Student Satisfaction in Malaysia :
customer-focused learner support

Helen KHOO Chooi Sim, & Rozhan IDRUS
Universiti Sains Malaysia, Malaysia
helenkcs@hotmail.com

ABSTRACT :

In order to compete competitively, a distance education institution has to identify its competitive edge within the industry. The issue of 'customer-focusing' is becoming increasingly important in order for the institution to excel. The purpose of this study is to identify aspects of the learner support system that contribute to the learning process of distance education 'customers'. Self-administered questionnaires were distributed to respondents during the annual residential intensive course on the main campus of USM, Malaysia. The findings from this study indicated that 8 dimensions of the learner support system recorded positive disconfirmations. These 8 dimensions were Pre-registration, Registration-as-a-Student, Academic-Planner, Academic-Guide-Book, Orientation, Intensive-Course, Main-Library-USM, and Examinations. This study found that Intensive-Course, Printed-Learning-Materials, Academic-Planner, Main-Library-USM, Academic-Guide-Book, and Teletutorial were effective in the respondents' studies. Lastly, Teletutorial was identified as an area for continuous quality improvement.

1. INTRODUCTION :

The education industry in Malaysia is currently experiencing a boom as indicated by the increasing number of both public and private learning institutions offering various disciplines of education programmes for local and foreign students. As competition is becoming intense, education institutions can no longer sit back and be contented in their 'comfort-zone'. The education industry is becoming more challenging, not only in providing high-quality programmes but also in coping with the dynamic demands of its 'customers'. As competition within the industry is becoming more intense, it is apparently clear that the primary customers (students and their parents) have more choices from which to choose. Thus, the issue of 'customer-focusing'' is highly important. Institutions should focus on meeting and delighting primary customers' expectations to survive the competition.

The early years of the nineties in Malaysia have witnessed an increase and greater demand for tertiary education in Malaysia. This has resulted in a remarkable increase in the number of distance education programmes offered by local institutions. The number of distance education students enrolled increased from 3,472 in 1995 to 12,597 in 1997 (Malaysia, 1998). In the Eighth Malaysia Plan (2001-2005), it is estimated that there are 36,000 distance

education students, and that this number will increase to 54,000 in the year 2005. The number of providers has also increased from two in 1990 to seven in 1996. The increase in the number of students and distance education institutions provides the potential students a wide choice to choose from.

2. CUSTOMER-FOCUSED IN DE :

Quality measures in distance education have traditionally focused very much on outputs and objective performance indicators. It has centred on outputs such as the presentation of course materials, the integrated use of media, and performance indicators such as retention and pass rates (McIlroy, 1997). Drop out, wastage or attrition are and have been major guides to the success of distance education systems (Sewart, 1993). Until recently, little attention was paid to what quality meant to the customers or the students.

In the quest for quality, attention should be paid to what quality means to the consumers (students) of the service. Thus, a key concept in current approaches to managing quality is 'putting the student first' (Nunan & Calvert, 1991; Mills & Paul, 1993; Robinson, 1994) and designing procedures and courses which more closely match the learner's needs and context. The new paradigm assumes that students are customers who are involved in an active and ongoing dialogue with their educational process, and that dialogue will include many voices, one of which may be the experienced voice of the faculty (Hall 1996). In any educational system, students are the most important stakeholders (Ravisankar and Murthy, 2000). Therefore, it is important that institutions should meet or exceed the expectation of their students. As customers, students would demand quality in the products and services offered by the institution and value for their money.

Many researchers have suggested a definition of quality focusing on meeting customer needs and requirements (Crosby, 1979; Gronroos, 1982; Yi, 1990). Quality is frequently defined as meeting and exceeding customer expectations. Customer focus provides the direction and the targets for improvement efforts, and customers are the driving forces for quality efforts.

The provision of learner support is now widely and increasingly being recognized as an essential component of any open and distance learning system. Tait (1995) noted "there has been an enormous growth in interest, and indeed institutional commitment even in times of financial constraint, to student support in ODL, and many examples in different countries of excellent practice". In distance education, there is strong emphasis on the provision of education support, which is designed to facilitate interaction and communication between students and academic staff (Garrison & Baynton, 1987; Kember & Dekkers, 1987; Sewart, 1992; Hillman, Willis & Gunawardena, 1994). In fact, any educational institution providing distance education programmes must also provide quality support services to all students. Due to the wide range of technologies used by distance educators, the support must be available and consistent to all students at all times.

Learner support is needed in order to facilitate students' learning. Research has consistently shown that, without the necessary student support services, a distance education programme will not succeed. These supports can be in the forms of facilities, administration, learning materials, reading materials and references, human interaction, and of advice and moral support. Learner support provided by the distance learning institutions is still based on the presumptions, beliefs and conditions of the provider (Daing & Abu Daud, 1997; Robinson, 1994). However, it is important that support by the providers should be customer-focused and meet the expectations and needs of the students. This is because the responsibility of learning is in the hands of the students. It is only appropriate that students are the best to know what are the kinds of support they need to achieve their educational and personal goals. Moreover, distance education students are adults and they are able to determine quality according to their individual needs (McIlroy & Walker, 1993, p.43).

Responding to the effort of becoming customer-focused, it is inevitably important for distance education institutions to deliver the promised service quality to both students and their parents. Meeting and exceeding customers' expectation not only satisfy students but also eventually they become advocates who would provide a 'free' source of promotion to the institution through their 'positive word of mouth'. Students in distance education systems, who are adults, are in the best position to assess the quality of any particular distance education programme. They buy, use and perceive not only the physical products but also tangible and intangible services, such as marketing, counselling, tutors' behavior, etc. Their judgments of quality are personal and subjective, based on their individual needs, demands, desires and experiences. They may have different levels of expertise when it comes to determining the quality of a particular study programme. However, their judgments are decisive for the future of any study programme, because the student-customer is the one who makes the investment in terms of money, time and effort (Lampikoski 1995).

Distance education providers striving to stay competitively in this education industry should have a competitive edge over their competitors. Focusing on the needs of the customer, which is at the heart of quality, is one of the most effective means of facing the competition and surviving (Sallis, 1993). This calls for comprehensive studies on the satisfaction of quality of learner support services provided by the distance education institution. These studies would provide better insights for the institution for continuous quality improvement. Quality learner support services are essential in this era of competitiveness and globalisation.

3. AIMS OF STUDY AND METHODOLOGY

The aim of this study was to examine the current level of student satisfaction with respect to the various dimensions of the learner support system. The second aim of this study was to identify which dimension of learner support contributed to the learning of students. Lastly, this study aimed to identify which dimension(s) required continuous quality improvement.

The framework of this study is based on the Expectancy Disconfirmation Theory. According to this theory, feelings of satisfaction arise when customers compare their perceptions of a product's performance to their expectations. If perceived performance exceeds a consumer's expectations (a positive disconfirmation), then the consumer is satisfied. But if perceived performance falls short of his or her expectations (a negative disconfirmation), then the consumer is dissatisfied. There is a considerable amount of empirical evidence that confirms the hypothesised impact of the disconfirmation of expectations on satisfaction (Spreng, MacKenzie & Olshavsky, 1996).

The research instrument was developed based on the literature of distance education regarding the nature and purpose of learner support. 16 important dimensions of learner support were identified in this study. The dimensions were Pre-registration, Registration-as-a-Student, Academic-Planner, Academic-Guide-Book, Orientation, Printed-Learning-Materials, Supplementary-Materials (Multimedia), Teletutorials, Counselling, Intensive-Course, Regional-Centres, Students'-Bulletin, Main-Library-USM, Students'-Association, and Assignments-and-Examination. Responses to the 171 statements in the questionnaire were based on a five-point Likert Scale. Data analysis was conducted using the SPSS version 10. The population of this study included the students of the School of Distance Education, Universiti Sains Malaysia (USM), in the Academic Session 2002/2003. Self-administered questionnaires were distributed to 558 students during their annual residential intensive course at the main campus in USM in October 2002. The questionnaires were distributed in person by the researcher, and completed questionnaires were collected at a time agreed between both parties.

4. RESULTS AND DISCUSSION :

4.1 Satisfaction with the Learner Support System

Table 1 shows the current satisfaction level of the respondents with respect to the 16 dimensions of the learner support system. The results of the average expectation and perception (mean results) of 340 respondents showed that the respondents were generally satisfied with 8 dimensions of the learner support system provided by the school. These dimensions recorded a positive disconfirmation, and thus the students were satisfied with them. The respondents were

Table 1 : Expectations and Perceptions of the Learner Support System

| Dimension	Expectation n = 340 mean ± sd	Perception n = 340 mean ± sd	Perception minus Expectation
1. Pre-registration	3.58 ±0.64	3.79 ±0.56)	**0.21**
2. Registration-as-a-student	3.80 ±0.64	3.98 ±0.60	**0.18**
3. Academic -Planner	3.73 ±0.63	3.86 ±0.60	**0.13**
4. Academic-Guide-Book	3.82 ±0.61	3.96 ±0.58	**0.14**
5. Orientation	3.72 ±0.62	3.80 ±0.59	**0.08**
6. Printed-Learning-Materials	3.67 ±0.62	3.64 ±0.62	-0.03
7. Supplementary-Materials (Multimedia)	3.29 ±0.74	3.24 ±0.77	-0.08
8. Teletutorial	3.53 ±0.69	3.44 ±0.68	-0.09
9. Counselling	3.30 ±0.70	3.25 ±0.69	-0.14
10. Intensive-Course	3.93 ±0.58	4.03 ±0.55	**0.10**
11. Regional-Centres	3.27 ±0.73	3.17 ±0.75	-0.10
12. Students'-Bulletin	3.56 ±0.69	3.55 ±0.71	-0.01
13. Main-Library-USM	3.73 ±0.62	3.77 ±0.60	**0.04**
14. Students'-Association	3.09 ±0.99	2.83 ±1.01	-0.26
15. Assignments	3.57 ±0.70	3.53 ±0.68	-0.04
16. Examinations	3.96 ±0.61	4.07 ±0.58	**0.11**

satisfied with the Pre-registration (0.21), Registration-as-a-Student (0.18), Academic-Planner (0.13), Academic-Guide-Book (0.14), Orientation (0.08), Intensive-Course (0.10), Main-Library-USM (0.04), and with Examinations (0.11).

However, negative disconfirmation was found in 8 dimensions of the learner support system. The respondents were not satisfied with Printed-Learning-Materials (–0.03), Supplementary-Materials (Multimedia) (-0.08), Teletutorial (-0.09), Counselling (-0.14), Regional-Centres (-0.10), Students'-Bulletin (-0.01), Students'-Association (-0.26), or with Assignment (-0.04).

Measures should be taken by the school to increase the satisfaction of students regarding the dimensions above. Positive and negative disconfirmations of the 16 dimensions of learner support are clearly shown in Figure 1.

4.2 Statistical Analyses :

Table 2 shows the results of the statistical analysis (one-way t-test) for each of the 16 dimensions in the Learner Support System at the 95% confidence level. The analysis found that 7 dimensions, which recorded positive disconfirmations, were statistically
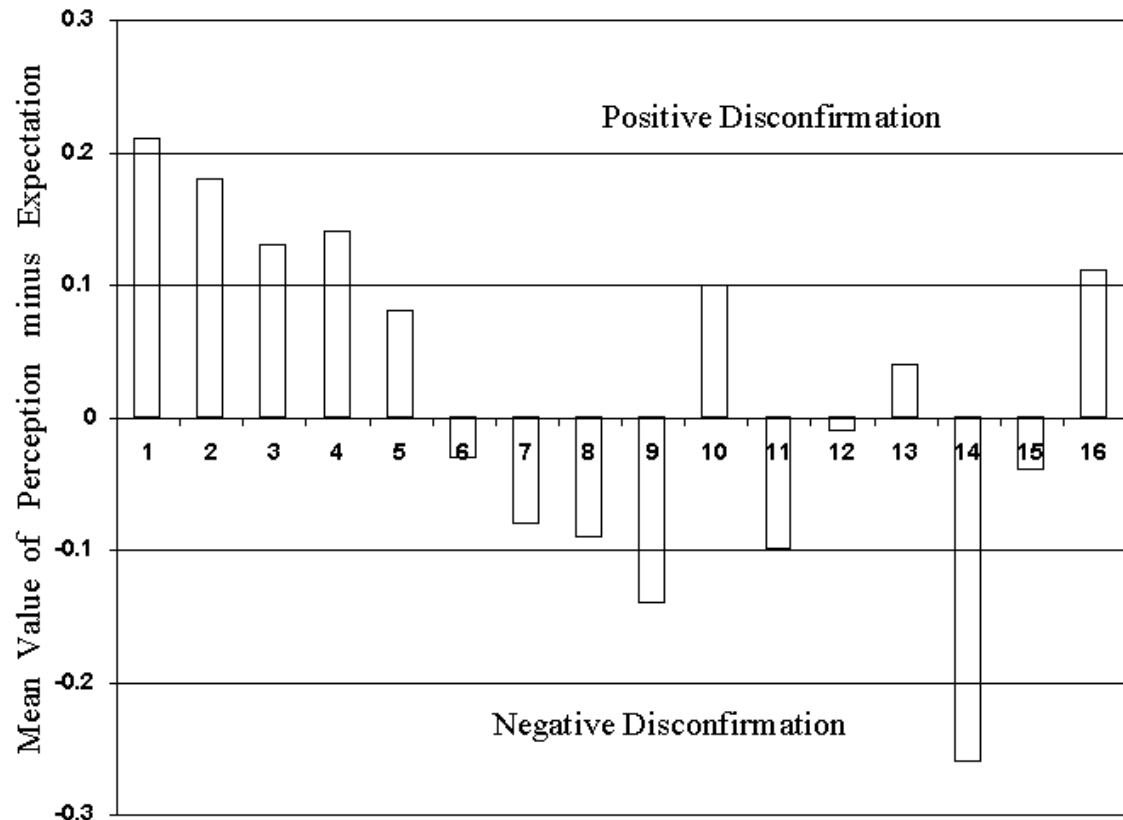
Figure 1 : Satisfaction (negative disconfirmation) with the student support system
(the columns 1-16 refer to the dimensions given in Table 1 above)

Table 2 : Results from the Statistical Analysis

Dimension	Perception minus Expectation	t	significance
1. Pre-registration	**0.21**	7.537	**.000**
2. Registration-as-a-student	**0.18**	6.872	**.000**
3. Academic -Planner	**0.13**	4.667	**.000**
4. Academic-Guide-Book	**0.14**	5.350	**.000**
5. Orientation	**0.08**	3.159	**.002**
6. Printed-Learning-Materials	-0.03	-1.050	.294
7. Supplementary-Material (Multimedia)	-0.08	-1.398	.163
8. Teletutorial	-0.09	-2.720	**.007**
9. Counselling	-0.14	-1.555	.121
10. Intensive-Course	**0.10**	3.837	**.000**
11. Regional-Centres	-0.10	-2.889	**.004**
12. Students'-Bulletin	-0.01	-0.227	.821
13. Main-Library-USM	**0.04**	1.773	.077
14. Students'-Association	-0.26	-5.408	**.000**
15. Assignments	-0.04	-1.091	.276
16. Examinations	**0.11**	4.148	**.000**

significant. These 7 dimensions were Pre-registration (t=7.537, p<0.001), Registration (t=6.872, p<0.001), Academic-Planner (t=4.667, p<0.001), Academic-Guide-Book (t=5.350, p<0.001), Orientation (t=3.159, p=0.002), Intensive-Course (t=3.837, p<0.001), and Examinations (t=4.148, p<0.001). The one-way t-test failed to reject the null hypothesis. Therefore, it was concluded that the students were satisfied.

The dimension Main-Library-USM that recorded a positive disconfirmation was not significant (t=1.773, p=0.77). The t-test failed to show that the students were satisfied with this dimension (at the 95% confidence level). However, if the confidence level was reduced to 90%, then the data would show that the students were satisfied.

The statistical analysis showed that only 3 dimensions that recorded negative disconfirmation were statistically significant. These 3 dimensions were Teletutorial (t=-2.720, p=0.007), Regional-Centres (t=-2.889, p=0.004), and Students'-Association (t=-5.408, p <0.001). The t-test indicated that students were not satisfied with these three dimensions.

There were 5 dimensions that recorded negative disconfirmation but did not reach statistical significance. These 5 dimensions were Printed-Learning-Materials (t=-1.050, p=0.294), Supplementary-Materials (t=-1.398, p=.163), Counselling (t=-1.555, p=0.121), Students'-Bulletin (t=-.227, p=0.821), and Assignments (t=-1.091, p=.276). The t-test failed to show that the students were not satisfied with these dimensions

4.3 Effectiveness of the Learner Support System

Table 3 shows the effectiveness of the

Table 3 : Effectiveness oof the Learner Support System

Dimension	Very helpful (%)	Help-ful (%)	Un-certain (%)	Un-helpful (%)	Very un-helpful (%)	n= 340 mean ±sd
3. Academic -Planner	103 (30.3)	209 (61.5)	22 (6.5)	5 (1.5)	1 (0.3)	**4.20** ±0.64
4. Academic-Guide-Book	89 (26.2)	205 (60.3)	34 (10.0)	12 (3.5)	0	**4.09** ±0.70
6. Printed-Learning-Materials	144 (42.4)	170 (50.0)	24 (7.1)	2 (0.6)	0	**4.34** ±0.63
7. Supplementary-Material (Multimedia)	46 (13.5)	133 (39.1)	122 (35.9)	32 (9.4)	7 (2.1)	**3.53** ±0.91
8. Teletutorial	100 (29.4)	169 (49.7)	47 (13.8)	10 (2.9)	14 (4.1)	**3.98** ±0.96
9. Counselling	23 (6.8)	87 (25.6)	142 (41.8)	55 (16.2)	33 (9.7)	3.04 ±1.04
10. Intensive-Course	166 (48.8)	153 (45.0)	19 (5.6)	2 (0.6)	0	**4.42** ±0.63
11. Regional-Centres	50 (14.7)	166 (48.8)	79 (23.2)	30 (8.8)	15 (4.4)	3.61 ±0.99
12. Students'-Bulletin	22 (6.5)	118 (34.7)	113 (33.2)	60 (17.6)	27 (7.9)	3.14 ±1.04
13. Main-Library-USM	117 (34.4)	180 (52.9)	25 (7.4)	15 (4.4)	3 (0.9)	**4.16** ±0.81
14. Students'-Association	12 (3.5)	57 (16.8)	100 (29.4)	82 (24.1)	89 (26.2)	2.47 ±1.15

various dimensions in the learner support system towards respondents' learning process. 6 dimensions recorded mean values of more than 3.98. This indicated that Intensive-Courses (4.42), Printed-Learning-Materials (4.34), Academic-Planner (4.20), Main-Library-USM (4.16), Academic-Guide-Book (4.09), and Teletutorial (3.98) were effective in helping respondents in their studies.. The school should therefore put more emphasis in these dimensions to facilitate students' learning processes.

4.4 Areas for Continuous Quality Improvement

As an effort towards continuous quality improvements, a grid was plotted based on the means of expectation and perception of quality given in Figure 2. The Expectation / Perception Grid could help to identify the crucial learner support dimensions, which could be focused upon to increase satisfaction in the system and so make the

system into a customer-focused support system. The mean value of 3.5 was selected as the reference divider because providers who are aiming towards customer–focused and quality improvement should work to increase the expectation and perception of its students. People's expectations and demands for total quality are increasing all the time (Bank, 2000).

Examining Figure 2, there are four quadrants namely, 'Keep-up-the-Good-Work', 'Try-to-Improve', 'Opportunity', and 'Low-Priority'. Learner support system dimensions that fall in quadrant 'Keep-up-the-Good-Work' were classified as high in expectation and high in perception. This showed that the School of Distance Education was customer-focused. There were 11 dimensions in this quadrant ;-. Examination (16), Intensive-Course (10), Registration-as-a-Student (2), Academic-Guide-Book (4), Academic-Planner (3),

Figure 2 : The expectation / perception grid
(the grid-points 1-16 refer to the dimensions given in Table 1 above)

Orientation (5), Main-Library-USM (13), Pre-registration (1), Printed-Learning-Materials (6), Students'-Bulletin (12), and Assignments (15). There is only one dimension in the quadrant 'Try-to-Improve'. Teletutorial (8) has to be improved because the expectation is high while its perception is low. Teletutorial is an important dimension of learner support to facilitate the learning process of distance education students. Thus, measures should be taken by the school to improve the provided quality of Teletutorial. There are four dimensions in the quadrant 'Opportunity' where both the expectation and perception are low. These four dimensions are Counselling (9), Supplementary-Materials (Multimedia) (7), Regional-Centres (11) and Students'-Association (14). As these four dimensions are in the 'Opportunity' quadrant, it shows that there are many opportunities for improvement. No dimensions fall in the quadrant 'Low Priority' where the expectation is low but the perception is high. This shows that the school is not wasting its efforts and funds in areas that are not important.

From the analysis above, it can be clearly seen that the learner support dimensions that are effective in facilitating students' learning i.e. Intensive-Course (4.42), Printed-Learning-Materials (4.34), Academic-Planner (4.20), Main-Library-USM (4.16), and Academic-Guide-Book (4.09) fall in the quadrant 'Keep-up-the-Good-Work'. The school should keep up the current performance in these dimensions to enable students to achieve their educational goals. However, the school should conduct incremental efforts in future to increase the perception of its students in these areas.

Only Teletutorial (3.98) falls in the quadrant 'Try-to-Improve'. This indicates that more stringent efforts should be taken by the school in this dimension, which is important to facilitate students' learning.

5. CONCLUSION :

Customer-focused support is an important issue to be addressed by distance education providers. As customers' expectations and perception of a product or service are not static, distance education providers should be sensitive to this. It is necessary to study the dynamics of customers' expectations and perceptions in order to be competitive. Distance education providers should examine the level of satisfaction in the quality of their learner support system currently offered to distance education students. Continuous quality improvement focusing on customers' expectations and perceptions should be conducted to enable distance education institutions to survive in this competitive industry. They should also be ahead or on par with current developments in information and communication technology. Lastly, issues pertaining to customer-focused support should be of the utmost importance and prioritised by distance education providers.

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Helen KHOO Chooi Sim is a postgraduate student, and Rozhan Mohammed IDRUS is an Associate Professor, at the School of Distance Education, Universiti Sains Malaysia, Penang 11800, Malaysia. Rozhan can be contacted through Tel : 6-04 653 2314, Fax : 6-04 657 6000, Email : rozhan@usm.my , URL : http://www.freewebc.com/rozhanmidrus .