

REPORT ON OUM'S 2008 IMPORTANCE-PERFORMANCE SURVEYS

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1. INTRODUCTION

- 1.1. One of the pertinent challenges facing an ODL institution like OUM is to minimise its attrition rates, that is, the percentage of learners who drop out of their studies due to their failure to cope with their learning, dislike of the learning system, financial difficulties and a host of other reasons.
- 1.2. In its endeavour to be a learner-centred institution, OUM needs to fully understand the needs of its learners. This is important not only to minimise the attrition rate above, but also ensure that it is able to provide a rich and rewarding learning environment to its learners which is an integral part of its critical mission statement.
- 1.3. Understanding its learners' needs is also necessary for the institution to embark on continuous improvement efforts. In the current higher education environment where competition is very stiff, an institution needs to continually improve its internal processes to be more efficient and effective.
- 1.4. Finally, providing better quality services to learners is as important to current learners as well as new learners. Thus, it is also an important marketing tool to promote the institution. Realising that it has to contribute towards the democratisation of education of the nation, OUM needs to be recognised as an educational institution of high quality in order to attract the masses to enrol in it.
- 1.5. To accomplish all of the above, OUM needs to determine what the needs of its learners are. More specifically, it needs to know what services are of important to them and which of these are provided to their level of satisfaction. And the best way to obtain this information is from the learners themselves through an appropriate survey instrument which is called "Importance-Performance Survey."
- 1.6. While several researchers have used service quality instruments (SERVQUAL) to conduct this type of survey (Parameswaran, etc.), through our literature review, we find that a better instrument for our purpose is the service performance instruments (SERVPERF) which was developed by Cronin, etc.

1.7. Thus, OUM, through the efforts of its Centre for Student Management (CSM) had conducted several Importance-Satisfaction (I-S) Surveys since 2003 in an attempt to better understand the needs of learners. The foundation of the I-S survey is based on Noel-Levitz's instrument but modified to suit the needs of OUM as an ODL institution.

2. OBJECTIVE OF PAPER

The objective of this paper is to report on OUM's Importance-Performance Surveys conducted on OUM learners in 2008. The surveys comprised of two components: First on OUM's post-graduate learners and second on the undergraduates learners.

3. METHODOLOGY

3.1. The survey was conducted using a set of questionnaires based on the SERVPERF instruments developed by Cronin, etc. It comprises of Part A which contains 18 questions on the background of respondents, Part B which comprises of 46 service-items statements asking on *importance* of services & facilities provided by OUM, Part C also comprises of 46 service-items statements which asks on *performance* of services & facilities provided in Part C, and Part D which consist of 3 questions asking on the overall quality of services & facilities, the overall satisfaction towards services & facilities and the overall intention to complete study at OUM.

3.2. Two separate surveys were conducted: one on the postgraduates and the other on the undergraduates. The sample for the post-graduates covered 530 post-graduate students spread over 11 regional/learning centres. It was conducted in May 2008. A total of 231 students in the sample responded giving a response rate of 43%

3.3. The sample size for the under-graduate was 2,668 students spread over 53 regional/learning centres. The survey was conducted in June 2008 with an effective response rate of 60% (or 2668 respondents out of 4,500 questionnaires distributed)

3.4. The mean scores for importance and performance of each service items were calculated and their differences were computed to obtain their respective *Importance-Performance Gaps (IPGs)*.

3.5. The above means were also used to plot the positions of each service items on an *Importance-Performance Matrix (IPM)*

- 3.6. The matrix is divided into 4 quadrants based on the level of importance and performance: The *high-importance-high-performance* quadrant indicates “*Strength*” quadrant since learners rate the items in this quadrant highly important and they perform well in satisfying their needs. The opposing quadrant, *low-importance-low-performance* indicates a “*good-to-have-quadrant*” since if these service-items are not provided, they will not have any adverse effect on learners’ satisfaction. The next quadrant is *high-importance-low-performance* which represents “*Weakness*” quadrant since these service-items are of great importance to the learners but they do not satisfy the needs of learners that well. Finally, we have the *low-importance-high-performance* quadrant where we find those service items that are of not very high importance to learners and yet they are happy with the quality of the services provided. This is called the “*Misallocation of Resources*” quadrant.
- 3.7. Two sets of regression analyses were carried out; the first to examine the relationships between the overall quality, overall satisfaction and intention to complete and service-dimensions and the second to determine the relationships among the three former variables themselves.

4. RESULTS

4.1. Survey 1: Post-Graduates

4.1.1. Overall Importance and Performance Means

Overall Importance Mean = 6.1 and Performance Mean = 5.5. These results indicate that OUM had done well in providing the services that are of importance to the learners. Appendix 1 gives the full list of the ratings for all 46 service-items for post-graduate learners.

4.1.2. High Importance and Top Performing Services

The top 10 high importance service-items are shown in Table 1 while the top 10 high performance items given in Table 2.

**TABLE 1: TOP 10 HIGH IMPORTANCE SERVICE-ITEMS
FOR POST-GRADUATE LEARNERS**

No	Description	Mean
1	Knowledgeable and competent facilitators/tutors	6.5
2	Quality programmes	6.5
3	Tutorials conducted according to time-table	6.3
4	Accessibility of myLMS	6.3
5	Flexibile duration to complete study programmes	6.3
6	Easy payment of fees by installment	6.3
7	Discounts on tuition fees	6.3
8	Informing when tutorials/seminars will be held	6.3
9	Up-to-date T&L facilities	6.3
10	Staff always willing to help	6.3

From the above, 7 out of the 10 service-items are related to teaching and learning. This indicates that our post-graduate learners placed very high level of importance to those services related to their studies.

**TABLE 2: TOP 10 HIGH PERFORMING SERVICE-ITEMS
FOR POST-GRADUATE LEARNERS**

No	Description	Mean
1	Knowledgeable and competent facilitators/tutors	5.9
2	Quality programmes	5.8
3	Tutorials conducted according to time-table	5.8
4	Treating learners with respect	5.8
5	Quality exam & assignment questions	5.8
6	Work experience considered as part of entry qualifications	5.8
7	Strict exam invigilation procedures	5.8
8	Accessibility of myLMS	5.7
9	Programmes with various specialization	5.7
10	Flexibile duration to complete study programmes	5.7

From the above, 8 out of the 10 service-items are related to teaching and learning. This indicates that the Centre for Graduate Studies (CGS) had been able to provide academic-related services which are of high level of satisfaction to its post-graduate learners.

The number of common items appearing in both lists is 5 and all of them are related to teaching and learning. This implies CGS had done well in providing high quality academic-related services to its learners.

4.1.3. Importance-Performance Scores By Dimension

The mean scores and standard deviations for Importance and Performance by dimension are given in Table 4.

Table 4: THE MEAN SCORES AND STANDARD DEVIATIONS FOR IMPORTANCE AND PERFORMANCE BY DIMENSION FOR POST-GRADUATE LEARNERS

Dimension	Mean(I)	SD(I)	Mean(P)	SD(P)	I PGap
Tangibility	5.8	0.8	5.4	0.9	0.4
Reliability	6.1	0.8	5.5	0.9	0.6
Responsiveness	6.1	0.7	5.4	1.0	0.7
Assurance	6.2	0.7	5.7	0.8	0.5
Empathy	5.9	0.8	5.4	1.0	0.5
Accessibility	6.1	0.8	5.4	1.0	0.7
Affordability	6.3	0.8	5.5	1.1	0.7
Flexibility	6.1	0.8	5.6	0.9	0.5
Overall service performance	6.1	0.7	5.5	0.8	0.6

4.1.4. Importance-Performance Matrix

The Importance-Performance Matrix Table for all the service-items by dimension is shown in Table 3 while the Matrix itself is given in Figure 1.

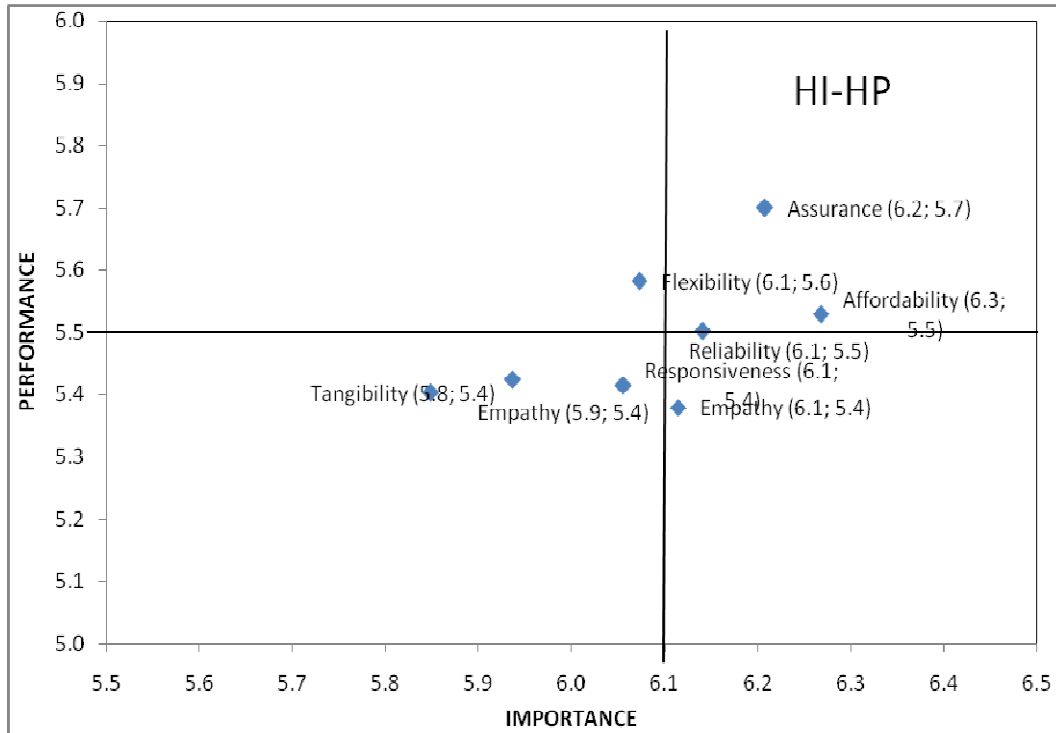
TABLE 3: DISTRIBUTION OF ITEMS BY DIMENSION AND QUADRANT FOR POST-GRADUATE LEARNERS*

Dimension	HILP	HIHP	LILP	LIHP	Total
Accessibility	2	2	1	2	7
Affordability	1	2	0	0	3
Assurance	0	5	1	1	7
Empathy	1	0	1	2	4
Flexibility	1	3	1	2	7
Reliability	2	2	1	0	5
Responsiveness	4	2	1	0	7
Tangibility	1	0	2	3	6
Total Number of Items	12	16	8	10	46

Percentage	26%	35%	17%	22%	100%
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*HILP: High-Importance-Low-Performance; HIHP: High-Importance-High-Performance;
LILP: Low-Importance-Low-Performance; LIHP: Low-Importance-High-Performance

FIGURE 1: IMPORTANCE-PERFORMANCE MATRIX FOR POST-GRADUATE LEARNERS



4.1.5. Regression Analysis: Factors Influencing Overall Quality, Satisfaction and Intention to Complete

The results of the above regression analysis are shown in Equations 1 to 3.

$$\text{Overall Quality} = 0.052 + 0.312 \text{ Resp} + 0.288 \text{ Assur} + 0.193 \text{ Access}$$

R² = 54% (1)

$$\text{Overall Satisfaction} = -0.05 + 0.30 \text{ Resp} + 0.23 \text{ Afford} + 0.27 \text{ Assur}$$

R² = 52% (2)

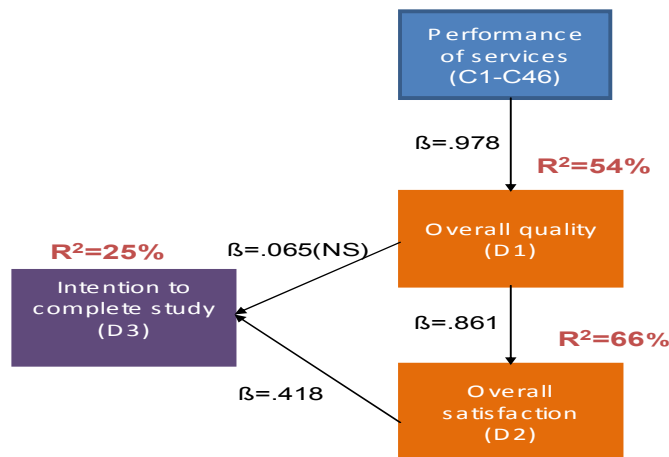
$$\text{Intention to Complete} = 3.20 + 0.36 \text{ Afford} + 0.21 \text{ Flex}$$

R² = 28% (3)

As can be seen from the equations, *Responsiveness*, *Assurance* and *Accessibility* have significant influence on the *Overall Quality* of the services provided by CGS to its post-graduate learners. However, in terms of the *Overall Satisfaction*, while *Responsiveness* and *Assurance* once again exert a significant influence but *Affordability* now replaces *Accessibility* as its third determinant. Finally, in the case of the *Intention to Complete*, only *Affordability* and *Flexibility* are its significant determinants.

4.1.6. *Regression Analysis: The Relationship between Performance of Services, Overall Quality, Overall Satisfaction and Intention to Complete a Study Programme.*

FIGURE 2: PERFORMANCE OF SERVICES, OVERALL QUALITY, OVERALL SATISFACTION & INTENTION TO COMPLETE STUDY FOR POSR-GRADUATE LEARNERS



4.1.7. The relationship between *Service Performance*, *Overall Quality*, *Overall Satisfaction* and *Intention to Complete a Study Programme* is schematically shown in Fig. 2. The figure shows that *Service Performance* has a significant direct influence on *Overall Quality*, which in turn exerts a significant direct

influence *Overall Satisfaction* and *Intention to Complete a Study Programme*. In addition, *Overall Satisfaction* also has a significant direct influence on *Intention to Complete a Study Programme*. *Service Performance* does not appear to have a significant direct influence on *Intention to Complete a Study Programme*. Instead, the influence of *Service Performance* is indirectly manifested through *Overall Quality* and *Overall Satisfaction*.

4.1.8. *Summary of Results*

- a) Overall, post-graduate learners' ratings of the services provided by CGS are commendable with relatively high importance and performance mean scores.
- b) Services related to teaching and learning are high on post-graduate learners' ratings.
- c) Slightly more than one-third (35 percent) of services fall in the "Strength" Quadrant of the I-P Matrix which reflects a fair performance. However, a major area of concern is the fact that 26 percent of the services are in the "Weakness" Quadrant. Likewise, a considerable portion of the services fall in the LILP (17 percent) and HILP (22 percent) Quadrants. This clearly indicates that CGS will need to review the quality of these services if it wants to be a more learner-centred department.
- d) *Service Performance* only has an *indirect influence* on Learners' *Intention to Complete their Study Programme* through *Overall Quality* and *Overall Satisfaction*. In addition to that, the combined influences of the latter variables on the former are relatively low ($R^2 = 25$ percent) indicating that they are other variables that had not been included in the above model specification. Further research needs to be carried out to identify these variables.

4.2. Survey 2: Under-Graduates

4.2.1. *Overall Importance and Performance Means*

Overall Importance Mean = 5.7 and Performance Mean = 5.5. These results indicate that OUM had done well in providing the services that are of importance to the learners. Appendix 2 gives the full list of the ratings for all 46 service-items undergraduates.

4.2.2. *High Importance and Top Performing Services*

- a) The top 10 high importance service-items are shown in Table 5 while the top 10 high performance items given in Table 6.
- b) From the tables, 6 out of 10 highest importance items are also rated in the top 10 in terms of performance indicating that OUM had performed well in the services that are important to learners.
- c) Based on dimensions, 4 out of 6 items are academic-related, 1 relates to learner support service and the other to learner-centredness.

TABLE 5: TOP 10 HIGH IMPORTANCE SERVICE-ITEMS FOR UNDERGRADUATES

No	Service items	Mean
1	Quality programmes	6.05
2	Knowledgeable and competent facilitators/tutors	6.03
3	Informing when tutorials/seminars will be held	6.02
4	Keeping up-to-date records	5.93
5	Tutorials conducted according to time-table	5.92
6	Accessibility of myLMS	5.92
7	Providing prompt feedback on assignments	5.90
8	Treating learners with respect	5.90
9	Staff always willing to help	5.89
10	Easy payment of fees by installment	5.89

TABLE 6: TOP 10 HIGH PERFORMANCE SERVICE-ITEMS FOR UNDERGRADUATES

No	Service items	Mean
1	Quality programmes	5.75
2	Distributing modules on registration day	5.74
3	Informing when tutorials/seminars will be held	5.72
4	Quality exam & assignment questions	5.72
5	Knowledgeable and competent facilitators/tutors	5.71
6	Treating learners with respect	5.70
7	Strict exam invigilation procedures	5.69
8	myLMS	5.68

9	Tutorials conducted according to time-table	5.66
10	Accessibility of myLMS	5.66

4.2.3. Importance-Performance Scores By Dimension

The mean scores for Importance and Performance by dimension are given in Table 7.

Table 7: THE MEAN SCORES FOR IMPORTANCE AND PERFORMANCE BY DIMENSION FOR UNDERGRADUATES

No	Dimension	I-Mean	P-Mean
1	Tangibles (B1 to B6)	5.52	5.46
2	Reliability (B7 to B11)	5.79	5.53
3	Responsiveness (B12 to B18)	5.84	5.58
4	Assurance (B19 to B25)	5.87	5.65
5	Empathy (B26 to B29)	5.72	5.51
6	Accessibility (B30 to B36)	5.69	5.39
7	Affordability (B37 to B39)	5.75	5.39
8	Flexibility (B40 to B46)	5.75	5.58
9	Overall service quality (B1 to B29)	5.76	5.54

4.2.4. Importance-Performance Matrix

- The Importance-Performance matrix for all the service-items by dimension is shown in Table 8.
- 52 percent of all items fall in the “Strength” Quadrant indicating that they should be should be exploited for marketing and retention purposes
- 26 percent are in the “Leave It” Quadrant implying that they should be reviewed with regard to their continuing relevance.
- 13 percent are in the “Misallocation” Quadrant implying that resources should be diverted away from these items as they can be done without.
- 9 percent are in the “Weakness” Quadrant indicating that more resources should be allocated to these services to improve their performance and move them to the HIHP or “Strength” Quadrant.

TABLE 8: IMPORTANCE-PERFORMANCE MATRIX BY DIMENSION FOR UNDERGRADUATES

Dimension	HILP	HIHP	LILP	LIHP	Total
Tangible	1	1	3	1	6
Reliability	0	3	2	0	5
Responsiveness	1	5	0	1	7
Assurance	0	6	1	0	7
Accessibility	1	2	4	0	7
Empathy	0	2	1	1	4
Affordability	1	1	1	0	3
Flexibility	0	4	0	3	7
Total	4	24	12	6	46
Percentage	9%	52%	26%	13%	100%

4.2.5. *Regression Analysis: Factors Influencing Overall Quality, Satisfaction and Intention to Complete*

The results of the regression analysis are shown in Equations 1-3

$$\text{Overall Quality} = 1.535 + 0.172 \text{ Tang} + 0.131 \text{ Rel} + 0.182 \text{ Assur} + 0.149 \text{ Access} + 0.066 \text{ Afford}$$

$$R^2 = 30.8\% \quad (1)$$

$$\text{Overall Satisfaction} = 1.585 + 0.190 \text{ Tang} + 0.213 \text{ Assur} + 0.117 \text{ Emp} + 0.067 \text{ Afford} + 0.102 \text{ Flex}$$

$$R^2 = 28.4\% \quad (2)$$

$$\text{Intention to Complete} = 3.005 + 0.380 \text{ Assur} + 0.133 \text{ Flex}$$

$$R^2 = 18.5\% \quad (3)$$

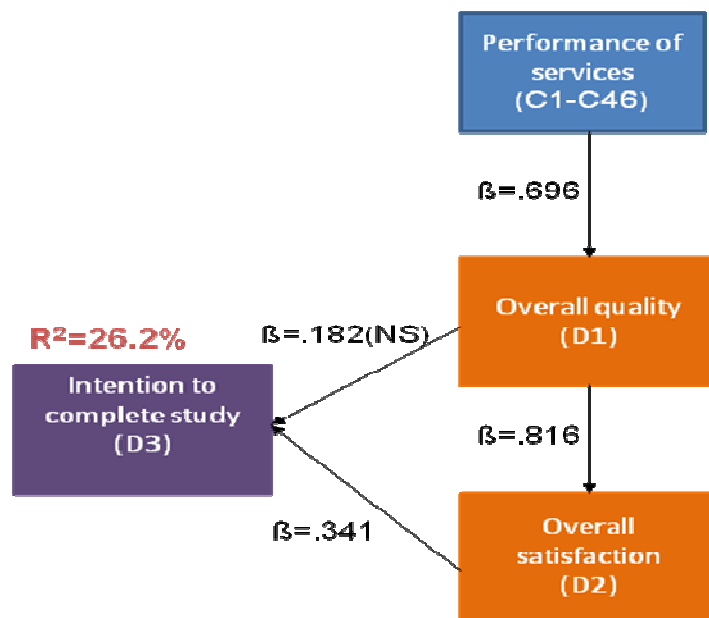
4.2.6. *Performance of services, overall quality, overall satisfaction & intention to complete study*

a) The results of the above regression analyses as shown in Figure 3 reveal a pattern of relationships between the above variables similar to that of the post-graduate learners, that is:

- i. *Service performance influences Overall Quality.*

- ii. *Overall quality* impacts *Overall Satisfaction*.
- iii. *Overall Satisfaction* influences *Intention To Complete Study*.
- iv. *Service Performance* does not appear to have a significant direct influence on *Intention to Complete a Study Programme*, and
- v. There is an insignificant impact of *Overall Quality* on *Intention to Complete a Study Programme*.

FIGURE 3: PERFORMANCE OF SERVICES, OVERALL QUALITY, OVERALL SATISFACTION & INTENTION TO COMPLETE STUDY FOR UNDERGRADUATES



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4.2.7. Summary of Results

- a) Overall, undergraduate’s ratings of the services provided by OUM are commendable with relatively high importance and performance mean scores.
- b) Similar to those of the post-graduate learners, services related to teaching and learning are high on undergraduate learners’ ratings.
- c) More than half (52 percent) of services fall in the “Strength” Quadrant of the I-P Matrix which reflects a fair performance. Only 9 percent of the services are in the “Weakness” Quadrant. Quite a considerable portion of the services fall in the LILP (26 percent) Quadrant while only 13 percent are in the LIHP

Quadrant. The results indicate that the services provided to the undergraduates to a large extent have met learner's expectations since the majority of them fall in the HIHP Quadrant. However, there is still room for improvements for the other services which are in the other 3 quadrants.

5. IMPLICATIONS OF THE RESULTS

The surveys had enabled OUM to identify the strengths and weaknesses of its services provided to its learners and consequently led to the following strategic initiatives:

- 5.1. Improving our teaching and learning facilities at our rented LCs
- 5.2. Reviewing our Learning Centres' operating hours
- 5.3. Creating the *Online Academic Counseling* to attend to students' academic and non-academic enquiries and problems
- 5.4. Improve the learner response system by:
 - 5.4.1. Designing, installing and implementing an integrated E- Customer Relationship Management System (E-CRM); *(the system helps the user keep track of customer requests/complaints)*
 - 5.4.2. Reducing the direct lines from 5 to 3, to improve the use of E-CRM
 - 5.4.3. Deleting the aduan@oum.edu.my, to improve the use of E-CRM
 - 5.4.4. Getting students to pose their problems via "sms" and staff to call back, using part of the E-CRM system.
- 5.5. With regard to retention efforts, that is, to encourage learners to complete their studies, OUM needs to improve on the aspects of reliability, assurance and accessibility of its services. In addition, due attention should be given to maintain the affordability of its programmes as well as improve the physical presence and appearance of some of its facilities such the libraries.

6. CONCLUSION

The results of the 2008 I-P Surveys indicated that OUM has done well in providing its services to its learners both in the post-graduate and undergraduate programmes. More specifically, the ratings by learners in terms of importance and performance are commendably high. This provides additional evidence on the strengths of OUM as an ODL institution which provides a wide range of learner-support services to its learners in its effort to be a learner-centred institution.

The primary objective of these surveys is to provide inputs to OUM in its retention initiatives. The results of the surveys indicate that service performance does not directly influence learners' intention to complete their study programmes, even though it does exert an indirect influence through the overall quality and overall satisfaction. The results also indicate that further research is necessary to determine possible factors that have a strong and significant influence on learner retention.

7. IMPROVEMENTS TO THE I-P SURVEY

As mentioned above, the I-P surveys had contributed towards a greater understanding of the importance and performance of OUM's services provided to its learners both in the post-graduate and undergraduate programmes. To further improve on the survey, the following new initiatives will be undertaken:

- 7.1. Developing an instrument for measuring service performance for ODL institutions
- 7.2. Using structural modeling to expand the analysis by incorporating more retention related variables
- 7.3. Mystery Calling Project to identify problems relating to responsiveness and accessibility and how they affect OUM's service performance
- 7.4. Benchmarking with other institutions
