributes and students level of satisfaction with them.
5. To evaluate the University's level of commitment and understanding to win customers and keep them for long.

Scope of the Study

This paper is delimited to measuring the satisfaction level of AAU's post-graduate students at Arat killo (Science Faculty) and Sidist Killo (main campus). As the total number of post-graduate students who are currently (in 2010) about to graduate is large and diversified in terms of fields of study and requirements for effective running of the programs, the researcher was expected to consider relatively large number of sample proportional to the total population. Unfortunately, from the preliminary survey, the researcher found out that many students were very much unwilling to fill the questionnaire, even some of the students who were willing did not responsibly returned the questionnaires, and students in some departments have already left the University for conducting their own research and thus were totally inaccessible to this study's researcher. Thus, the researcher was

forced to consider those who are accessible. The amount of money for conducting such a vast University wide research is obviously large for it requires greater number of concerned individuals as contributors in terms of preparing the questionnaire items pertinent to each category of graduate students at the University, arranging ways for ease of gathering the required data (like informing the instructors who will be kindly requested to give permission for researcher's entrance to distribute the pertinent questionnaire during class time, advisors cooperation in terms of getting their advisees filled the questionnaires and so on), collecting data from graduates of various campuses, and the incentive that might be made to the students so that they could extend their cooperation; the study was delimited to masters education students.

Limitations of the Study

The researcher tried to incorporate and consider as many dimensions as possible that he believed can serve measuring students' level of satisfaction with their educational experience at the University. However, he is afraid that some graduates might have been tired and carelessly filled some part of the questionnaires. The other limitation of this thesis writing was lack or inadequacy of related literatures in the area considered—graduates' satisfaction—which constrained the researcher's ability to look at the issue from different perspectives and make the analysis accordingly. The last limitation of the study is that since the provision of satisfactory quality service can partly be enhanced by service takers' (students) contribution, incorporating the views of/the perceptions the University's staff have of students too would have strengthened the quality of the research.

Review of Related Literature

The importance of higher education has increased worldwide and societies have become more dependent upon professionals (Metzger, 1987).

In this regard, higher education plays a crucial role in supporting macroeconomic growth and consequently affects the regions' economy (Kane, 2005). The overall purpose of university education is to educate and prepare young people for later realization in the labor market. The common perception is that the quality of education has an impact on the opportunities to find highly desirable job placements. Despite a vast literature in customer satisfaction, little has been said on the satisfaction of higher education institutions' customers i.e. the students (Elliot, 2003). Higher educational institutions are increasingly recognizing that they are in the service industry. As service organization, higher educational institutions are dealing with a same situation which places greater emphasis on meeting the expectations and needs of their customers.

Researchers in higher education have assessed student satisfaction in three different justifications. First, most researchers have measured solely the levels of student satisfaction in order to identify the most and the least satisfaction with university programs and services for accountability reporting and self-improvement purposes. Secondly, some researchers have examined student satisfaction to see if satisfaction ratings of college programs and services associate with the satisfaction of the overall college experience. Lastly, few researchers have investigated student satisfaction items related to the occurrence of the educational events such as student retention and attrition.

The measurement of student satisfaction can be useful to higher educational institutions, to help them pinpoint their strengths and identify areas for improvement. Satisfaction ratings go beyond teaching assessments, which have a narrow focus, to include broader aspects of the student learning experience. To grasp the complexity of that learning experience, it is not enough to know the degree to which students are satisfied and it is important to understand the factors that contribute to student satisfaction too.

Student Satisfaction in the Context of Higher Education Institution

There are many difficulties involved in managing a customer's satisfaction, and these result particularly complicated in the education sector. Because education is a service, it is often challenging to increase both customer satisfaction and productivity concurrently (Anderson *et al.* 1997). One of the contributors to this fact is that customer satisfaction is more dependent on customization and increased productivity often requires more standardization. In an education-related context, that can best be described by understanding that students generally prefer smaller classes where they can contribute more to course discussion and receive personal attention from the professor, but this is significantly more costly and less efficient sometimes than educating students in a large-classroom setting.

Customer satisfaction is a measure of how the services or physical tangible products a company offers to its target market match with what the customers (market) expected before experiencing it. Put differently, customers' evaluation of service quality is a function of the magnitude and direction of the gap between the customers' expectations of service and his/her perception of the service delivered. These expectations stem from word-of-mouth promotion about the service that a customer has heard, his/her past experience, the promises made about the service by its advertisements and by its sales representatives, and other situational factors. Therefore in the context of educational services, students' satisfaction refers to how they (student customers) feel (their perceptions they have of) about the services the institution provides. It is all about fulfillment or gratification of the students with the University.

Student Satisfaction and Institutional Effectiveness

In higher educational institutions, students are said to be successful when they accomplish tasks (in the curriculum) expected from them. And this can be done through exams and research papers or in general terms when

they show evidence of being learnt or brought about expected behavioral changes. But when an institution giving educational services is considered effective? It is when students are satisfied, if not delighted, with the University experiences. Students are the responses. The very reasons for and life-bloods of any organizations to be are customers, and for educational institution—student-customers. Students are the measure of institutional performances. Thus, the Student Satisfaction Survey enables the University to:

- Assess the level of satisfaction within, and importance of, various key issues
- Identify gaps in the provision of education services and resources
- Judge how successful the University has been in achieving specific policies
- Build a picture of students' expectations based on the whole student experience
- Highlight areas requiring further investigation

The benefit also goes to the students. Students who provide feedback will gain some of the benefits from modifications (related to any of the educational experiences) (Wossenu Y. 2008). On the other hand, listening is powerful for give to customer the impression that the organization cares about them and fosters in order to meet their needs/requirements.

Listening and Handling Customers' Complaints

Contemporary managers recognize that they must stay in touch with and listen to their customers. Managers and employees must listen to customers who are unsatisfied with their service. But listening is the first step. Companies must also respond to customers' complaints and concern. The successful organization is one that listens open-mindedly, acts appropriately subsequently, and uses customers' faced problems to improve

service and win more customers (Tiosroud, D, 1993). “Make it easy to complain” it is the point stressed by Loskot W (2000) in order to sustain the satisfaction of customers. This is due to the reason that people don’t like to complain to organizations. “For various reasons, customers, even if they would like to complain, usually say nothing. Some of them don’t want to waste time and energy; others don’t believe that it will make any difference. The rest might lack skills and assertiveness.”

Research Methodology

The objective of the research was accomplished through a several step process. Firstly, a set of coherent and relevant factors potentially influencing student satisfaction had to be established. Secondly, the factors had to be categorized into groups, each group reflecting certain satisfaction dimension. Thirdly, the importance of the factors which have relationship with the educational experience, and the satisfaction experienced by the students in relation with those factors were analyzed. Subsequently, both satisfaction dimensions as bundles of factors and each individual factor were analyzed through measuring differences between the importance and the satisfaction obtained. Finally, dimensions of students' expectations and satisfactions having the greatest score were identified.

The main part of the research was carried out by survey method, integration of the interview technique while the questionnaire was the instrument of data gathering. Students were asked to assess their academic experience through the importance given to several factors and their satisfaction in relation to these factors.

Population and Sampling

According to the data obtained from the registrar office of the University, the total population consisting of 407 students who are expected to graduate at the end of S’ene in Ethiopian Calendar. Also those graduates

who are expected to defend their thesis work in the middle of the year 2002 E.C. are part of the population under study. The sampling method used varies at two different levels. First the researcher used judgmental sampling in selecting the sampling unit. Since measuring students' satisfaction refers to their customers experience and the more time students experienced services at the University the more they can evaluate performance as per their expectations, the researcher targeted only those who are expected to graduate at the end of this academic year (Sene 2002 E.C). Secondly, the respondents (participants) were selected based on convenience sampling.

Types and Sources of Data Collected

First hand information was collected from the graduates and Graduate Study and Research Office through questionnaires and interview respectively. The Samples were confined to AAU's Faculty of Education's students on its two campuses—Main campus and science faculty. The secondary sources of data used, among others, include the University's official web site, its strategic plan, a report on the current (AS-IS) situation, related books, journals, and student satisfaction surveys in various European and American Universities. Sampling error was controlled using a large sample size collected at the two campuses.

By a deep literature review, the researcher identified **seven major factors** to be considered, which in turn are composed of numerous measuring items. These factors are: campus environment, registration effectiveness, academics, faculty/staff, infrastructure, skill developments or students' partial experience, and enrollment factors. Starting from this 7 factors, about 70 specific questions items were developed as part of each questionnaire. Also two sections dealing with the general characteristics of respondents and some general question were included.

Students were expected to respond twice to each item – first by indicating how important it is that specific expectation, and then again by

indicate their satisfaction level. The scale was a 1 to 5, with 5 being the highest. Then the researcher calculated the performance gap, which is importance minus satisfaction. The smaller the performance gap, the more the university is achieving in meeting its students' expectations; the larger the performance gap, the more room for improvement there is to better meet its students' expectations. Finally items with large performance gaps indicate areas on where students perceive their expectations were not adequately met.

Data Presentations, Analysis and Interpretations

The Rating Scales

Because the Student Satisfaction questionnaire results in three different aggregated scores for each item, a significant amount of information is generated for the University decision makers, such as:

- Importance score ratings reflect how important students consider the item (the higher the score, the more importance attributed by the student, hence the stronger the expectation).
- Satisfaction ratings show how satisfied students are with AAU efforts and achievement in meeting the expectation.
- Performance gap scores (importance rating minus satisfaction rating) show how well AAU is meeting the expectation, overall. A large performance gap score for an item (e.g., 1.5) indicates that the University is not, almost at all, meeting students' expectations, whereas a small or next to zero gap score (e.g.,.50) indicates that AAU is meeting students' expectations, and a negative gap score (e.g.,-25) indicates that it is exceeding students' expectations. Please note that in the interest of space certain items in the tables or the whole tables at times were cut from the present work.

So, the study provides a good overview of strengths and areas in need of improvement. At the same time there had been previous example of such

national survey (as is true in various nations like America—e.g. the Noel-Levitz Student Satisfaction Inventory (SSI)), measuring student satisfaction across a broad spectrum of University/College life, so the AAU's graduate student level of satisfaction could be compared with that. The total number of questionnaires distributed was 180, considering the return of incomplete and carelessly filled questionnaires and absence of return at all, and any way sufficient numbers of responses were collected to make a realistic inference about the population. Out of that, 140 questionnaires were returned and of these only 126 were useable and adequately filled. Reliability was also measured. The modified version used to measure the graduates' level of satisfaction was Cronbach's coefficient alpha, .844 for the set of satisfaction scores and is .771 for the set of importance scores.

Factors Influencing the Decision to Attend Addis Ababa University

The factors that students reported influencing their decision to attend the University were ranked and their respective means and standard deviations were calculated. Academic reputation is the primary factor, along with sponsor's preference and campus appearance. On the other side the cost factor followed by the university's advertisement result the least important in that order. The standard deviation, 6 of the 9 items in the dimension relative to enrollment factors—suggests that the respondents have relatively a balanced feeling towards level of importance of each item. A relatively higher variation in responses may be traced back to better opportunity for part time work in Addis Ababa and access to fund (for research and/or other purposes).

The Campus Environment

The campus environment as measured in terms of safety after dark, availability of food at reasonable price together with its variety in the existence of sufficient space for students to relax and enjoyable experience

on campus, care and helpful campus and adequacy of the amount of parking space has been rated above average. This suggests that all of them are of great concern to graduates. In other words, the students greatly expected the university to fulfill them but their level of satisfaction for all these items fall within the mid range (2.50-3.49). Only safety after dark, diverse selections of food, and caring and helpful campus showed a performance gap greater than 1.5. Thus, these three are the first considered dimension areas in which the university is not meeting the students' expectations. Adequacy of the amount of parking space in the campus has got the lower performance gap level (it is below 0.5). Therefore, it can be concluded that the university has no problem of parking spaces in the campus. Of course, it should also be kept in mind that this item was rated by students as the least important one in the dimension.

Registration Effectiveness

As the table below (table 5) illustrates, all the aspects considered in this phase were rated above average (i.e., 4.24 and above) on importance scale, but none of the satisfaction ratings discovered were above the cutoff point, implying that graduates satisfaction did not reach optimal average level in this dimension. One finding is really evident: the smaller performance gap was found between the importance and satisfaction score for item number 5 (i.e., admission staffs are knowledgeable). Thus, is impossible to talk about students' expectations exceeding since the University service performance had not still reach the cutoff point. Just the knowledge level of admission staff can be assessed as relatively good. The relatively bigger performance gap was observed between the expected performances of the personnel involved in registration and the level of graduates' satisfaction in that regard. 79.4% and 13.5% of the students thought helpfulness of personnel involved in registration process is, respectively, very important and important, but they perceived it as the most

disappointing experience they had in relation to registration. Only 11% of the graduates were satisfied with it. Overall, only 27% of the graduates were satisfied or very satisfied with registration effectiveness.

Table 1: Registration Effectiveness

<i>Registration Effectiveness</i>				
<i>Item No</i>	<i>Items</i>	<i>Imp Mean</i>	<i>Satisfaction Mean</i>	<i>Gap Mean</i>
1	The personnel involved in registration are helpful	4.72	1.94	2.78
2	Registration takes place at the right time	4.65	2.55	2.10
3	Promptness of registration	4.60	2.58	2.02
4	Admission policy is clear	4.43	2.63	1.80
5	Admission staff are knowledgeable	4.24	3.03	1.21

Academics

In all the aspects that fall under this dimension, the students' expectations exceeded the corresponding satisfaction scores. The performance gap score column shows only five items (item number 2, 4, 6, 9, and 10) have below 1.5 positive deviations, implying that the university never met the graduates' expectations, even though the University claims to be committed in providing an academically challenging and supportive learning environment, in order to motivate students to be actively engaged in their educational process and be independent in decision making.

Table 6: Academic Related Item Ratings

<i>Academics</i>				
<i>Item No</i>	<i>Items</i>	<i>Imp* Mean</i>	<i>Sat* Mean</i>	<i>Per** Gap</i>
1	There is a commitment to academic excellence on this university	4.82	2.40	2.42
2	The University has a good reputation within the community	4.79	3.43	1.39
3	Students' work assessment is fair	4.79	2.30	2.49
4	The program I joined is a positive professional development experience	4.76	3.59	1.17
5	Most assignments required me to critically reflect on previous knowledge and new material	4.70	3.20	1.5
6	Courses are academically challenging/demanding	4.69	3.34	1.35
7	My instructors provide me with prompt feedback about my work	4.69	2.44	2.25
8	Clarity of information about assessment criteria	4.69	2.50	2.19
9	Variety of courses offered are adequate	4.68	3.21	1.47
10	The course outlines are relevant	4.52	3.52	1.00
11	The courses prepared me for employment	4.48	2.83	1.65
12	Tuitions paid is a worthwhile investment	4.27	2.40	1.87

* *Satisfaction Mean* ** *Performance Gap Mean*

However, the satisfaction scores in the table above (table 6) shows that the University is not leaving up to its promises. Whereas the items are of great concerns for students, all satisfaction scores are between 2.50 and 3.59, except for the 1st item (2.4), 3rd item (2.30), 7th item (2.44), and 12th item (2.40). Item 4 (The program I joined is a positive professional development experience) and 10 (The course outlines are relevant) resulted in students' satisfaction. Even in these two items, a positive gap between importance (expectations) and satisfaction scores was obtained though it is below 1.5.

In this regard, only 57% and 57.9% of students were satisfied or very satisfied with the challenges and variety of the courses offered at the university respectively. The percentages of graduates who were dissatisfied or very dissatisfied with the extent to which the courses they took prepared them for employment (46.1%), fairness in students' work assessment (71.4%), clarity of information about assessment criteria (55.4%), existence of commitment for academic excellence on the university (53.1%), worthiness of tuition fee (50%), and promptness of feedbacks provided by instructors to students' work (55.6%) are greater than those who were satisfied or very satisfied. Thus, these are many areas needing improvement in this particular dimension.

How important is academic advising to students—and what aspects of advising are students most and least satisfied with? The following table and analysis were built on the considerable evidence that for students, teachers' advice is an important and needed service. Students in fact rated academic advising as one of their most important needs. It also documents specific strengths and challenges related to the advising process. Only one specific aspect of advising—adequacy of skill and subject knowledge of advisors to support students' research work—was relatively satisfying students. The institution has a lot of work remaining to be done to meet student expectations for advising, ranging from increasing advisors' level of concern about the success of students as individuals too, improving advisors' exertion to understand difficulties graduates face while conducting researches.

To clearly see the extent of graduates' satisfaction within academic advising item, the specific areas that fall under this dimension are presented in the table below (table 9). When compared to those graduates who were dissatisfied or very dissatisfied with each area depicted in the above table, the percentage of graduates who were satisfied or very satisfied are relatively

large. 45.56% of the graduates expressed their delight or satisfaction to overall academic advising effectiveness, about 36.71% of them were disappointed at it, and the remaining 17.7 % were neutral.

Table 2: Levels of Satisfaction with Academic Advising

<i>NQ</i>	<i>Items</i>	<i>Ratings in %</i>					Total
		<i>VS</i>	<i>S</i>	<i>N</i>	<i>D</i>	<i>VD</i>	
1	My academic advisor is available during consultation hour	17.5	21.4	19.8	20.6	20.6	100%
2	My academic advisor is available when I need him/her	9.5	32.5	13.5	23.8	20.6	“
3	My academic advisor is concerned about my success as an individual	19.1	42.1	9.5	18.3	11.1	“
4	My academic advisor has the skill and subject knowledge to adequately support my research	31	22.2	18.3	15.3	13.3	“
5	My academic advisor makes a real effort to understand any difficulties I face	11.1	13.5	17.5	20.6	37.3	“
6	I have been given good guidance in topic selection and refinement by my advisor	16.7	32.5	16.7	14.3	19.8	“
7	I have been given good guidance in my related literature search by my advisor	17.5	32.5	21.4	10.3	18.3	“
8	My advisor provides helpful feedback on my research progress	26.2	19	25.4	5.6	23.8	“

One of the missions of the University is to produce graduates that will become leaders in their communities and public services, accomplished professionals in their respective disciplines, and capable of becoming fully competitive in all labor sectors, including private and public ones, academic institutions and in the international community(AAU Strategic Plan). However, in this regard, graduate education students evaluations are very negative. Only a small proportion of graduates were satisfied and very satisfied with the areas pertaining to academic advising.

Faculty / Staff

When subject became faculty, students were asked to rate both the level of importance and satisfaction with issues related to fairness, approachability, knowledge, helpfulness and the staff's way of treatments. As found out in many other analyzed dimensions, importance rating of the items in the table below was rated fully above the average. They are considered very important by students. The corresponding satisfaction scores depict that item 3 and item 6 are abundantly below the average. Students were dissatisfied with both of these items. In all considered cases, the performance gap scores are well above 1.5, result that suggests a need for dimension special attention. Whereas the University has an objective of developing academic administration dedicated to graduate studies and research, the result below shows that it is not keeping its promises in this regard.

Table 3: Expectations and satisfaction with the Faculty / Staff

<i>Faculty / Staff</i>				
<i>No</i>	<i>Items</i>	<i>Imp Mean</i>	<i>Sat Mean</i>	<i>Per. Gap</i>
<i>1</i>	Library staff are helpful	4.92	3.35	1.57
<i>2</i>	Faculty are fair and unbiased in their treatment of individual students	4.86	2.56	2.30
<i>3</i>	Teaching staff treat students as mature individuals	4.83	2.44	2.39
<i>4</i>	Nearly all of the faculty are knowledgeable in their field	4.80	3.04	1.76
<i>5</i>	Faculty provide timely feedback about students progress in a program	4.75	3.03	1.72
<i>6</i>	Administrators are approachable to students	4.69	2.10	2.59

Infrastructures

For the purpose of easy analysis, this dimension is divided in two sections: the first involving infrastructures related to libraries and the second pertaining to computers and other infrastructures. The University aimed at enhancing educational support services and as it can be seen from the table all items were rated well above average on importance scales even from students' point of view. A relatively good performance score was found in terms of library collection for the students' respective program of study (a gap of only 1.27), adequacy of library opening hours (with a gap of 1.28), attractiveness of the libraries' environment (with a gap of 1.47), and waiting time to get the library service (with a performance gap of 1.33). The highest performance gap is observed for item 3(adequate availability of copy machines).

Table 4: Infrastructures Related to the Libraries

<i>No</i>	<i>Items</i>	<i>Imp. Mean</i>	<i>Sat. Mean</i>	<i>Per. Gap</i>
1	Library facilities are adequate	4.94	2.25	2.69
2	Library opening hours is adequate	4.91	3.63	1.28
3	Copy machines availability is adequate	4.84	1.84	3
4	Library books are helpful	4.83	2.91	1.92
5	Electronic resources like journals, news letters, etc are available	4.76	2.29	2.47
6	Libraries collection for my program of study is helpful	4.72	3.45	1.27
7	There exists Quality printing facilities in the library	4.65	2.36	2.29
8	The libraries environment (noise, heating, ambience) is conducive	4.57	3.10	1.47
9	Waiting time to get library service is reasonable	4.46	3.33	1.33
10	I can get a suitable working space in the library	4.44	2.42	2.02

The satisfaction rating for item number 4, 6, 8 are all below the average and none of the issues of graduates concern did not result in a satisfaction score above average-graduates did not report good satisfaction

with any single area, except adequacy of library opening hours considered important or very important. Whereas the importance ratings do not greatly vary across dimensions and specific issues under the dimensions, the satisfaction ratings on infrastructures related to computer support services, as depicted in the above table (table 11), is below the average or cutoff point (except suitability of opening hours of computer lab rooms). The performance gap for each of the items depicted in table 11 is completely above 1.5 score, which implies that they are among the areas needing a strong improvement.

Table 5: Ratings of Infrastructures related to Computer Support Services

<i>No</i>	<i>Item</i>	<i>Imp. Mean</i>	<i>Sat. Mean</i>	<i>Per. Gap</i>
1	Access to the Internet service is easy	4.94	2.21	2.73
2	The computer labs are adequate and accessible	4.92	2.02	2.90
3	Opening hours of computer lab rooms is suitable	4.91	2.97	1.94
4	Availability of audio visual aids	4.86	1.72	3.14
5	There is sufficient number of computers for students	4.83	1.87	2.96
6	Availability of printing in the computer lab	4.75	1.90	2.85
7	Training in the use of computers	4.69	1.73	2.96

Skill Development / Students' Partial University Experience

Skills related communication, analysis, working cooperatively with team members, research and independent learning were areas about which graduates expressed their opinion.

Table 6: Skill Development / Student Partial University Experience

<i>No</i>	<i>Item</i>	<i>Imp Mean</i>	<i>Sat Mean</i>	<i>Per Mean</i>
1	My experience so far had helped me to develop a range of communication skills	4.92	3.51	1.41
2	My department provides opportunity for social contact with other research students	4.92	2.30	2.62
3	As a result of my experience so far I have improved my ability to learn independently	4.91	3.60	1.31
4	The University helped me to work cooperatively in a group	4.83	2.90	1.93
5	My experience so far has improved my analytical skills	4.80	2.90	1.90
6	My department provides a good seminar program for research students	4.80	2.71	2.09
7	I am able to experience intellectual growth here	4.75	3.03	1.71
8	My department provides me to become involved in the broader research culture	4.63	2.12	2.51
9	As a result of my experience so far I feel confident about managing a research project	4.61	2.70	1.91

Students reported that the experiences they had during their attendance at AAU helped definitely them in developing of communication skill, and in improving ability to learn independently. The highest gap score (2.62) is observed corresponding to item 2, followed by item 8 with a performance gap of 2.51. With the exception of item 1 and 3 above, once again the University failed to meet graduates' expectations. That suggests that the graduate program at AAU, intended to produce qualified, competent and confident graduates, has still a lot to do to fill existing gaps, especially in the area of research.

Among all items in the above table, students provided above average ratings in terms of satisfaction scores only to independent learning and communication skills, where about 19.1 % and 19.8 % of the students expressed their dissatisfaction/very dissatisfaction and 62.7% and 65.1% for

them reported satisfaction /very. To better analyze the gap score, the best way to begin is by looking at the big picture and identify areas more relevant for students. The following table summarizes the importance, satisfaction, and performance gaps for the 7 areas (scales) included in the questionnaires distributed to graduates. The scales are listed in order of importance. This table is followed by the scale scores that summarize the top 15 items, with the largest and smallest performance gaps.

Scale Summary

Ranking the 7 scales offers insight into what graduates value across the full spectrum of the University experience. The scale summary helps to understand the importance and satisfaction scores for each composite scale. The responses of graduates led to this ranking of importance scales:

Table 7: Scale Summary

N^o	Scales / Dimensions	Imp Mean	Sat Mean	Gap Mean
1	Academic Advising (b=13-20)	4.85	3.07	1.78
2	Skill development / Student partial Uni. Experience	4.79	2.86	1.93
3	Infrastructure	4.79	2.37	2.42
4	Faculty / Staff	4.78	2.63	2.15
5	Academics (a=1-12)	4.66	2.93	1.73
6	Registration Effectiveness	4.52	2.55	1.97
7	Campus Environment	4.10	2.87	1.23

From the table above, it can be seen that academic advising is the scale which was rated as the most important of all and campus environment the last one, even though a very little difference, in terms of importance, between the first three values can be observed. In terms of satisfaction score, however, the scale which was rated as the least important gained the smallest performance gap, suggesting that it requires the least attention if related to

others. The most important scale was rated as being the third in terms of gap score and the first in terms of satisfaction score. Just similar to individual item rating results, the University never met any of the students' concern in terms of dimensions / composite scores. Faculty and infrastructures are the two dimensions with the bigger performance gap. Interaction with faculty is a key concern among students. Faculty needs to foster opportunities for regular interaction with the students in order to promote student success. Such opportunities for further communication also improve the faculty's understanding of students' unique circumstances and may help to improve the faculty-student interaction. This helps students in meeting expectations and promotes faculty satisfaction through students' performance.

In order to deliver its core, teachings and research mission, AAU needs to have adequate and quality infrastructures. And in fact, the scale infrastructure results among the three top important dimensions, as from respondents answers, but unfortunately it is also where the highest performance gap score is observed. It suggests that the university has to be more responsive to students' call to action as it is an issue of top priority among the seven scales measured, followed just by faculty (2.15), registration effectiveness (1.97), skill development (1.93), academic advising (1.78), academics (1.73) and campus environment (1.23). In an ideal situation, the dimensions of educational experience with the greatest importance should be the dimensions where students obtain the greatest satisfaction.

The above table also depicts the top fifteen largest performance gaps (all those at 1.50 or above), as reported by AAU graduate respondents.

A review of the largest performance gaps revealed 2 aspects:

1. Students are concerned about a wide variety of campus issues, from audio visual aids to copy machines to training, from use of computers to availability of printing, from helpfulness of library staff and worthiness of tuitions invested.

2. There is no area / dimension resulting devoid of performance gap. Thus, we cannot address most of the gaps in a single dimension / scale. However, when the items were rank-ordered by importance, the value that survey respondents placed on infrastructures clearly emerges, especially in relation to library and lab facilities. These are followed by academic issues.

The table also reveals that some areas with the largest performance gap are relatively less important in the eyes of the students, which may suggest AAU giving attention primarily to the remaining areas with high importance score against high performance gap.

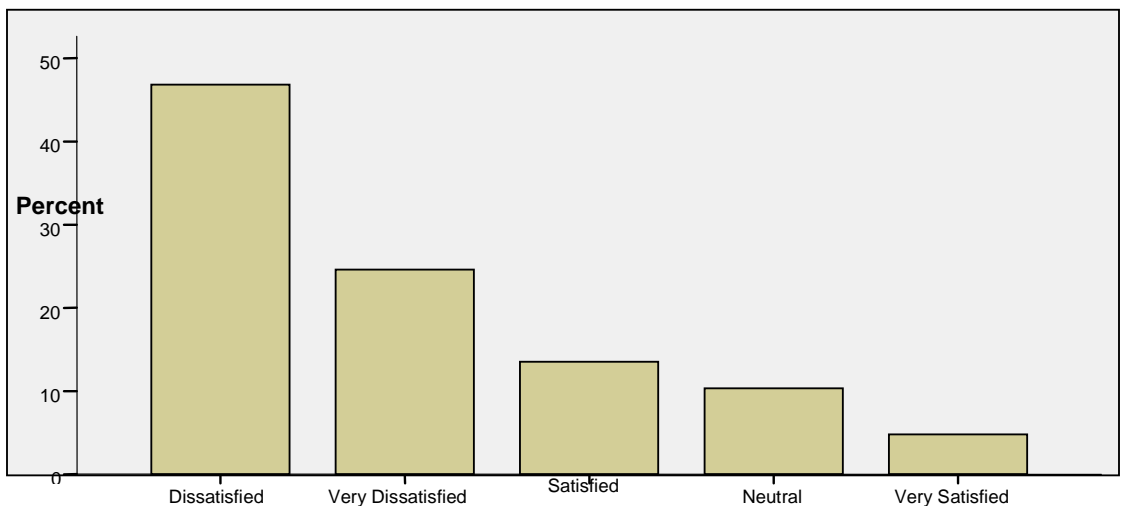
Table 8: Rank-ordering of the top 15 Largest Performance Gaps Reported by the Respondents

<i>No</i>	<i>Items</i>	<i>Gap Mean</i>	<i>Imp Rank</i>
1	Availability of audio visual aids	3.14	15
2	Copy machines availability is adequate	3.01	16
3	Training in the use of computers	2.94	41
4	There is sufficient number of computers for students	2.94	18
5	The computer labs are adequate and accessible	2.92	3
6	Availability of printing in the computer lab	2.86	34
7	The personnel involved in registration are helpful	2.78	38
7	Access to the Internet service is easy	2.74	2
8	Library facilities are adequate	2.70	1
10	My department provides opportunity for social contact with other research students	2.62	43
11	Administrators are approachable to students	2.60	42
12	Students' work assessment is fair	2.54	31
13	My department provides me to become involved in the broader research culture	2.50	48
14	My academic advisor make a real effort to understand any difficulties I face	2.50	10
15	Electronic resources like journals & news letters are available	2.49	32

General level of satisfaction

In the survey, graduating students provided information about their satisfaction with the University in general. For various aspects of the University as a whole, graduating students were asked to indicate their level of satisfaction by indicating: very satisfied, satisfied, neutral, dissatisfied, or very dissatisfied. Accordingly, 13.5% percent reported that they are satisfied and only 4.8 percent are very satisfied but 24.6% of them are very dissatisfied and the mega part 46.8 % are dissatisfied and the remaining are neutral with the overall experience they gained at AAU. The standard deviation shows about 1 point variation among responses from the mean score. It would be reasonable to assume that, if customers are satisfied with the services they are offered by a company, they would talk favorably about the company and its offers, and recommend others to exploit such services too, and vice versa. Finally, according to Noel-Levitz, "Students who find an institution just the right place, the institution's courses and professors stimulating, who are challenged and energized and happy and enthusiastic will go back home and talk up the institution to their friends.

Figure 1: In general, how satisfied are you with your overall graduate experience at AAU / in your campus



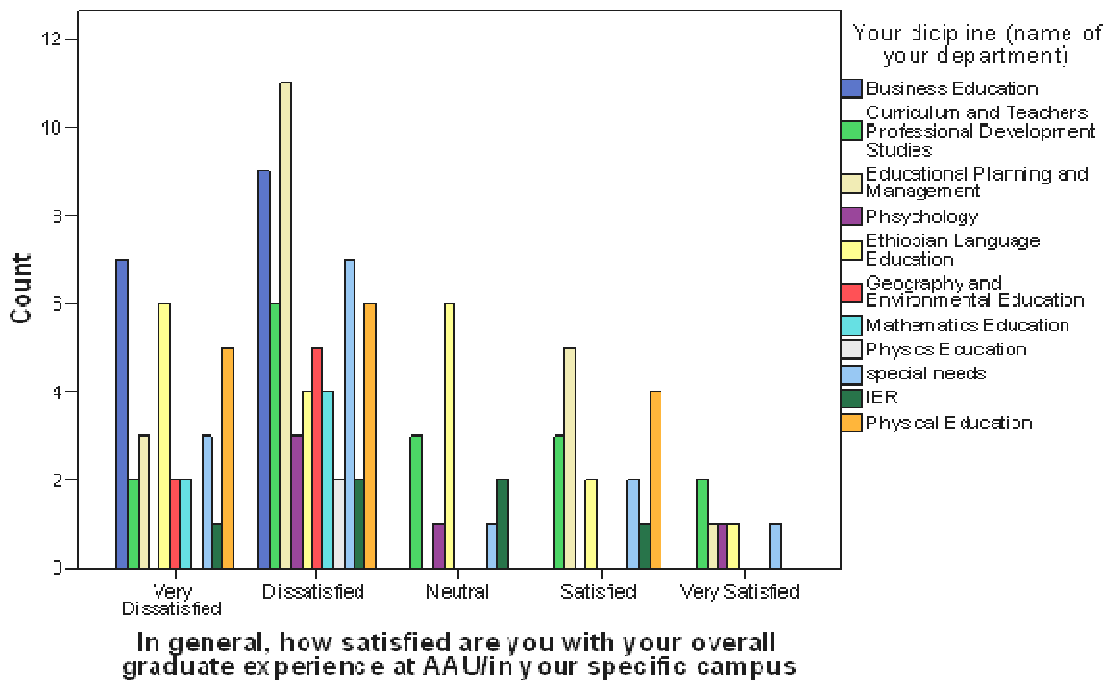
Surprisingly, although most of them are not satisfied, especially students from business, education, geography, environmental and mathematics department (as shown in table 13 below) with their university educational experiences.

Satisfaction by Department

The differences in the levels of satisfaction among departments surveyed can be clearly observed by considering at the following bar chart. The highest rate of dissatisfaction was reported by educational planning and management department students, followed by business education, Ethiopian languages. The highest rate of satisfaction in the faculty of education was reported by curriculum and teachers professional development studies followed by psychology, mathematics and special needs.

Table 9: Expectations Considered the Most Satisfying

Bar Chart



<i>N₀</i>	<i>Items</i>	<i>Imp Mean</i>	<i>Sat Mean</i>	<i>Gap Mean</i>
1	Library opening hours is adequate	4.91	3.63	1.28
2	As a result of my experience so far I have improved my ability to learn independently	4.91	3.60	1.31
3	The program I joined is a positive professional development experience	4.76	3.59	1.17
4	The course outlines are relevant	4.52	3.52	1.00

On importance scores adequacy of library opening hours, improved independent learning ability, professional development of experience, and relevance of course outlines were rated as very important—91.3%, 92.3%, 77%, and 54.2% respectively. In contrast to the expectations considered most satisfying by students, the following table illustrates those areas that resulted in the most dissatisfaction. Most of the areas where students were dissatisfied or very dissatisfied with fall under two of the 7 dimensions—infrastructure and academic related issues—considered. All of these areas require urgent consideration by the university management.

In section 8 part of the questionnaire, student were asked with questions like “is there any readily available channel of expressing complaints in the University?”, “Have you ever expressed any complaints?” and “how were you satisfied with the responses you received for the complaints?” To the first question 90% of the students replied no, 6% of them do not exactly know the existence of the channel and the remaining 4% reported the existence of the channel. 94 % of the graduates reported that they never expressed their complaints and only the remaining 6% have expressed their complaints. To the last questions a significant portion of the graduates (85 %)—out of those who expressed their complaints—reported that they were very dissatisfied, 11 % dissatisfied, 3% satisfied, and 1% very satisfied with the responses they received.

Table 10: Expectations considered the Most Dissatisfying

<i>No</i>	<i>Items</i>	<i>Imp Mean</i>	<i>Sat Mean</i>	<i>Gap Mean</i>
1	Library facilities are adequate	4.94	2.24	2.70
2	Access to the Internet service is easy	4.94	2.20	2.74
3	The computer labs are adequate and accessible	4.93	2.01	2.92
4	My academic advisor make a real effort to understand any difficulties I face	4.90	2.40	2.50
5	My department provides opportunity for social contact with other research students	4.92	2.30	2.62
6	Availability of audio visual aids	4.86	1.72	3.14
7	Copy machines availability is adequate	4.85	1.84	3.01
8	There is sufficient number of computers for students	4.83	1.86	2.97
9	Teaching staff treat students as mature individuals	4.83	2.43	2.40
10	I have adequate access to the equipments necessary for my research	4.83	2.40	2.43
11	There is a commitment to academic excellence on this campus	4.82	2.40	2.42
12	Students' work assessment is fair	4.78	2.24	2.54
13	Electronic resources like journals, news letters, etc are available	4.77	2.28	2.49
15	The personnel involved in registration are helpful	4.72	1.94	2.78
16	Training in the use of computers	4.69	1.73	2.94
18	My instructors provide me with prompt feedback about my work	4.69	2.44	2.25
19	My department provides me to become involved in the broader research culture	4.62	2.12	2.50
20	I can get a suitable working space in the library	4.44	2.42	2.02
21	Tuitions paid is a worthwhile investment	4.27	2.39	1.88

From the semi-structured interview made, the response obtained to a similar question is that very few students express complaints, which are usually related to request for thesis advisors change and additional monetary support for conducting thesis, therefore the responsible office believes

graduates to be satisfied with the educational experiences at AAU. So, generally the University considers that, if graduates do not complain, they are satisfied, if not delighted, with their educational experiences. But comparing this result with the above ones, make clear that lack of complaints does not mean graduates to be satisfied or very satisfied with what they are provided with and is mainly referable to lack of appropriate channel or lack of knowledge about where to complain. Only 12% of the respondents have ever expressed their complaints and the remaining 88% have never done the same to any concerned party, just similarly to what is summarized hereunder.

Summarized Strengths and Weakness and General Comments

➤ Strengths

Appealing to the senses of graduates university environment (campus sizes and appearance); provision of education opportunity for some special groups like the blind; some good modes of assessments (examinations) irrespective of the grading system (habit) in place; existence of knowledgeable tenured academic staff, regardless of their willingness and commitment to share with students; location advantage of the university (center of the country where many opportunities exist); and good reputation.

➤ Weaknesses

- 1.** Opening new graduate programs without equipping them with the required inputs, especially qualified human power.
- 2.** In almost every corner of the University, ethical principles do exist and are declared but most of them are not respected by the staff. The administrative staff is very helpless / uncooperative, irresponsive and lacking integrity.
- 3. The Staff:** the academic staff lacks good teacher-student interaction, control and commitment; missing or coming lately to classes, absence

of support to problems graduates face, and lack of treating graduate students as mature individuals.

4. Relatively well designed courses exist in the University but they are not delivered in a way graduates can grasp practical skills and additional knowledge, especially in the area of research work.

Changes to be made to improve graduates' learning experience:

1. **Facilities:** Furnishing the graduate library's with up-to-date reference materials and sufficient computers with good internet access; the University has even to struggle to (or as to some respondents to regain) good recognition at least in Africa; toilets (especially those close to the libraries) should be always clean with sufficient supply of water, and access to accommodation even at market price should be given to graduates.
2. **Teaching and learning:** modes of assessment should more often consider analytical and conceptual understanding, and the professors with wide ranging research experiences should be encouraged to share it with students.
3. **The Staff:** The administrative staff in general and people working in registrar offices in particular should, if possible, be given intensive training regarding how to serve students professionally and meet their expectations, and the various parties in university should work and collaborate as part of a whole system rather than as separate bodies.

Some of the strengths and weakness identified here are similar to what has been obtained by the University's strategic plan committee, which was organized for designing the university wide strategic plan.

Conclusions

Based on the data presentations and analysis made in the previous chapter, the researcher drew the following conclusions:

1. The survey has produced a wealth of valuable feedback from key respondents, concerning their University educational experiences as students using the range of services on offer. Students have expressed high satisfaction with the adequacy of library opening hours, improved independent learning ability, professional development experience, and relevance of course outlines. These individual items were also among those rated by graduates as the most important ones.
2. The overall impression given by students is that they are considerably more dissatisfied than satisfied. However, on individual item basis, graduates' level of satisfaction varied from item to item. The mean satisfaction score for all items (grouped in scale wise) was 2.75, which fall within the range of neither satisfied nor dissatisfied.
3. Although all of the scales / dimensions, except adequacy of parking space (a specific attribute within the campus environment dimension), were rated as important or very important, the corresponding measures on satisfaction gained uncomfortably dissatisfaction and high dissatisfaction, except the items identified in the first conclusion above. Thus, they are issues which can be worrying for students and possibly distract them from their studies, unless appropriate support is not available. These areas require careful investigation to ascertain the best way forward and develop suitable action plans for this purpose. Some evidences have, of course, been observed that the university made progress in raising satisfaction levels and lowering dissatisfaction levels. It is important in terms of morale that this achievement is recognized and valued as a model for further progress.

Reviewing the satisfaction and priorities of students also led to the following conclusions:

- Skill development, issues related to the faculty, and infrastructures are of paramount importance to graduates. Of course the other scale measures like academics, effectiveness of registration and the campus environment are not very far away from the above three scales. The performance gaps observed in the first three scales is very high, suggesting that the University is not leaving up to students' expectations. In contrast the latter three scales results showed better performance gaps (i.e., lower performance gaps), with campus environment least followed by registration effectiveness and then by academics.
- More than 50 of the items (specific expectations) were unmet by the University.
- Infrastructure dimension was rated among those that matter most to students but it was the least satisfying of all.
- About 70% of the graduates were dissatisfied or very dissatisfied with their University experiences. Only 13.5 % and 4.8% of them were satisfied and very satisfied respectively.
- The majority of students (90%) believed that there exists no readily available channel of handling and expressing students' complaints implying that the University is not keeping track of students' voice. And about 94 % of them have never placed any complaint.
- There were no individual questions with high importance ratings (mean of 3.49 or higher) and small performance gaps (gap = 0.50 or less), revealing that the University is not doing a good job in meeting student expectations. It has got a long way to go to meet expectations of students.
- In no one area the University exceeded the students' expectations.

Recommendations

Based on the conclusions made with respect to the area of study, the researcher recommends the following, believing would help in fill gaps identified by the study.

1. A combined methodology, as paper based and online questionnaire in order to attain respondents' feedback on the University, should be used so that students would make use of either of the alternatives they prefer, have plenty of time for preparation, and to get greater response rate. This, of course, should be comprehensive (encompassing all faculties and PhD students to attain better representation at the university with varied areas / issues of concern), realize quality emphasis throughout the process, be administered at the right time (the time the students are about to graduate and some time after graduation—alumni—to get more insight about the relevance and contribution of their experience at the university to the work).

Finally, the result should be reported to all concerned parties via various ways, like internal and external publication (the university's newspaper, newsletter, local newspapers, and official web site). Communicating any measure that is taken as a result of the survey would help students ensure whether students' voice is heard and are invaluable. Students have the right to be informed of action that has resulted in the expression of their views. This just closes the communication loop. Students are more likely to give reliable feedback if they are aware that it is taken seriously and they are informed on improvements.

2. The University has to make easier for its customers to complain. A dramatic lesson was learned by the researcher involved in this study; the best-in-business universities want their customers to complain. Informed customers know how their university services should work. If things are not working, customers are the first to know it. The best universities use feedback from personal visit and surveys to identify and resolve root causes of dissatisfaction and to change their services to ensure that the customer will be quickly satisfied. A strong and more vigorous complaints handling system should be in place. This would give the University an opportunity to meet, if not exceeding, students' expectations related to their educational experiences.

3. The University should strengthen its recent offers of developmental courses (on research and computational skills for example) to improve academic skills of graduates. Skill development is a crucial component of graduate education, and it is the faculty's responsibility to ensure students receive regular, informative, fair, helpful advice and contribution at all stages of their careers as graduate students. The researcher suggests that graduate advising should be treated as an important component of teaching process and service as part of normal faculty personnel reviews.

4. Developing strategies that will encourage formal and informal contact between faculty/staff and students is essential; so as to partly enhance graduates educational experience by the University is essential. Building a culture of continuous improvement needs the free exchange of views about teaching between students and staff. Both students and staff must indeed understand each others' expectations. This culture must capitalize a pluralism of evaluation

strategies and yet enable the university to provide evidence for improving quality of services and programs.

5. The University would be better-off, if it establishes an office devoted exclusively to the improvement of the educational experiences at large, with responsibility for conduct continues student satisfaction survey on a systematic basis, focusing on the "gaps" between student expectations and satisfaction of educational programs and services, and address those factors where graduates get dissatisfied and very dissatisfied, a kind of quality evaluation and improvement office. Continuity is of paramount importance as a satisfaction study in any given time is merely a snapshot. Many renowned Universities conduct annual satisfaction assessments. The annual reviews help the University keep its priorities in tune with the market. This is important because student satisfaction is a moving target – as soon as the University improves anything, its customers' attitudes shift; usually, they require still more.

6. The University has to enhance the physical plan and facilities particularly important to students (e.g., library resources, computer lab and residence halls). Easy access to the necessary infrastructures related to library and computer labs is still poor. Ease of access to the Internet, adequacy of computer labs, suitability of computer labs opening hours, availably printing facilities in the labs and the libraries, suitability of library working spaces, and training on the use of computers should be improved. The upgrading of computing resources for graduate students is badly needed. The key areas are improvements in computing hardware/software, faster on-line connections, and longer on-line time.

7. The University staffs must be made aware that every point of contact students has matters for their level of satisfaction so that they can exert their level more and enhance students' satisfaction.

8. Where applicable, the student satisfaction survey in conjunction with the University's Strategic Plan should be used to guide planning efforts at the unit level.

9. The University seeks to identify specific areas where university resources might be redirected, in order to bring about new desirable changes and sustain continued improvement in student satisfaction.

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