

A Framework for Evaluation OUM Experience

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Abstract

The purpose of this paper is to highlight the various factors related to learners' performance which should be considered in a framework of evaluation for an open distance learning institution such as Open University Malaysia. Evaluation of learners' performance is an integral part of any educational setting. It is important that the Institutions of Higher Learning to have a comprehensive framework of evaluation which among other factors can ensure the development of effective professional and competent graduates to meet the demand of the job market. Open University Malaysia (OUM) is an institution which provides life-long and distance learning education. The current practice in OUM's delivery system is the flexible blended mode of learning, a combination of Face to Face mode, On-line mode, and Self-study mode. OUM's learners are from different levels of community sectors and different educational backgrounds with most of them are still working. The three main aspects to be considered in the evaluation framework are the social context of the learners, the educational environment, and the course goals. These three aspects will make the evaluation system more comprehensive, and will ensure the credibility, validity, reliability and quality of the evaluation processes.

Keywords: Evaluation, social context, educational environment, course goals, open distance-learning, framework.

Brief Overview of Open University Malaysia

Open University Malaysia (OUM) has a wide perspective on its educational goals. Its distinctive mission is to promote education equally; prepare learners' to be competent citizens; train learners' to meet with the needs of the workplace; providing learners' the ability for social mobility and raising standards of living. With the increase in number of open distance learning provider in the country, OUM faces challenges in the competition to be the leader in open learning.

As a leading contributor in the democratizing of education, OUM planned to put forward the various possibilities of getting education to the people, aligning its mission with the government's aim of developing a knowledge-based society by the year 2020. Through its blended mode of learning OUM has attracted more than 70,000 learners ever since its operation in 2001. Currently, OUM has 61 Learning Centers, which conducts the blended mode of learning. The blended mode of learning has three main components; self-managed learning regulated by the learners themselves; face-to-face tutorials and online learning. The self-managed or self-regulated learning style is what is expected of adult learners, since this is the strength that the learners will have to stand by with in following a distance mode of learning. The face-to-face component is to ensure that learners will be kept engaged with tutors in the teaching and learning process. The last component, which is the online learning mode. This is a learning management system (my LMS) and it is a platform provided and managed by the university which allow learners to continuously interact with tutors and classmates on the course content or other related matters concerned with the course.

Generally, OUM learners are from different age group and different educational background. A recent study conducted by a group of researchers in OUM (2008) revealed that OUM learners' are working adults with an estimated majority of 59.8% who are between 31 and 40 years followed by 29.9% learners who are in the 41-50 age group while the remaining 9.6% are those in the 21-30 age group and a small percentage of 0.8% who are above 50 years old. Majority of our learners (95%) are working and have family commitments.

Due to this learner profile, OUM established a flexible mode of learning to suit learners needs. This is done by allocating an approximately 80% on self-regulated learning where learners managed and be responsible to their own learning, 12% in the online interaction where learners communicate with peers and tutors online and the remainder 8% will be for the time where learners can be in direct contact with their tutors in their face-to-face tutorial sessions. The face-to-face contact time is a two-hour meeting with the tutors conducted once in a fortnight, five times per semester?

Framework for Evolution

One of the basic principles of managing educational programs is to evaluate the extent to which the program serves the purposes for which they were established for (Robson, 1999). It is not necessary that the operational procedures and mechanism that we have built in the educational delivery system are functioning, as it should be. Constant checking, monitoring and evaluating have to be a major priority in maintaining delivery of quality education to the learners. Providing quality education is of major concern in any educational setting, either in the conventional mode of learning or in the open distance mode of learning.

An appropriate approach to the evaluation processes is imperative in order to make judgments about the efficiency, relevance, sustainability, merit, value and worthiness of the programs (Borg & Gall1989). According to Scott, Yates & Wilson 2001, extensive evaluation processes will be involved if a university's main concern is in producing effective professional graduates. The focus will be collecting information from learners and employers on the programs offered by the university. Evaluation is dependent on the university's area of concern, and if the area of interest is in the delivery of instruction, than evaluation should be focused into teaching and curriculum development (Smith & Lovat 2003).

Distance education learners are different from on-campus learners, in their age group, their personel and working experiences and their educational background. Findings from a study conducted on 450 learners by Biner (1995) showed that distance learners were more intelligent, more emotionally stable, more trusting and more conforming when compared to on-campus learners. Knowles (1984) listed well-defined characteristics of adult learners with working experience. Some of the characteristics that he has listed are as follows; adult learners are responsible and can direct themselves, they come to class with a wealth of working experiences, they are ready to learn what they need to know or do in order to solve real –world problems, they like to know why they should learn something, they are motivated to learn in order to apply what they learned to real life and to increase job satisfaction.

This wide spectrum of differences and needs among our adult learners raised a number of questions in the course of providing an appropriate education for them. Related issues which are of concern to OUM are as follows:

Are we designing our courses appropriately so that they meet with our learners requirements?

Are our learners accommodating themselves in our learning environment? And

Are our course goals well defined so that they benefit of our learners?

There are many different approaches in evaluating distance education programs, most universities developed their own evaluation method or framework or adopt and adapt an established model to suit their evaluation needs (Spady 1971). It is only through evaluating the effectiveness of distance education programs that we can justify their use and continuously improve to develop their quality.

The Model

The framework for evaluation used in this study was developed based on various theories. The framework is an integration of the elements brought forward by Robson (1999), Spady (1971) and Tinto (1975). Robson (1999) developed a comprehensive framework which can be use to evaluate distance education course or project. This original framework can be extended and applied to evaluate factors influencing discontinuation among distance learners. However for the purpose of this particular study, the framework will be used to evaluate a program in the Faculty of Science and Technology (later will be called FST) for learners who are still attending the courses in the program. The original framework suggested by Robson, Spady and Tinto was modified to suit the purpose for the evaluation conducted in the OUM. Three main areas will be investigated and that is the social context, educational environment and program goals.

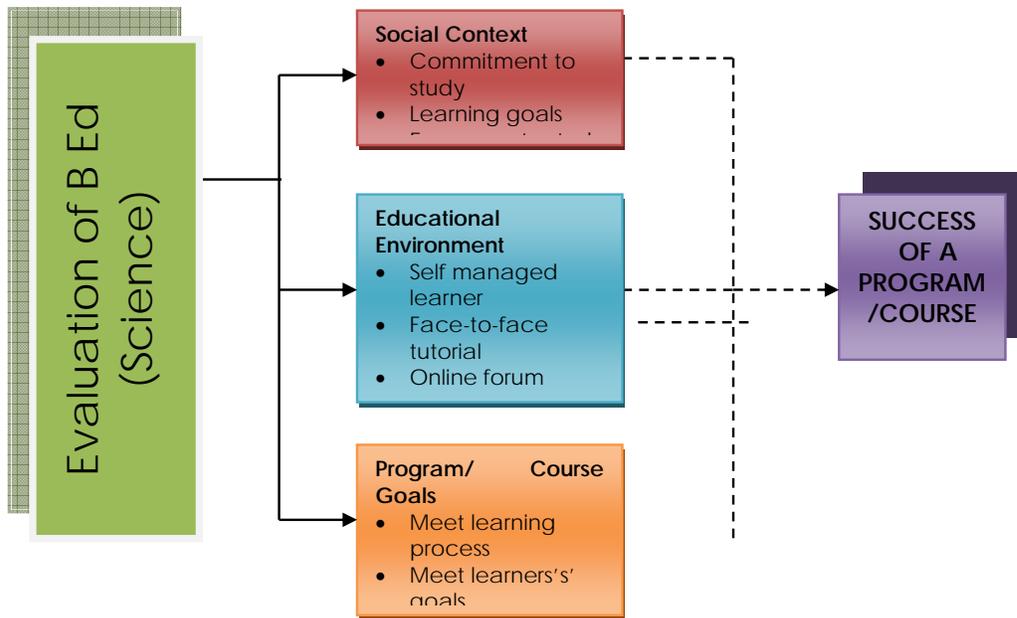


Figure 1. Model for Evaluation

The first construct in the framework is the social context of the learners. The combined elements in this construct keep the learners engaged in learning and these elements will influence their persistence throughout the learning process. The elements included in social

context are learners learning goals, learner's eagerness to study and learners' commitment in the learning process. Positive feedback from the evaluation of the social context will show that learners find the course beneficial for them in their career and therefore this will further make them continue to study.

The second construct in the evaluation framework is the educational environment, which relates to the management and the properties of the blended mode of learning that OUM offers to the learners. The elements that were organized to be evaluated in this construct were, the blended mode of learning which is made up of the face-to-face tutorials, self-managed learning, the printed module, the management of the assignment and examination questions and finally the online participation.

In distance learning, learners were often thought as being able to adjust themselves in the learning community or they can manage and be responsible for their own learning environment (Brookfield, 1992). According to Zimmerman 1990, a self-regulated learner practices self-evaluation, organization and transformation, goal setting and planning, information seeking, record keeping, self monitoring, environment structuring, giving self consequences, rehearsing, memorizing, seeking social assistance and reviewing. Moore (1994) stressed that learner who learns to think of themselves as the most important tool in the learning process will finally achieve great things. Learning will not take place if learners are not ready to look at things positively. In the 21st century educational environment, learning will shift from the institution to the learner but this will only happen if the learner will take charge of his learning.

The second element in the educational environment is the face-to-face tutorial session. Here learners have the opportunity to develop their social skills through direct communication with fellow classmates and their tutors. According to Sherry (1996), human beings show their best potential when they interact with the real world and when they collect experiences through these interactions. In OUM, the learning centers conduct a two hour tutorial meeting allowing face-to-face interaction between tutors and learners. During this time, learners communicate with fellow classmates and tutors and discussion of questions or course related matters will be done in class. But to what extent are learners satisfied with the learning that they have acquired during the face-to-face tutorial sessions? How do these adult learners perceive the face-to-face tutorial mode of learning?

Another element in the educational environment is the online participation. In the blended mode of learning, this mode covers 12% of the learners learning time. This is the most adaptable mode of learning if learners were unable to attend tutorials or when there is not enough time to cover certain issues in class, it can be done in the online forum. Learners can get connected to the tutors and their classmates to work collaboratively sharing knowledge online. The online participation is another option for learners to gain further input after their face-to-face tutorials. Learners can either discuss share or post questions to their tutors or other classmates.

The next element in the educational environment is the management of the assessment method. The two forms of assessment method applied in the educational setting in OUM are the formative and summative assessments. At the moment, in the OUM, formative assessment is mainly dealing with written assignments, and also some courses have mid semester examination. The marks obtained for the assignment and the mid semester examinations will help learners in their final examination grade. Summative assessment is in the form of an examination, which is conducted at the end of a course.

The third construct in the framework is the program or course goals. The program which was evaluated in this study is the Bachelor of Education (Science) degree. This program aims to expose graduates to the latest development in the teaching and learning of science; develop outstanding teachers in biology, chemistry or physics; competent teachers who can manage secondary or primary learners in the classroom or in the lab. These are some of the goals of the program. Distance learners will stay and continue with a program of study if the skills they gained from the program can be applied in their working environment.

Purpose of Study

The purpose of this study is to evaluate the Bachelor of Education (Science) degree based on social context of learners, educational environment provided by the OUM and also the program goals. The model which was applied throughout the evaluation is as shown in Figure 1. The main respondents for this study were learners in the ninth semester of the program.

Methodology

This is a quantitative research and the main instrument is a survey questionnaire developed to obtain responses from learners based on the three main constructs; social context, educational environment and program goals.

Random samples were taken from FST as respondents for this research. These learners were teachers from the Ministry of Education, Malaysia who are attending the Bachelor in Education (Science) degree program and their study is sponsored by the Ministry of Education, Malaysia. These teachers were science teachers who are teaching in the Government's primary schools.

The items in the instrument were developed according to the predetermined constructs by the researchers. The instrument for this survey was administered during the third and fourth tutorial sessions. The survey questionnaire consists of five parts, which are Part A, B, C, D and E. Questions in Part A relates to the profile of the respondents, such as gender, location of school, length of service and age of respondents. In Part B, questions were developed to measure the social context of the learners; commitment to study, learning goals and desire to study. Items in Part C focused on the educational environment of the learners, mainly on the mode of learning and the assessment method. In Part D, items were developed to measure learners' perception on the course goals and finally Part E were open ended questions. Items in the questionnaire were measured using a 5-point Likert scale from level 1 (strongly disagree), 2 (disagree), 3 (moderately agree), 4 (agree) and 5 (strongly agree).

A pilot test was conducted prior to the actual survey and the reliability of the items in the instrument assessed by coefficient alpha, ranges from 0.71 to 0.83. Results from the pilot study showed that some of the items need to be corrected due to spelling error before the actual study is conducted. In the actual research, a total of 272 questionnaires were distributed to the learners and they were collected immediately after the field work. The collected data were analysed using Statistical Package for Social Science (SPSS) version 12. Reliability analysis for the items was conducted again using Cronbach Alpha. It was found that the reliability coefficient obtained for the items was over 0.80 suggesting that the items in the instrument were reliable for the purpose of this study.

Findings

The demography of the respondents is as shown in Table 1. A total of 216 female (79.4%) and 56 male (20.6%) undergraduate learners participated in this research (Table 1). The age of the respondents was between 25 to 45 years old, and this is categorized into 3 age groups (25-30, 31-40 and 41-45 years old). Basically, a total of 180 respondents have 6-10 years of teaching experience (66.2%), while 80 (29.4%) have more than 10 years of teaching experience and 12 respondents have less than 6 years teaching experience. In terms of academic qualification, 232 respondents (85.3%) were diploma holders and 40 (14.7%) were certificate holders. Of the 272 respondents, 160 (58.8%) were teachers teaching in urban schools and 112 (41.2%) were teachers teaching in rural schools.

Table 1. Profile of Respondents According to Location of School, Sex, Age, Length of Service and Academic Qualification

(N=272)

Profile		Frequency	%
Location of School	Urban	160	58.8
	Rural	112	41.2
Sex	Male	56	20.6
	Female	216	79.4
Age	25- 30	68	25.0
	31-40	180	66.1
	41-45	24	8.9
Teaching Experience	Less than 6 yrs	12	4.4
	6-10 yrs	180	66.2
	More than 10 yrs	80	29.4
Academic Qualification	Teaching Certificate	40	14.7
	Diploma in Teaching	232	85.3

Table 2 shows the results for the social context of the learners. Learners' commitment to learning has a mean score of 3.86 which shows that learners perceived themselves to be at only moderate level in their commitment to the learning process. Some of the items which were responded by learners for commitment to learning are: "I study in between my daily work in the office"; "I will find time to study", "Distance is not an obstacle for me to go to class", "I will always try to be punctual to class".

The mean scores for the learners' responses towards learning goals is 4.35 and eagerness to study is 4.65. This indicates that the respondents agreed that their learning goals will be achieved through the learning process and they too agreed that they have the inner motivation to continue to study.

Items for learning goals includes: "I hope to have a pay rise when I finish my study", "I would like to move on to a different job", "I hope to get a promotion after graduation" and "I want to work and earn a degree at the same time".

Learners also evaluated themselves on their eagerness to study again for the following items: "I want to get into a degree program", "I want to be a student again", "I want to learn new things", and "I want to meet new people outside my working environment".

Table 2. Social Context In Terms Of Commitment to Learning, Learning Goals and Eagerness to Study (N=272)

	Mean	S.D
Commitment to learning	3.86	0.68
Learning Goals	4.35	0.79
Eagerness to study	4.65	0.83

Table 3 presented the mean scores generated for learners' responses toward their educational environment. The mean scores ranged from 3.05 to 3.95 (indicating a moderate level of agreement). The top three responses that generated a mean score of above 3.5 are face-to-face tutorials (mean=3.58), printed course modules (mean=3.95) and management of examination (mean =3.71). Although these criteria have been moderately scored, results showed that the printed course modules, the face-to-face tutorials and also the examination questions help them through their learning process better than the rest of the elements in this construct. On the other hand, learners perceived themselves at a lower moderate level (mean score <3.5) for self-managed learners (mean=3.43), followed by online participation (mean=3.25) and lastly management of assignment (mean=3.05).

Some of the items for the elements mentioned in the educational environment are:

Self-managed learning: "I read the module before the tutorial", "I search further information regarding the subject being taught", "I will plan my study time", "I will try to finish off the assignment before the due date", "I will motivate myself to study".

Face-to-face tutorials: "Discussion in the classroom helps me grow into a better person", "Tutors are competent in the subject matter", "Tutors understand my weaknesses", "Tutors are prepared during the tutorials", "Tutors help to clear my confusion on certain topics".

Printed course modules: "Reading the module helped me when I can't go to class", "Reading the module helps me to understand better the discussion in class", "The content of the module is easy to understand".

Online participation: "I will open myLMS everyday", "I posted questions related to the course content to my tutor", "I am willing to communicate with peers and my tutor in the online forum", "I learn about the subject more through the forum".

Assignment: "Tutor guides me in answering the assignment", "Tutor let us know our assignment marks before the examination", "The time for the assignment is appropriate", "Tutor discusses the corrections after the assignment were marked".

Examination: "The time allocated for each course is appropriate", "The distribution of marks for every section is fair", "The number of questions are adequate", "The questions are challenging".

Table 3. Criteria in the Educational Environment Considered for Evaluation (N=272)

	Mean	S.D
Self managed learning	3.43	0.55
Face-to-Face tutorials	3.58	0.57
Printed Course Modules	3.95	0.78
Online Participation	3.25	0.76
Assignment	3.05	0.53
Examination	3.71	0.70

In addition to the above results, the study also collected learners views on the assessment mode that they preferred best. The results of the ranking are as shown in Table 4. Quite surprisingly, they preferred objective questions for their mid semester (1st) and final exam (2nd) as compared to the current mode where the examination format include open ended short questions and essay type questions. Weekly assignment and portfolio assessment were ranked in the 8th and 9th position respectively. However, we did not collect information on why they have ranked them in such a way.

Table 4. Preferable assessment method proposed by learners (N=272)

Ranking List	Rank
Objective questions for mid semester examination	1
Objective questions for final examination	2
Subjective questions	3
Individual assignment	4
Group assignment	5
Class presentation	6
Online self test	7
Weekly assignment	8
Portfolio	9

Table 5 below, presented learners evaluation on their agreement towards the program goals. Learners were asked to respond with a 'Yes' or 'No' to the three questions in this section of the questionnaire. They were also given the opportunity to give their views towards their responses. Majority of the learners agreed that the goals of the program matched with the learning processes that were conducted during their three years of study (88.2%), followed by 91.6% who agreed that they have applied some of the knowledge gained from the program in their working environment and 94.5% responded that this program has opened up their views towards education.

Table 5. Percentage Agreement towards Program Goals (N=272)

	% Agreement
Matched with learning processes/activities	88.2
Use knowledge/skills in working environment	91.6
Improved outlook on education	94.5

The following were some suggestions and feedback from the open ended questions in the study:

“ I am satisfied with the allocation of marks for the assignment. It helps in the final exam” marks”

Respondent 1

“... The degree we earn is equivalent to the time we have to allocate for studying. It is not as easy as some people might think”

Respondent 2

“Although learning is flexible, but its quite challenging for me since school work is demanding now”

Respondent 3

“The allocation of 50% for final exams is appropriate since it takes a lot of sacrifice now to study when we are also working at the same time”

Respondent 4

These were some of the remarks given by the respondents when asked about the appropriateness of the marks for the assignment and the examination. There were mixed views and reaction towards this question since these learners come from different working environment, some may feel the stress at work more than others may.

Discussion

Evaluation determines the success of a distance learning program. But what is success? Success relates to being able to produce graduates who are compatible and meet the demands of the job market. A program is successful when it accommodates the needs of graduates and increases their potential as knowledge workers. Distance education programs should be efficiently managed and sensitive to the learners needs.

In this study, the evaluation criteria was based on the social context, educational environment and program goals, and through the empirical results there are issues which should be of concern to FST in providing quality programs for the learners. This study has its limitation since it was conducted in only one learning centre and the sample were taken from learners in the ninth semester. However, findings of the study showed that the distance learners in this program found that getting into this degree program have improved their skills and increase their ability as primary school teachers. They tried very hard to regulate their study time but realized that they could not give their full commitment to the learning process and thus could not manage their study as it should be since they have to fulfill their daily routine as teachers in schools and some of them as parents at home. Despite having agreed moderately on certain aspects in the educational environment, basically, these teachers feel that they benefited from the program since the content and skills gained helped them to be better teachers, and this matches with their learning goals. This is probably due to the experiences that they have acquired from their initial training;

equipped with pedagogical skills and pedagogical content knowledge to be trained teachers.

To fulfill learners needs in the educational environment, greater emphasis should be focused in the learning environment, especially those related with the teaching and learning process. At the moment, OUM learners are teachers from the government schools pursuing the degree program. But if this program is to be offered to candidates who have no teaching experience that is those from the general public, focus in improving and upgrading should be given to the management of the blended mode of learning (face-to-face tutorials, online participation and self-managed learning), the content of the printed modules and the administration of the assessment method.

The educational component needs to be strengthened for the purpose of ensuring the quality of graduates produced by the OUM. This is to ensure that OUM is producing quality and competent graduates who are ready for the job market. Secondly, is to assure learners that OUM is offering the best program in the distance education mode, where the learners' learning goals will actually meet with the program or the course goals. Based on the results from the study, some of the suggestions that can be highlighted are as follows:

Learners should be made to understand that in distance education mode of learning they are not left alone and struggle by themselves. They need to understand their learning goals and objectives, their strengths and weaknesses. The faculty can support them to become self-regulated learners by providing motivational talks and guidance to self motivate, self monitor or select a proper strategy to study. By acquiring skills to become self-regulated students, learners will have the ability to face failures or to seek assistance or to increase personal effort or to manage their own learning (Paris & Byrnes 1989).

Tutors must be properly trained and motivated to be effective. They must be made responsible to help learners learn; able to manage assignments; understand learners ability. Tutors must try to involve the learners in an environment of interaction, creating a feeling of a true class and overcome the limitation of distance learning (Hiltz & Wellman 1997).

Continuous tutor monitoring and evaluation so as to maintain standards in their delivery during tutorial sessions. Learners seek tutors guidance and advice during the tutorial sessions, since this is the time that they can interact with tutors and friends to discuss further about their assignments, making sure that they secure a high percentage for the assignment.

Online participation is the key feature of open distance learning but from the results of this study it is shown that learners are not really keen to interact online with peers and tutors. Learners have to be informed that effective learning takes place when they interact with other learners. Interaction will lead to group problem solving. FST need to plan on how to encourage every learner make full use of the online interaction, this is to maintain that online participation is an essential component in the blended mode of learning. Tutors and learners should be informed on the importance of interaction in distance education either online or in class participation. Furthermore, the flexibility and accessibility to interact online should be improved for both tutors and learners.

Conclusion

The main factor for comparative advantage in the globalized economy is the investment in human capital. In this respect, institutions of higher learning play an important role in producing highly skilled human resource. Indeed, this challenge can be addressed by providing education in an adaptable and a flexible mode to meet the entrance requirements of the learners but at the same time, ensuring that quality is not being compromised. Open distance learning which provides learning in a flexible manner can increase access to higher

education when compared to the traditional universities with its limitations in the mode of enrolment and learning. Distance education institutions can expedite the production of a knowledge-based society by working strongly hand-in-hand with the traditional universities towards achieving this mission. Nevertheless, to produce highly skilled human resource, both traditional and distance learning institution must provide and deliver structured and quality programs.

This current study has projected the key elements in the evaluation framework but it is only focused on the learners' perspectives of the educational services provided. However, future studies should be conducted to further enhance the results of this study by incorporating other elements in the framework and also including respondents from among the external tutors and other stake holders of the program of study. The program can be strengthened and improved further based on a more comprehensive report.

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