

Interaction Issues in Malaysia Open Distance Learning(ODL)

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Changing Educational Environment

Open Distance Learning calls upon an impressive range of technologies to enable distance teachers and distance learners (DLs) who are separated by distance to communicate with each other in real time (synchronous) and delayed time (asynchronous) which means DLs can access education and learning opportunities at a time, place, and pace to suit their individual lifestyles, learning preferences and personal developments plans. Such separation according to (Idrus & Lateh,2000) give rise to “an impressive and innovative array of media mix resulting in the application of technology in education”(p.197). Such development offers a radical new direction for DE enthusiasts, teachers and learners alike. They incorporate flexible and open learning methods as well as modified and specially created learning resources.

As such, ODL providers need to understand that its educational products and services are to service the DLs and provide an encouraging educational experience for the learners. The main task of any DE provider is to design and offer distance educational experience that encourages learning. In developing and delivering ODL courses, we need to consider many factors to overcome different barriers and factors to achieve effective and efficient implementation of distance education courses and programs. One factor that affects distance learners' (DLs) success in ODL is the amount of *learning interactions and interactivity* made available for the learners by the institution and most importantly by the teachers.

Learning support and sufficient amount of learning interactions is particularly important in ODL because many DLs at UUM alike, 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). It can be argued that these DLs learners should already have these attributes. However, this generalization does not apply to all DLs at UUM and may not be generalize to all DLs. Every learner, every institution, every curriculum is unique and each exhibit different strengths and weaknesses. Malaysian DLs who have journeyed through 12 years of primary and secondary education may not have an appropriate educational concept of learning for DE. It could be very teacher-centered, and their learning is characterized by dependency on teachers as knowledge providers. Their transition into becoming DLs is not an easy task (Saw et.al., 1999). Their diversity in age, educational background, working experience only magnifies the fact that each learner could be similar or vastly different from other distance learners. A

learner who has left the educational setting for many years may feel incompetent and lacking in the learning skills needed to compete with other learners.

With the development of educational technology, DLs are required to engage in ‘new’ ways of learning. To some students this is accepted and does not impede learning. But to others, distance learning is *‘not just a plea for knowledge’*, but a plea for continuous ‘presence’ of the teacher for learning to take place. Within the Malaysian context of DE, the notion that *‘the teacher is always there, but isn’t’* in distance learning is a significant reality. Findings shared in this paper for example suggest that the infrequent face to face (f2f) meetings between distance teachers and DLs, and learners dependency on their teachers have caused frustrations and sometime impede the learning process. Some DLs are not able to cope with distance learning expectations and find that the new ways of learning and the sets of expectations that go with it too great. In such circumstances, students expect distance teachers to play an important role in helping come to terms with the new ways of learning.

It is also important to realize that distance teachers too need to undertake some changes to engage in new ways of teaching. They need to understand what is involved in distance learning 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 education.

New Ways of Learning

It should come as no surprise that the learners recognize that participating in distance learning course involved ‘change’ on different level. Most notable were the perceptions of learning to work more independently and having to adopt more active learning modes as a result of learning at a distant.

It does not take much time for the learners to notice the fundamental differences between distance learning, and f2f campus based learning . But, what needs attention is that to transform these learners to have the educational ‘change’ for distance learning, Distance teachers need to provide optimal learning support system.

Technology has invaded today’s educational experience. The utilization of technology was not the learners choice, and accepting it was challenging for some. Adaptation was merely a method of survival. This is not to say that all the DLs viewed having to adapt to the use of ICT, and computers in a negative manner. Most of the respondents in Dzakiria’s study, described DE as an *“opportunity”* but with *“rooms for further improvement”* (Dzakiria, 2004).

Learning at a distance is different from traditional learning experiences. Malaysian learners for example, in general have cultural orientations towards learning which make educational experience at a distance difficult to grasp. The learners are more reserved, and sometimes passive participants in classroom discussion. As a result, they sometimes feel at loss when clear instructions are not given for work, assignments, and experiments. When this happen, they are tempted to blame their distance teachers for an apparent lack of knowledge or commitment as revealed in some of the students' discourse.

This interpretation has interesting implications for the ODL learners. They have to change their learning and study habits because at times the content may have been ambiguous and distance teachers' feedback was delayed. If this is typical of Malaysian DLs, it would not be difficult to see Saw's et.al (1999) claim that making the transition to ODL might be challenging for Malaysian DLs.

Inherent in the nature of ODL is a sense of individual autonomy in the learner, which may be valued but which may also cut across traditional values. The learners are not always given immediate feedback that may come with f2f interaction in a traditional course. 'Feedback' here meaning more interactions than just comments on their written work, and more reassurance from Distance teachers reiterating a point or respond to a question asked by a distance learner.

DLs are sometimes unsure of the distance teachers' meaning when interpreting the lectures and materials without having this level of reassurance. This in turn may cause the DLs 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 learner to lose self control, power to make decision and courage. They make mistakes, and continue errors may demotivate them from learning successfully. This in turn may lead to failure and withdrawal.

ODL offerings in Malaysia

Offering ODL courses and programmes is consistent with the mission of Malaysia Ministry of Higher Education, and is a critical endeavor for the survival of higher learning institutions (Dzakiria, 2004, Dzakiria Idrus, 2003, Gibson, 1998; Khoo & Idrus, 2004).

With the intent of making university courses and programmes more accessible to learners, various ODL and dual mode institutions in Malaysia delivered various courses and programmes that would lead to various qualifications. Distance delivery began in Malaysia back in 1969 and continues today. Today, ODL is only getting bigger, more popular and better. However, much could be done to make ODL a better learning option for prospective students. An important aspect of any ODL program is continuous evaluation for continuous improvement. Unfortunately, there has been a lack of

systematic evaluation research focusing on interaction on ODL courses (Dzakiria & Idrus, 2003, Gibson, 1998; Roberts, Irani, Lundy, & Telg, 2003). More research is needed on ODL and particularly on the students being the most important clientele to ODL; the technology use, and one pertinent issue that this article intended to focus on is the issue of interaction that was highlighted in many forums and conferences as a central issue that needs greater attention. Much understanding is needed on the role and functionality of interaction and interactivity in ODL and how that may or may not affects the ODL completion success rate among the learners.

A further distinction needs to be made between synchronous and asynchronous interaction (Murphy, Walker & Webb, 2001). In traditional classroom teaching, interaction is normally immediate and face to face (f2f). However, in ODL, interaction can be immediate with some media or delayed with others. This distinction between delayed or immediate interaction is very significant because it determines the logistics and "feel" of the distance learning experience. It creates a sense of belonging. In order to have immediate interaction, students must participate at a fixed time whereas with delayed interaction, participation is according to the student's schedule. So, ODL programs that involve delayed interaction provide more student control and flexibility. On the other hand, classes that involve immediate interaction often have a sense of excitement and spontaneity that is not present with delayed interaction. That in some ways could dampen the learning process (Dzakiria, 2004).

Common Barriers to ODL

Problems and barriers encountered by the student fall into several distinct categories; costs and motivators, feedback and teacher contact, student support and services, alienation and isolation, lack of experience, and training.

More so than traditional students, distance learners are more likely to have problems about learning (Donald, J., 1997; Dzakiria, 2004, McCloughlin, C. & Marchall, L, 2000; Knapper, 1988). As depicted in Dzakiria, (2004); Dzakiria & Rozhan, (2003), Saw, Awang, Idrus, Atan, Azli, Jaafar, Rahman, and Latiff, (1999). students who come from conventional form of education that practices *teacher-centredness* as oppose to *student-centredness* may find the transitional period of becoming an ODL student more challenging. Such problems are founded in personal and school related experiences and other contributing factors such as financial costs of study, disruption of family life, perceived irrelevance of their studies and lack of support from employers. These pressures often result in higher dropout rates than among traditional students (Sweet, 1986, Dzakiria, 2004).

A second area which is of interest to this article is the perceived lack of feedback or interaction with the distance teacher or respective tutor or lecturer. Due to the nature of ODL there is lack of f2f contact with teachers, students may have trouble in learning and self-evaluation.

Keegan (1986) believes that the separation of student and teacher imposed by distance removes a vital "link" of communication between these two important stakeholders in ODL. The link must be restored through overt institutional efforts so that the teaching-learning transaction may be "reintegrated" (Keegan, 1986, p. 120). Keegan hypothesized that students who did not receive adequate reintegration measures such as electronic or telephone communication, would be less likely to experience complete academic and social integration into institutional life. Consequently, such students would be more likely to drop out.

It is important that the student receive prompt feedback in any institutional setting, particularly in ODL where the learner is impaired by the lack of f2f contact with the teacher and other students. This is especially important for those students who does not live in big cities where connectivity, network system, and accessibility could be additional determining factor for a satisfactory of ODL educational experience.

They may not have access to reliable telecommunications, computers, and technology. The frustrations resulting from problems with interactivity between student and other ODL stakeholders are factors of which distance education administrators should be continuously be reminded and aware of.

A third area of concern for distance students is the lack of support and services such as providing tutors, academic planners and schedulers, and technical assistance. Students of all kinds want to be part of a larger community, and simply a member of an ODL course. For many traditional students, this is an important part of their social lives as iterated in the study done by Dzakiria (2004) that highlighted students feelings as "The teacher is always there, but really isn't..." This verbatim quotation came out to be one of the primary evident of student's voice pressing on the need for prompt, reliable, trusted services (Dzakiria, 2004) while doing a distance programme at Universiti Utara Malaysia.

The isolation that results from ODL process can complicate the learning process for adult students. Support for distance learners should not be overlooked when planning distance programs. Students need tutors and academic planners to help them complete courses on time and to act as a support system when stress becomes a problem. Dzakiria (2004) notes that student services are a significant part of the budgeted costs of any ODL program. Dzakiria (2004), Dzakiria & Idris (2003); Murphy, walker and Webb, (2001); Tait, (2002) also believe that success in attracting, serving, and retaining students will depend more on excellent student support services than on any technology issues. Technology costs and considerations can be a source of budgeting problems; however, student support for distance learners should take precedence.

The "distance" aspect of distance learning takes away much of the social interactions that would be present in traditional learning environments. This problem must be mitigated by institutions providing a sense of personal involvement between the student and the institution. Both the distance teacher and learner need to be inducted to ODL delivery system. The teachers must be trained and understand what and how to teach at a

distance; and the learners on the other hand must know the expectation and routine as a distance learner. Distance teachers need to interact continuously with students either electronically, by phone or f2f. Students as depicted in many research. We believe that having a good distance teacher is vitally important in helping them (the students) get the most out of a particular ODL course (Meacham & Evans, 1989, Dzakiria, 2004).

A fourth problem is prevalent with new distance students. If distance learning institutions are serious about providing equity of educational opportunity to all, then careful consideration must be given to the special needs of students undertaking distance education for the first time.

Study materials must take into account the significant proportion of students who enroll with little or no experience of distance study as this is common in a county like Malaysia. These students are at risk of dropping out unless they develop study survival skills as rapidly as possible. Of particular importance is the design of study materials for distance students. Malaysia distance learners for instance need to be inducted as mentioned earlier on to what constitute distance learning. They must know what ODL is all about i.e the learning and teaching process, and other relevant facets of ODL. Making it compulsory for all new students to take an introduction to distance learning as practice by Universiti Sains Malaysia is commendable and should be modeled by other dual mode and ODL institution in Malaysia.

Another problem encountered by students is the lack of student training, particularly in reference to technical issues. Many adult students are not well versed in the uses of technology such as computers and the Internet (Dzakiria, 2003, Murphy, Walker & Webb, 2001). Using electronic medium in distance learning can inadvertently exclude students who lack computer or writing skills. These skills are required if computer technology is used. Students will typically be offered volumes of online-based information. Using this information will be a problem for some non-technical students. They must be taught how to manage, not only their study time, but the materials presented as well.

If students are undertaking distance learning courses require knowledge of computers, then the students must be taught, at a minimum, the fundamentals of operating the system of choice of the distance-taught course. If distance learning is to be successful, technical barriers must be made a non-issue.

Analyzing the above barriers, it is evident that two-third of possible barriers to ODL surrounds the issue of interaction one way or the other. It is therefore particularly important for all ODL stakeholders to understand what interaction and interactivity is all about and adhere to thinking of possible ways and avenues to improve interactivity in ODL.

Interaction in ODL

Interactivity has many different facets (Murphy, Walker & Webb, 2001). In instructional theory, interaction provides the means for learners to receive feedback (Dempsey & Sales, 1994, Tait, 2000). In so far as feedback determines successful learning progress, it can be argued that the more interaction provided, the better it would be for the learner, the learning and teaching process. In the context of traditional classroom teaching, Flanders (1970) for example made detailed studies of student-teacher interaction and concluded that increased interaction improved student achievement and attitudes towards learning. This is supported by Dzakiria (2004), Dzakiria & Idrus, (2003).

The importance of interaction in ODL generally is acknowledged. This is evident in the literature (Billings, Connors, & Skiba, 2001; Boyle & Wambach, 2001; King & Doerfert, 2000; Meyen & Lian, 1997; Moore & Kearsley, 1996; Muirhead, 2001a, 2001b; Sherry, 1996; Tuovinen, 2000; Wagner, 1994) and the concept of interaction in ODL has been the focus of much research (Billings et al., 2001; King & Doerfert, 2000; Muirhead, 2001a, 2001b). However, no consensual definition for interaction exists in the educational literature (Soo & Bonk, 1998, Dzakiria & Idrus, 2003; Dzakiria, 2004). The concept of interaction is a core element of the seven principles of good practice in education (Chickering & Gamson, 1987). These practices include:

- encouraging faculty/students 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.

Other authors have described some of the dimensions that comprise the concept of interaction, such as communication, collaboration, and active learning (Kenny, 2002). Frequently the social process was highlighted in definitions (Beard & Harper, 2002; Crawford, 1999; Wagner, 1994). Additionally, interaction in Web-based courses can occur synchronously or asynchronously (Smith & Dillon, 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 disparity seems to be that interactivity involves the technology used in learning, while interactions describe behaviors of individuals and groups

Moore (1989) identified 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 a open distance learning program. Each type of interaction could have different effects on learners or the effectiveness of a course.

In traditional classroom instruction, the focus has been on student-teacher interaction. On the other hand, in the development of self-study materials (especially computer-based or other forms of blended-learning), the focus has been on student-content interaction. Until recent interest in collaborative/cooperative learning and the use of computer networks, little attention was devoted to student-student interaction and student-content interaction

Divisions of interaction

The nature of interaction also varies with the type of technology: media or delivery system used: written (typed), audio (voice), video (face-to-face), or tactile (response units).

The typical form of interaction for correspondence study was written assignments and feedback. This was certainly the medium seen to be used extensively in Malaysia back in the early 70's up till early 1980s; this still represents the main form of communication between student and teacher/tutor in most open university and independent study courses. Computer mediated communication also represents a form of written interaction. However, while the communication is in typed form, the interaction is much more complex than traditional writing since messages can have many characteristics (e.g., public vs private, forwarding, file attachments) and can also be searched/edited/filed. Furthermore, a different style of written communication is required for network communication compared to traditional correspondence (e.g., Angell & Heslop, 1994).

Audio interaction is usually via a telephone or microphone. In the context of an audioconference, the instructor must structure and manage the discourse very skillfully in order to produce effective classes since there is a high potential for confusion, chaos or boredom otherwise. On the other hand, there is typically little, if any, preparation for the audio portion of a teleconference since this is primarily used to answer questions from the audience. The sound quality of audio interaction is always a consideration in audio/teleconferences; poor quality may significantly reduce the effectiveness of a program.

Video interaction is a relatively new phenomenon for many dual mode institutions since two-way video-conferencing systems are just beginning to be commonly used in many ODL institutions. Clearly the quality of the transmission affects how people interact via video. Presumably other characteristics of the conferencing environment such as lighting, acoustics, room/seat layout, and decor, also affect interaction, but at the present time their impact is unknown.

While we know a little about each of these different forms of interaction in the context of their most common usage, many ODL administrators, policy makers, academics in general and ODL technicians are exploring and experimenting about mixing and combining different modes of interaction and thus producing a blended mode of learning. This is becoming an important issue in the age of multimedia systems which allow written, audio, video and tactile interaction.

While there are many studies that have investigated the effects of interactivity, few of these studies truly isolate the interactive component from other aspects of the ODL activity, nor do they distinguish the different facets of interaction discussed above. It is not surprising, therefore, that the results of these studies are inconsistent and the issue of interactivity remained unsolved.

Pertinent Research Issues

As the brief survey of the literature above illustrates, existing studies and literature do not really address fundamental issues relating to interactivity. This includes:

- Is frequency of interaction a meaningful measure of success or failure of ODL?
- Is interaction more important for certain groups of learners than others?
- Is interaction more critical in certain kinds of learning than others?
- Does interaction affect ODL outcomes such as retention or transfer?
- Does interaction increase ODL's student comprehension/understanding?
- Does interactivity always improve learner satisfaction?
- What form of interaction is the most critical in ODL?

In order to examine these issues, we need studies that isolate specific dimensions of interaction. We also need descriptive studies that provide a clear picture of interactivity as it currently exists in ODL courses. A recent doctoral study completed by Dzakiria (2004) illustrates this latter category. Dzakiria found that interaction between student and student was much more common than interaction among students with their tutors or instructors, content or equipment. He also found that the amount of interaction increased as the complexity of learning increased, i.e., there was more interaction at an application level than memory tasks.

Coping with Interaction

Even though there are many unanswered questions about interactivity, it is still possible to provide guidelines for improving the degree of interactivity in ODL . A variety of techniques for creating learner participation and generating discussions are recommended for teleconferences (e.g., Cyrs & Smith, 1990; Monson, 1978; Ostendorf, 1989) as well as methods for increasing learner involvement in learning materials (e.g., advance organizers, self-assessment exercises). There are extensive guidelines available for interactive media (e.g., Lochte, 1993; Schwier & Misanchuk, 1993, Murphy, Walker & Webb, 2001; Simpson, 2002). Almost all such recommendations emphasize that interactivity must be planned or it is unlikely to occur (or be meaningful). The idea that interaction must be explicitly designed in ODL courses seems a difficult concept for many instructors to accept or understand. But, that is the challenge!

Furthermore, any efforts to increase interactivity involve development and teaching efforts which must be accounted for. Even simple forms of interaction can take considerable time to prepare and carry out. When course enrollments are large, there are cost/benefit tradeoffs to be considered in providing interactivity (Dillon, Gibson & Confessore, 1991). Unless there are clear-cut benefits to adding interaction to a course, designers and instructors are not likely to invest the time to do so.

Finally, we need to consider that the perception of interactivity may be as important as actual interaction. Fulford & Zhang (1993) examined learner perceptions in a course delivered by instructional television. They found that the critical predictor of student satisfaction in the course was not the extent of personal interaction, but the perception of overall interaction. In other words, if students perceived that there had been a high level of student interaction in the course they were satisfied, regardless of how much interaction they had personally. This result suggests that the potential for interaction is an important design factor in open distance learning courses, even if most students do not take advantage of this potential.

Responsibility for creating interactivity in ODL program rests with the course instructors. Distance teachers must build interactive sequences into their classes either in terms of simple question & answer sessions or more elaborate problem-solving or game activities. Similarly, distance instructors anywhere in the world must provide assignments and group activities that entail interaction. While the preparation time is not appreciable, the time required to conduct interactive segments and provide feedback can be significant. This is particularly a problem because each message must be read and replied to. For example, if a class of 30 students completes an assignment and it takes the instructor 20 minutes to read and reply to each one, a total of 10 hours is required to provide feedback to all students. If the class enrollment is large or there are many interactive activities, this can present a tremendous load on the instructor.

We do not have any data that tells us how the two kinds of interaction affect student achievement. We do know from evaluation studies that both kinds of interaction are valued by students and contribute to their satisfaction (or dissatisfaction) with the program. Some students report that they feel less involved in the class than other students. Other students say that find the opportunity to interact with the instructors and their classmates to be one of the best features of ODL . On the other hand, students who do not receive timely feedback on their online assignments from the instructors become very frustrated (Dzakiria, 2004). So we feel that interactivity when conducted properly by distance teachers increases the motivation of students to complete ODL courses.

Conclusions

Continued research on distance learning is essential. This study offers research potential regarding interaction & interactivity in ODL. The challenge however, is to ensure that learning support in ODL is sufficiently addressed in striving towards a better distance learning experience.

All ODL institutions aim to be an effective functioning distance learning provider. For that matter issues pertaining to learning interaction and interactivity must be addressed effectively. Apparent neglect of the role of interaction which clearly link the student-instructor-content, and the learning environment need attention and revision. The task is to design and offer ODL experience that encourages learning. ODL providers need to understand that its educational products and services are to service the learner and provide an encouraging educational experience. We must consciously and actively develop and maintain approaches which enable learners to have their voices heard, and for Distance teachers and educators, and ODL institutions itself to be able to listen and understand the practical implications of what is being said. The learners should never be perceived as the problem, but should be perceived and integrated as part of the solution. Such approach and attitude will benefit all stakeholders in DE.

In designing learning interaction for ODL, this paper wishes to encourage the ODL providers to choose appropriate combinations of methods for particular learning contexts. It is important to note that the recommendations that this article proposes are certainly not the last answers to learning interaction concerns in ODL scenario. Nor do they necessarily provide optimal advice pertaining to components within the issue of interaction and interactivity. They are however made in an earnest effort to firstly sensitize distance teachers and other primary ODL stakeholders of the importance of their role in providing learning supports in ODL and more importantly to stimulate thought, dialogue, and future research in providing interaction to ODL programmes and courses.

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