Illuminating the Importance of Learning Interaction to Open Distance Learning (ODL) Success: A Qualitative Perspectives of Adult Learners in Perlis, Malaysia

Hisham Dzakiria [hisham@uum.edu.my], University Utara, Malaysia

Abstract

Open Distance Learning (ODL) provides learners with the greatest possible control over time, place and pace of education. The educational delivery of ODL has improved greatly over the years with growing number of students continuously enrolling into various ODL programs globally. ODL however does come with issues and problems. Loss of student motivation due to the lack of learning interaction with peers, tutors and computer skills are some possible to ODL. Interaction is a fundamental instructional component to ODL. It is the most challenging element to build into an ODL system and delivery that fit-all-learner needs and requirements. The level of interactivity within the interaction triads from student-to-student, student-to-tutor, and student-to-interface (technology) has a major impact on the quality of ODL programs and its educational experience. Research studies on interactivity show that learners have a real need to make connections with their peers, tutors and the technology use in their pursue for learning, and this research reports similar findings. This article is based on a qualitative research investigating issues of learning interaction in ODL of eight adult learners in the state of Perlis, Malaysia. The study findings supported the widely held belief that a high level of interaction is desirable in ODL environment (Anderson, 2003; Tinto, 2002; Dzakiria, 2008; Dzakiria & Idrus, 2003; Rumble, 2000; Walker, 2002) and positively affects the learning experiences. In order to improve ODL experience, this research suggests that all-important stakeholders in ODL must improve the provision of interaction and interactivity.

Keywords: interaction, learning interactivity, open distance learning, learning interaction triads, adult learners.

Introduction

The main task of any ODL provider is to design and offer open distance educational experience that encourages learning interactions which affects the learners' success in ODL.

Interaction in the conventional classroom or lecture room is much different than the interaction that occurs in Open Distance Learning. Learning interaction is fundamental to ODL because study completion success is dependent on how effective the students are interacting with the course content, tutors and with their peers in their learning.

Many learners however, perhaps for the first time, are now "faced with a new learning environment and the expectation that they will have independent learning skills and the capacity to engage in activities that require self-direction and self- management of learning" (McLoughlin and Marshall,2000:1). As adult learners living and learning in the 21st century, it is generally assumed that these learners should already have these attributes. However, this generalization does not apply to all adult learners and may not be generalized to all learners of ODL.

Every learner, institution, curriculum is unique and exhibit different strengths and weaknesses. Malaysian ODL learners who have journeyed through 12 years of mainstream primary and secondary education may not have an appropriate educational concept of learning for ODL. It could be very teacher-centred, and their learning is characterized by dependency on teachers as knowledge providers. The learners as been revealed by various researches (Dzakiria, 2004; Khoo & Idrus, 2004; Saw et al., 1999) quite often have specific-cultural belief towards learning which make educational experience and expectation for ODL difficult to grasp. They are more reserved, and sometimes passive participants in both f2f and forum discussions. These could be the result of the teacher-centred experienced they undergo during their mainstream education. As a consequence, they sometimes feel at a loss when communication and

interaction with course tutors are low, and when clear instructions are not given for work, assignments, and experiments.

Their transition into becoming learners of ODL is not an easy task (Saw et al., 1999). Their diversity in age, educational background, and working experience only magnifies the fact that each learner could be similar or vastly different from other learners. A learner who has left the educational setting for many years may feel incompetent and lacking in the learning skills and tools needed to compete with other learners.

On top of all that, technology has invaded and dominated ODL in ways never seen before and is impacting on all elements and design of ODL. The utilization of technology was not the learners' choice, and accepting it was challenging for some learners, but an imperative change for ODL institutions. For many learners, adaptation, learning and re-learning on how to 'learn', and acquire new knowledge within ODL system and practice are simply a method of survival.

The Fundamental Role of Interaction in ODL

Leaning interaction in ODL has many different facets (Anderson, 2003; Murphy, Walker & Webb, 2001). In instructional theory, interaction provides learning opportunity for learners to receive feedback (Dempsey & Sales, 1994; Tait, 2000).

Learning interaction in ODL is fundamental to study completion success. Logically, increase learning interaction between student-content-tutor with sufficient skills in technology would enhance the learning and teaching process.

Generally, the importance of interaction in ODL generally is acknowledged (Anderson, 2003; Boyle & Wambach, 2001; Dzakiria, 2004, 2008; Meyen & Lian, 1997; Moore & Kearsley, 1996; Muirhead, 2001a, 2001b; Sherry, 1996; Wagner, 1994) and the concept of interaction in distance education has been the focus of much research (Anderson, 2003; Billings et al., 2001; Muirhead, 2001a, 2001b). However, there is still lacking of a consensual definition for interaction in the educational literature (Soo & Bonk, 1998). The concept of interaction that this research holds to is the element of the seven principles of good practice in education as proposed by Chickering & Gamson, (1987). These practices include: encouraging faculty/learners contact; developing reciprocity and cooperation; engaging in active learning; providing quick feedback; emphasizing the amount of time dedicated to a task; communicating high expectations; and respecting diversity. In addition, this research also adopted Moore (1989) three types of interaction: student-content, student-teacher, and student-student. This fundamental distinction provides a basis for analyzing the relative significance of different types of interaction in an ODL programme. Each type of interaction could have different effects on learners or the effectiveness of a course.

Interestingly, there have been scholars who have portrayed other dimensions that comprise the concept of interaction. These include communication, collaboration, and active learning (Anderson, 2003; Kenny, 2002). Frequently the social process is highlighted in definitions (Beard & Harper, 2002; Crawford, 1999).

Wagner (1994, 1997), on the other hand, made a distinction between interaction and interactivity. According to Wagner (1997), interactions:

"occur when objects and events mutually influence one another. Interactivity ... appears to emerge from descriptions of technology for establishing connections from point to point ... in real time" (p. 20).

The difference seems to be that interactivity necessitates the use of technology in learning, while interactions illustrate behaviours of the learners.

Research Synopsis

This research focused on ODL learning experiences of a small number of learners residing in the state of Perlis, Malaysia who are attending ODL programs offered by various ODL institutions in the country. Specifically, this study focused on learners' perspectives and experiences on the role of learning interaction in open distance learning programs. This study seeks in-depth knowledge to generate insights into how, why, when and where ODLs interact with their learning and the problems that they encountered.

Research Questions

The research questions were based on substantial literature review on the issue of learning interaction in ODL. The questions were then refined and grounded from the discourse and discussions with the research respondents. The research questions were subsequently revised to function as interpretative questions:

- What do the learners think of the role of learning interaction triads (learner-learner interaction; learner-tutor interaction; and learner-interface interaction in open distance learning experience?
- What are the contributing factors that support or deter ODL learning interaction?

Research Objectives

The information needed for this study was individual, detailed and contextual. Finding out about the circumstances under which the learners' interact with the learning triads, the practicalities of studying and getting into the mind frame of learners were important elements of this study. This research was based on the following epistemological attitudes adopted from by Segall (1998):

- Metaphysical: What is the story exploring how the learners address causality, intention, existence
 and truth about learning interactions as they experienced it while attending open distance learning;
- Historical: search for understanding of how learning barriers and challenges began. How or what
 causes the learning barriers that learners face in their pursue of a worthy educational experience?

Research Respondents

Eight respondents who are current ODL learners were involved and selected on the basis of voluntary participation and ability to share their ODL experiences and perspectives with much openness. All the respondents were working adults' age between 42 and 51 years old. 5 males and 3 females were involved in the study. They come from various educational and economic backgrounds, and are presently working in various sectors.

Research Setting

The research was conducted in the northern part of Malaysia in the state of Perlis where most of the respondents reside and work. Interviews were conducted at several locations depending on the respondents' availability. Some of the interviews were conducted at the respondents' work place, others were at the respondents' home, kopi-tiam cafes, and other outlets.

The research was a one-year research project funded by UUM RIMC initiatives. Various themes surfaced in the research. This article focuses on the topic of 'Learning Interaction' as illustrated by the learners.

Research Methodology

An instrumental qualitative case study (Stake, 1995) approach was employed so as to understand the experience of the research respondents as they progressed through their ODL career. Interview was the primary instrument used in this study. All the learners (research participants) involved in this study were interviewed on a one-to-one basis, and this was the basis of the data reported in this paper. Most of the interviews were conducted in Bahasa Malaysia, and English language was only used when necessary and possible. The interviews were then transcribed, translated and profiled. Besides face to face interviews, the respondents also engaged and probed into more questions through e-mail, Skype, Blackberry messages (BBM) and chat interviews which all contributed to a substantial amount of data for the research.

Discussion and Analysis

The analysis of the qualitative data is processed and structured to examine the learners' perceptions on the ODL interactional dyads that look at: **learner-learner interaction**; **learner-tutor interaction** and **learner-interface interaction (technology usage)**.

Learner-Learner Interaction

The interaction that occurs among learners is divergent between ODL and the conventional classroom course. The ODL format or model as practiced in Malaysia quite often excludes or minimizes physical interaction, which may have an impact on learning (Beard & Harper, 2002; Dzakiria & Walker, 2003) as described by the following respondents:

Totally different. ... It is all about working independently more than what higher education used to be 20-30 years ago. Seeing the teacher or tutor only 4 times per semester is tough.

KM/(INTW 1)/JAN 2011

All these while my formal learning comes with a teacher standing in front teaching. But, here I am learning more so on my own ... away from the teachers and my fellow learning peers ... almost a 360 degree turn ... MOD/(INTW 2)/MAC 2011

The first two semester was a total disaster.....felt alone away from your tutors and peers ... I almost dropout ... FA/(FB 2)/JAN 2011

The physical distance that students have in ODL sometimes hinders learning interactions:

When you don't see your classmates or peers as often as you want like the traditional classrooms, sometimes could slow down your progress in learning ... on extreme cases demotivate you to progress ... KM/(BBM 2)/MAR 2011

I had huge problem with interacting with my peers as I have been and still is a shy person. ... I often need time to engage and make friends ... so you can just imagine the frustrations I had in my first I say 3 semesters ... but if you are determine to succeed that you can overcome that ... but that took lots of patience and reflection ... NNJ/(INTW 2)/JUN 2011

Learner-learner interaction can be between one student and another or between several learners. Evidently, it was found that in order for effective learning to occur, three types of learning behaviour are necessary in an ODL environment as evident in the following discourse:

Participation

You just need to be proactive and build your friendship with your learning peers from day one ... ZA/(INTW 3)/MAR 2011

Nobody is pushing you, I had to push myself and participate in learning forums, sending out emails, asking questions, etc. Participation is key ... MI/(FB 3)/JUL 2011

To succeed, the rule of the ODL game is to participate and interact ...FA/(INTW 2)/MAR 2011

Response

ODL is a learning mode that requires you to be responsive and be an active learner ... MFS/(INTW 1)/FEB 2011

Gone are those days where information and knowledge is spoon-fed to you. I think, my experience so far you just have to participate and be responsive to your learning, your peers, and course mates and tutors ... and on top of that response time or speed is also important. Time travel fast and I found that if I procrastinate to response I will be left behind in learning. KM/ (INTW 3)/FEB 2011

It is all about timing ... I learned that you have to act fast, be proactive and response accordingly to the questions, learning forums, discussions, etc. MOD/(INTW 6)/JUN 2011

Feedback

I can say very strongly that feedback particularly learning feedback is essential in ODL. When you have questions, and you ask those questions with your fellow friends, you want them to help you understand what you are learning ... such feedback has to be progressive ... but fast ... NNJ/(BBM 2)/MAR 2011

ODL is all about sharing and digging knowledge in a new way ... as such getting continuous feedback from your friends, tutors are crucial ... SH/(INTW 1)/FEB 2011

Team work, or group work and collaborative learning are essential to ODL scenes. It involves learners working together in groups to complete academic assignments (Dzakiria & Walker, 2003; Palloff & Pratt, 2001). This form of learner-learner interaction is intended to promote understanding the course content and stimulates critical thinking and was found to be an important component of interaction for the research respondents:

I am now in my 6th semester and doing reasonably well in my ODL career. In most part, I think the learning interactions and sharing of information and knowledge in my various study groups helped me learned significantly ... MI/(INTW 4)/MAY 2011

When you are not as young, and when age is catching up with work, and 6 children, group discussions helped me learn better particularly in understanding certain concepts or new

I enjoyed the discussion and all the arguments we had in my learning group discussions. ... I sometimes feel impress with my own self and my ability to throw ideas. ... SH/(INTW 3)/MAR 2011

Many of the respondents feel that the group discussion, team work and group assignments may lessen feelings of isolation and promote learning community and togetherness (Palloff & Pratt, 2001; Dzakiria, 2008) in the ODL classroom which supports their learning as evident in the following discourse:

I think of the many factors, belonging to a group of friends like your study group members, or an assignment group that work on a particular work helps me a lot in my study progress. The f2f, email exchanges, and other interactions and discussions steer away the feeling of working alone in your study. ... MOD/(INTW 2)/MAR 2011

As an ODL student, I appreciate the peer interaction the most ... the group work continuously inform me that we are in this together ... lets finish it successfully. ... MI/(INTW 2)/APR 2011

Interestingly, it was also found that there are earners who were required to participate in group work, reported less satisfaction with ODL (Thurmond et al., 2002). The reason for the dissatisfaction may have been due to the challenge of completing course assignments without the face-to-face contacts as is common with many Malaysia Open Distance Learners:

I think this was a struggle for me because of two reasons. One-we don't see the group members as often as I would want to have; Two-because I am just not an avid user of technology. To communicate electronically is just sometimes difficult ... this is where I still feel that the conventional education sometimes works better....maybe I am an old timer and too slow to adopt and change. ... MFS/(INTW 3)/MAR 2011

The first couple of semesters were a roller coaster ... performance wise, emotion, interest in my study and all ... was just difficult to communicate and do most activities via email, learning forums, etc. I was so used ... or spoil with the f2f overdose throughout my previous educational experience. ... KM/(INTW 2)/MAR 2011

ODL is a challenging undertaking ... so much work and few opportunities to interact face to face. ... On top of that, I never enjoyed group work and has always preferred to learn and do things on my own. ... FA/(INTW 2)/MAR 2011

In summary, findings regarding learner-learner interaction indicated that learners who actively participate and interacted more with their learning peers in ODL may perceive greater learning, and experience positive learning. It was also found that, group work interaction and discussions in many ways help the learners in learning the course content and reduce the feelings of isolation and boredom. However, some learners may still prefer the interaction that is found in the traditional classroom setting. This was attributed by the twelve years of mainstream education that has always been teacher centred, and consequently developed a common mind-set among learners in the country.

Learner-Tutor Interaction

The interaction that transpires between learners and course tutors is intended to help strengthen the learner's understanding of the material or illuminate meanings from the course content. Quite often, such interaction help students clarify vague learning points and reinforce learning.

In the traditional classroom setting, oftentimes learner-tutor interaction can occur in an f2f, and physical meeting within the four walls of a classroom. In an ideal ODL course, most often this type of interaction is transmitted by electronic means, such as learning forums like the LMS, chat discussions or e-mail communications; however, it is also a common practice to have both the f2f component and the electronic means amongst ODL providers and institutions such as the case of Malaysia.

Within the scope of ODL in Malaysia, evidently, the findings in this research seem to suggest that the role of the tutor in an ODL pedagogical format is a spectacular change from the one in the traditional classroom as described by the following research respondent:

It was just completely a shock to me having left school and education for almost 30 years now to find the function of a teacher ... now called tutor is far different than what I have experienced from before ... they don't spoon feed you anymore ... they just facilitate...and if you do not know how you work as an ODL student ... you can fail ... I had to learn how to learn in ODL ... and if that does not happen you will get lost. Your success is almost certain your own doings ... tutors are just facilitating our learning ... they help to guide, suggest and facilitate the flow of knowledge, but never like before. ...MOD/(INTW 2)/MAR 2011

He later posited the following remarks:

Among the crucial questions or issues I had was how do you learn without having the teacher figure in front of your classrooms? MOD/(BBM 4)/APR 2011

It was like ... teacher is presence, but you cannot see them ... times it is almost like a vacuum in your learning. ... I remembered when doing my diploma a while ago, it always easy to catch hold, talk, ask questions to your lecturer ... but now to seem your lecturer physically is difficult ... and so emails are the medium, even that sometimes you have to wait for his or her response. ... MOD/(INTW 5)/JUL 2011

Various other issues were discussed with the research respondents on the topic of 'Learner-Tutor Interaction'. These include: *Face-to-face interaction, tutor timely feedback*, and *course performance*.

This study supported that learners consider the face-to-face interaction with their tutor an important issue particularly so within the Malaysia context of ODL. Though it may not be generalizable to all learners, all the learners in this study seem to suggest that the f2f interaction with course tutors is important especially within the transitional period of becoming a student in ODL. But once, they have accepted the norms in ODL, they (the learners) would become more independent type learners.

With the advancement of technology and learning software in ODL, the learners interacted as much online and using all the technology made accessible for their learning. As the students progress into their course with sufficient support, the absence of the tutors' physical presence did not appear to affect student performance in ODL because learners seemed more willing to participate online with their peers, tutors and the course content. They know, such requirement is a matter of their survival in ODL.

It was also evident in the interviews that learners would interact more with the tutors if the course prescribed or required them to do so. This was found to be with learners enrolled into programs offered by Open University Malaysia, Wawasan University and others that allocate between 5-15 % LMS participation from the overall grade.

Interestingly, there was also a positive relationship between the amount of interaction with their tutor and their level of perceived learning as described by the following discourse with the students:

ODL is new and different to me. As I progress into my learning, I find that you just have to connect with your tutor as you frequently required. Such interactions helped me to become a better learner and understanding of the materials. ... ZA/(INTW 2)/MAR 2011

It is so easy to be left behind in ODL. ... I think at the end of the day as a learner I had to find learning time to interact with my tutors ... the more interactions I have, I understand better and performed better in the course. ... MFS/(EMAIL 2)/MAR 2011

Finally, it was also established among the research respondents that timely, prompt feedback from their tutor contributed to positive or negative perceptions of learner-tutor interactions (Collis et al., 2001; Dzakiria, 2004) as iterated in the followings:

Negative Interaction:

The technology is simply wonderful, but I think the people using it must be dedicated and have a sense of responsibility ... what good is it, when students sent out questions and learning concerns through email are left unanswered or extremely late reply ... that I think could deter learning and require much attention. FA/(INTW 3)/MAR 2011

Aren't students the most valued customer for ODL institutions? Didn't we hear 'student-centred' slogan described and focused yet again ... but failing to give us prompt reply is in contrary to all the campaign. ... MFS/(INTW 3)/APR 2011

Positive Interaction:

I love all my TESL courses tutors ... they are always there for you. I can't remember of any of my questions left unanswered or late response from them. The worst I had was just a 24 hours delay in responding to my email which I can tolerate. ... SH/(INTW 4)/MAY 2011

Loving all the communication I am having with my tutors ... so inviting and prompt. For a shy person like me, ODL experience is just good for me ... progressing well with a 3.8 CGPA ... $ZA/(INTW\ 5)/AUG\ 2011$

I think with all the general support for learning in place, plus having the tutors constantly keeping your progress in learning and giving effective feedback to your questions, my negative perception of ODL that occurred initially has disappeared ... KM/(INTW 2)/MAR 2011

Fundamental to the nature of ODL is awareness of individual autonomy in the learner. This may be valued

but which may also cut across traditional values. As elicited in this study, the learners are not always given immediate feedback that may come with f2f interaction in a traditional course. 'Feedback' here means quite often pertains to more interactions. These include not just comments on learners' written work or email questions, but a more reassurance type of communication from course tutors reiterating a point or responding to a question asked by a learner.

In addition to the above, learners are sometimes unsure of the tutors' meaning when interpreting the lectures and materials without having this level of reassurance. This in turn may cause the learners to experiment with many different possibilities for meaning, thereby constructing their own knowledge and making connections to situations that are more meaningful to them, but at the risk of 'being wrong'. The degree of uncertainty in this process can cause the learner to lose self-control, power to make decisions and courage (Moore & Kearsley, 2012). They make mistakes, and continued errors may demotivate them from learning successfully. This in turn may lead to failure and withdrawal (Dzakiria, 2004, 2008; Tinto, 2006; Woodley, 2004).

The findings regarding learner-tutor interactions are important because they provide tutors with information on ways to enhance student participation and learning in an ODL course. In many ways this study put to rest some of the fear that course tutors may have about the detrimental effects of the absence of face-to-face interactions. The key to positive student outcomes regarding learner-tutor interactions seem to be linked to continuous and effective learning interaction and support. The most important of all is frequent, personalized contact with the learners (Moore & Kearsley, 2012; Dzakiria, 2004)

Learner-Interface (Technology) Interactions

In summary, variables that have been linked to learner-interface (technology) interactions included computer skills, ICT experiences, perceptions about technology being adopted (i.e. LMS), and easy access to technology. Studies reviewed provided conflicting findings regarding the effect of learners' perceptions of their interaction with the technology.

Unfamiliarity with the technology for example has been cited as a negative barrier to learning (Anderson, 2003; Dzakiria, 2004; Dzakiria, 2008; Moore & Kearsley, 2012) as shown below:

Being away from higher education and learning is the cause of my primary barrier to learning....the use of technology surpassed my expectation ... you need to have a fair amount of skills to become functional in the new way of learning ... MI/(EMAIL 2)/MAR 2011

Any students registering for ODL have to re-learn the learning skills ... MOD/(INTW 6)/JUL 2011

I have never had my heart pumping so fast until I enrolled in my presence ODL undertaking ... the technology and computer skills are essential learning tools that you have to learn and acquired ... almost made me withdraw ... too much to learn ... NNJ/(INTW 4)/MAY 2011

In addition to the above, a few of the research respondents have also indicated that they often got lost on the Internet, and prefer a preference to listening to the course content in the traditional classroom setting, rather than reading it online:

... in addition to what I have said, the internet offers you a wealth of information ... which bogged me down easily ... how do you know what is good info, or bad info? FA/(BBM 4)/MAR 2011

I think too much information is bad ... anything too much is just bad ... this is where I feel being dependent to a teacher is good. I think you will be safe to receive and understand the information and knowledge given by your teacher ... more is a plus ... ZA/(INTW 2)/MAR 2011

Also, learners' perceptions of the access to technology clearly influenced whether they believe the technology was helpful or an inconvenience (Subotzky & Prinsloo, 2011; Dzakiria, 2004). Access to technology is fundamental to any ODL experience, and any diminutive would impact on learning as iterated in the following learners' discourse:

Internet and technology accessibility is key to my success in ODL ... I think Perlis is far better today than before ... a small state. Learning has been made possible with fast internet services that we have ... MFS/(INTW 2)/MAR 2011

Generally ok, but condition to location and place of meetings ... unlike KL or Penang, if you do not have internet facility at your home ... there are abundance Starbuck and Coffee Bean café or Coffee-Tiam ... but here, the numbers are small ... making it less accessible ... this provide some possible stress especially when you wanted to retrieve information or assignment ... NNJ/(INTW 6)/MAY 2011

On the contrary, there have been other studies that have concluded despite lacking the skills and exposures to technology, learners have reported increased confidence in computer use (Kenny, 2002; Subotzky & Prinsloo, 2011) and have suggested that the delays associated with technology as a time for reflection, and retraining (Daley et al., 2001). There have also been studies that revealed computer experiences had no impact on overall student satisfaction (Thurmond et al., 2002).

As evident in this study, the lack of computer skills and experience or difficulty with interacting with technology does not lead to negative learner-interface interactions. Much of the learner-interface interaction seems to centre on how learners perceive the technology. Thus, learners who have little skills and experience with technology for learning may still report positive student outcomes in the course as he or she progresses into her ODL career as evident in this study.

Conclusions

The advancement of educational technology in ODL required learners to engage in 'new' ways of learning. To some learners this is accepted and does not impede learning. But to others, ODL experience is still 'not just a plea for knowledge', but a plea for continuous 'presence' of the tutor for learning to take place. Within the Malaysian context of ODL, the notion that 'the teacher is always there, but isn't' in ODL is a significant reality. Findings shared in this paper for example suggest that the infrequent face-to-face (f2f) meetings between tutors and learners, and their dependency on their tutors have caused frustrations and sometimes impede the learning process. Some learners are not able to cope with the learning expectations and find that the new ways of learning and the sets of expectations that go with it too great. In such circumstances, learners expect the tutors to play an important role in helping come to terms with the new ways of learning. It is imperative that tutors too need to undertake some changes to engage in new ways of encouraging learning interaction. They need to understand what is involved in ODL and must themselves account for this in their reassessment of teaching. Therefore, there is a need for a major project; the reassessment and reengineering of the educational process by both learners and teachers and, indeed, by the university as a whole. It is not simply to introduce new technologies of communication but to 're-understand' the process of educational delivery that encourages learning interaction within the learning triads in ODL: learner-tutor-content. This paper wishes to encourage the ODL providers to choose appropriate combinations of methods (blended approach) for particular learning contexts. The research undertaken was pursued in an effort to induce tutors and other primary ODL stakeholders in Malaysia on the importance of their role in providing learning interaction and support, and more importantly to stimulate thought, dialogue, and future research in providing a sustainable effective learning interaction to students in ODL.

References

- 1. Anderson, T. (2003). Getting the mix right again: An updated and theoretical rationale for interaction. *International Review of Research in Open and Distance Learning, 4(2),* (pp. 1-14).
- 2. Beard, L.A. and Harper, C. (2002). Student perceptions of online versus on campus instruction. *Education*, *122*, (pp. 658-663).
- 3. Billings, D.M.; Connors, H.R.; Skiba, D.J. (2001). Benchmarking best practices in Web-based nursing courses. *Advances in Nursing Science*, *23*, (pp. 41-52).
- 4. Boyle, D.K. and Wambach, K.A. (2001). Interaction in graduate nursing Web-based instruction. *Journal of Professional Nursing*, *17*, (pp. 128-134).
- 5. Chickering, A.W. and Gamson, Z.F. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin*, *39*(7), (pp. 3-6).
- Crawford, M.W. (1999). Learners' perceptions of the interpersonal communication courses offered through open distance learning, Doctoral dissertation, Ohio University, 1999. UMI Dissertation Services, (UMI No. 9929303).
- 7. Daley, B.J.; Watkins, K.; Williams, S.W.; Courtenay, B.; Davis, M. (2001). Exploring learning in a technology-enhanced environment. *Educational Technology & Society, 4(3)*, (pp. 126-138). Retrieved November 28, 2012, from http://www.ifets.info/journals/4_3/daley.html
- 8. Dempsey, J.V. nd Sales, G.C. (1994). *Interactive Instruction and Feedback*. Englewood Cliffs, NJ: Educational Technology Publications.
- 9. Dzakiria, H. and Idrus, R.M. (2003). Teacher-Learner Interactions in Distance Education: A Case of Two Malaysian Universities, *Turkey On-line Journal of Distance Education (TOJDE)*, 4(30), ISSN 1302-6488, http://tojde.anadolu.edu.tr/tojde11/articles/idrus.htm
- 10. Dzakiria, H. and Walker, R. (2003). Understanding the Culturally Diverse Malaysian Distance Learners: Does Culture has a Role and an Effect on Learning and Practice in Distance Education, *Malaysian Journal of Distance Education*, 5 (1), (pp. 95-107).
- 11. Dzakiria, H. (2004). "The Teacher is Always there, but isn't..." Distance Learners' Experiences & Perspectives on Distance Learning at University Utara Malaysia. Unpublished thesis.
- 12. Dzakiria, H. (2008). Students' Accounts of the Need for Continuous Support in a Distance Learning Programme, *Open Learning: The Journal of Open and Distance Learning, 23(2)*, (pp. 103-112), (Rutledge, Taylor & Francis Group).
- 13. Kenny, A. (2002). Online learning: Enhancing nurse education? *Journal of Advanced Nursing, 38*, (pp. 127-135).

- 14. McLoughlin, C. and Marshall, L. (2000). Scaffolding: A model for learner support in an online teaching environment. In Hermann, A. & Kulski, M.M. (eds). *Flexible Futures in Tertiary Teaching*. Proceedings of the 9th Annual Teaching and Learning Forum 2000. Perth, Curtin University of Technology, http://www.c3l.uni-oldenburg.de/cde/support/readings/loughlin2.htm, Accessed on November 28, 2012.
- 15. Moore, M.G. (1989). Three types of interaction. *The American Journal of Open distance learning*, 3(2), (pp. 1-6).
- 16. Moore, M.G. and Kearsley, G. (1996). *Open distance learning: A systems view.* Belmont: Wadsworth Publishing Company.
- 17. Moore, M.G. and Kearsley, G. (2012). *Distance education: A systems view of online learning*. Belmont, CA:Wadsworth.
- Muirhead, B. (2001a). Enhancing social interaction in computer-mediated open distance learning. USDLA Journal, 15(4). Retrieved January 4, 2004, from http://www.usdla.org/html/journal /APR01_Issue/article02.html
- 19. Muirhead, B. (2001b). Interactivity research studies. *Educational Technology & Society, 4(3)*. Retrieved November 28, 2012, from http://www.ifets.info/journals/4_3/muirhead.html
- 20. Murphy, D.; Walker, R. and Webb, G. (2001). Online learning and teaching with technology: case studies, experience and practice. Kogan Page Limited.
- 21. Palloff, R.M. and Pratt, K. (2001). Lessons from the cyberspace classroom: The realities of online teaching. San Francisco: Jossey-Bass.
- 22. Rumble, G. (2000), Student support in distance education in the 21st century: Learning from service management, *Distance Education*, *21*(2), (pp. 216-235).
- 23. Saw, K.G.; Awang, M.N.; Idrus, R.M.; Atan, H.; Azli, N.A.; Jaafar, I.; Rahman, Z.A. and Latiff, Z.A. (1999). Educational Transition of East Malaysian Distance Learners, *Open Learning*, (pp. 24-36).
- 24. Segall, G.R. (1998). *Points of viewing children's thinking: A digital ethnographer's journey.*Mahwah, NJ: Lawrence Erlbaum Associates, http://www.routledge.com/books/details/9780805824322/
- 25. Stake, R.E. (1995). The Art of Case Study. Thousand Oaks, CA: Sage Publications.
- 26. Soo, K. and Bonk, C.J. (1998). Interaction: What does it mean in online open distance learning? Paper presented at the ED-MEDIA/ED-TELECOM 98 World Conference on Educational Multimedia and Hypermedia & World Conference on Educational Telecommunications (10th), Freiburg, Germany. (ERIC Document Reproduction Service No. ED 428724).
- 27. Subotzky, G. and Prinsloo, P. (2011). Turning the tide: A Socio-critical model and framework for improving student success in open distance learning at the University of South Africa, *Distance Education*, 32(2), (pp. 177-193).
- 28. Tait, A. (2000). Planning Student Support for Open and Distance Teaching, *Open Learning*, 15(3), (pp. 287-299).
- 29. Thurmond, V.A.; Wambach, K.; Connors, H.R. and Frey, B.B. (2002). Evaluation of student satisfaction: Determining the impact of a Web-based environment by controlling for student characteristics. *The American Journal of Distance Education*, *16*, (pp. 169-189).
- 30. Tinto, V. (2006). Research and practice of student retention: What next? *Journal of College Student Retention*, 8(1), (pp. 1-19).
- 31. Wagner, E. D. (1994). In support of a functional definition of interaction. The American Journal of Open distance learning, 8(2), 6-29.
- 32. Wagner, E.D. (1997). Interactivity: From agents to outcomes. In T. E. Cyrs (Ed.), *Teaching and learning at a distance: What it takes to effectively design, deliver, and evaluate programs.* San Francisco: Jossey-Bass Publishers.
- 33. Walker, R. (2002). Is there anyone there? The Embodiment of Knowledge in Virtual Environments. Paper written for Charalambos Vraasidas and Gene Glass (eds.), *Current Perspectives on Applied Technologies, Vol.1*, Distance Learning.
- 34. Woodley, A. (2004). Conceptualizing student dropout in part time distance education: Pathologising the normal? *Open Learning*, 19(1), (pp. 48-63).