**Blending the "e" for Effective Learning
at Open University Malaysia**

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**Abstract**

An increasing number of higher educational institutions have embraced e-learning. Many of these institutions have, however, realized that blending the "e" with traditional pedagogies is more effective than offering an entire environment based on e-learning. The right mix of technology and media can more effectively cater to the variety of learning styles and learning conditions. At Open University Malaysia (OUM), the blended pedagogical approach has been adopted for the delivery of all its academic programmes. The three main approaches are face-to-face learning, online learning and self-managed learning. These approaches involve a variety of media such as printed modules, multimedia, collaborative online discussions, classroom tutorials, laboratory sessions, a digital collection of e-books and e-journals, and so on. Since opening its doors in August 2001, OUM today has about 25,000 students spread over 16 academic programmes. More than 1,600 part-time tutors provide regular face-to-face tutorials. There are 31 learning centres located throughout the country to cater to the student population. The paper will describe OUM's blended pedagogies. It will also present some of the challenges the University faces as it tries to propagate a new learning culture among its tutors and learners particularly for online learning.

**Introduction**

The Open University Malaysia (OUM) is Malaysia's seventh private university and first open distance learning institution. Established on 10 August 2000, OUM is a consortium of Malaysia's first eleven public universities. It is one of about 40 Open Universities in the world. OUM provides flexibility, convenience, accessibility and affordability to those who seek further education and who are looking for life long learning opportunities. By virtue of its establishment at a time when the country was developing it Knowledge-based Economy blueprint and when the Multimedia Super Corridor was already taking shape, it is no surprise that Information and Communications Technology (ICT) has been used to support part of its curriculum and made as one of the delivery modes of learning.

It is to be noted that because most of OUM students are working adults, the term "learners" has been preferred over the term "students." OUM had its first group of 721 learners in August 2001. This was followed by 910 learners in January 2002 and a group of 2,581 teachers from the Ministry of Education enrolled at the OUM in March 2002. The latter was under a special arrangement with the Ministry of Education, catering to the requirements of the Secondary Teacher Graduation Programme. Today, OUM has enrolled 25,000 learners from both the Ministry of Education and the open market. Out of the total learner population, almost 10,000 are teachers sent by the Ministry of Education to pursue their basic degree. With this exponential growth in enrolment, OUM has been regarded as one of the country's fastest growing university in terms of student numbers.

The OUM's mission is to: (a) be the leading contributor in democratizing education, (b) develop quality education through multi mode learning technologies and (c) develop and enhance learning experiences toward the development of a knowledge-based society. The university employs the latest approaches in the teaching-learning process, as well as offers academic programs that cater to the demands of the industry.

It is driven by its motto, "University for All" based on the philosophy that education is to be made available to all regardless of time, place or age. This is further instituted at the launch of OUM on 26 August 2002, when Dato Seri Dr. Mahathir Mohamad, the then Prime Minister of Malaysia noted that "OUM is responding to our society's needs. The university's philosophy of using Open and Distance Learning *any place, any time* provides opportunities for a large cross section of the Malaysian society especially for the working populace (p. 13)" The Prime Minister also acknowledged that the use of blended pedagogy makes it not only interesting, attractive but effective for the learner.

**Distance Education prior to the ICT Age**

Distance education started more than a century ago. The University of South Africa (Unisa) for example, was established in 1973, initially called the University of the Cape of Good Hope. The Pennsylvania State University established its first distance learning in 1886. These universities communicated with its students using the postal mail system.

In the 1960's, the Open University was established in the United Kingdom. Initially called 'The University of the Air,' it started by first offering its degree programmes through television and radio broadcasts together with the printed medium. Only later with the advancement of technologies, in particular, networked computing, did the Open University implement computer mediated communication or online discussions.

In Malaysia, its oldest distance learning program has been offered by Universiti Sains Malaysia. It was established in 1971 and had depended on Pos Malaysia to deliver its instructional materials in the form of printed modules, recordings and other audiovisual materials to its students. In December 2003, an E-Learning portal was introduced to provide additional support for learning. It has since produced about 10,000 graduates.

**Table 1**
**Evolution of Modes of Learning in Open and Distance Learning**

| Phase | Learning Mode |
|---|---|
| **Pre-ICT Age** | |
| Generation I | Print |
| Generation II | Radio and television broadcasts |
| Generation III | Audio and video tapes<br>Video conferencing<br>Multimedia CD-ROMs |
| **Post-Computer ICT Age** | |
| Generation IV | E-learning (web-based, e-mail, computer-mediated communication/online forums/ e-discussions, chat)<br><br>Blended Learning (print and non-print; electronic and non-electronic) |

In other words, the traditional and most popular approach before the ICT age was via the printed mode. In addition, there would be radio and television broadcasts and later with the development of new technologies, cassette tapes and videotapes were used to reach the thousands of students located far and wide across any one particular country. Well-established countries for distance learning in Asia are India, Indonesia and Thailand. In each of these countries, the use of traditional media persists mainly because of limited ICT infrastructure and affordability. The gap between the digital haves and digital have-nots are slowly being addressed however. In other words, until the digital gap is addressed, the older print and electronic technologies will continue to be mainstream. Table 1 illustrates the evolution of the modes of learning in open and distance learning. The Pre-ICT Age is characterized by printed and electronic (broadcast and non-broadcast) media used for self-learning. This is in contrast to the Post-ICT Age where E-Learning followed by Blended Learning predominates.

**Distance Education in the ICT Age:  From E-Learning to Blended Learning**

With the progress of ICT, in particular the widespread use of the Internet where currently 729.2 million people (Global Reach, 2004) are netizens, E-learning had become the way to go for higher education institutions offering distance or open distance learning.  However note that in the Nielsen/Net ratings reported by Greenspan (2004), there were only 296,931,288 active Internet users out of the 700 over million netizens last June.  Active Internet users are defined as the number of people that actually go online in a given month, rather than the number of people with access.  Nevertheless, these numbers have been significant in attracting the interest of education providers to implement the use of the Internet for E-Learning in education.

In these more developed economies where ICT has made a wide impact on society, the use of the Internet predominate distance learning.  In countries such as the United States and Canada, universities have leveraged on the Internet to cater to the thousands of students who live hundreds of miles away from the nearest college or university and who still prefer to hold a full-time job.  Unfortunately, it has been reported that fewer than 50 percent of distance learners that have gone through the E-Learning methodology will graduate (Carr, 2000).

As spelt out by Rosenberg (2001), E-Learning refers to the use of Internet technologies to deliver a broad array of solutions that enhance knowledge and performance.  It is based on three fundamental criteria: (a)  E-learning is networked,  (b) It is delivered to the end-user via a computer using standard Internet technology, and (c)  It focuses on the broadest view of all learning – learning solutions that go beyond the traditional paradigms of training.

E-Learning was once considered the magic requirement for the success of distance learning.  However, this has all changed.  A year ago, Bersin and Associates expressed that blended learning will take over E-Learning.  They believe that "blended learning solves the problem of speed, scale, and impact – and leverages e-learning where it's most appropriate, without forcing e-learning into places it does not fit (2003, p.1)."  Today in a web log maintained by eCornell, a wholly-owned subsidiary of Cornell University, it was highlighted that the boom in E-Learning has gone bust.  According to a study by Zemsky and Massy (2004), the E-Learning was functioning on three myths.  The first myth was "if we build it they will come."  The second and the third myths were "the kids will take to e-learning like ducks to water," and "E-Learning will force a change in the way we teach."  As time revealed, there is no magic in E-Learning although it has the potential to improve learning but not in the ways it has been thought of.  It has been generally found that E-learning has neither been correctly applied nor properly utilized.  Learners are not learning any better.  If at all, e-Learning has been about using computer networks as a convenient and faster way to deliver instructional materials or to send out the latest announcements to students far and wide.

Today, the magic is in the appropriate mix of pedagogical tools.  There is no single blend or a particular recipe for any educational institution to follow.  It will most likely depend on a variety of factors:  learner characteristics, the adequacy of ICT infrastructure, the expertise available and the requirements for graduation.  What then, is blended learning?

Rossett, Douglis and Frazee (2003) define blended learning as:

> ". . . a planned combination of approaches, such as coaching by a supervisor; participation in an online class; breakfast with colleagues; competency descriptions;

reading on the beach; reference to a manual; collegial relationships; and participation in seminars, workshops, and online communities.**"**

According to Hoffman (2001) we could "start with a few online tutorials, add one synchronous event and a pinch of discussion forums for flavor, and stir." It appears that the current trend now is blended learning. It utilizes a mixed media or the use of a variety of media to take advantage of each of the medium's unique characteristics and blending them in such a way to optimize the learning opportunities for learners.

**The Blended Pedagogy at OUM**

At OUM, delivery of its academic programmes is via the blended mode of learning. Tan Sri Dato' Dr. Haji Abdullah Sanusi Ahmad, the first President and Vice-Chancellor of the OUM had envisioned that the blended mode of learning is best utilized for its learners. It is about fitting together a variety of media or pedagogies that have proven effective. He stated that OUM decided "to adopt the blended learning approach as we recognize that each mode of learning has its strengths and weaknesses . . . . We recognize the key to blended learning is selecting the right combination of learning modalities that will bring equal and satisfying returns to both the organization and the learners. (Ahmad, 2003, p. 1)"

The three components of blended learning at OUM are: face-to-face tutorials, online learning and Self-Managed Learning (see Figure 1). The blend of these three components appears to have been the solution that has worked rather well for the majority, if not all, learners of OUM. The blend of print and non-print, electronic and non-electronic, face-to-face and online has attracted thousands to enroll in OUM.
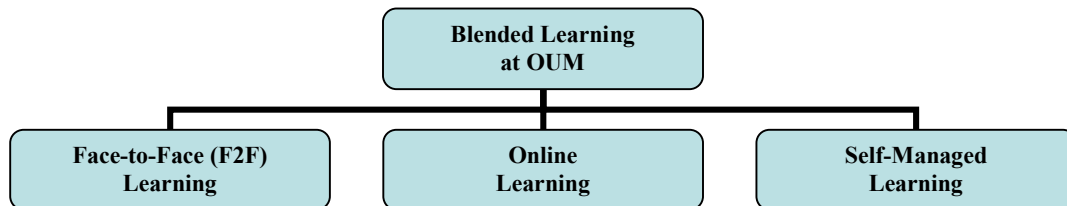


**Figure 1. Blended Learning at Open University Malaysia (OUM)**

OUM had the best of opportunities in terms of learning from other open universities about what has worked well for their distance learners. The country is also fortunate to have benefited from the Internet age as well as being at a time when the applications of ICT were strongly encouraged by the government. Hence, e-Learning or more specifically, online learning naturally became part of the blended learning at OUM.

Interestingly it was found that among 947 OUM learners who responded to an online poll, 528 (56 percent) enjoyed the face-to-face learning, 237 (25 percent) enjoyed online learning and 182 (19 percent) enjoyed Self-Managed Learning among the three modes of learning. The online poll was carried out as part of the second issue of *Learner Connexxions*, an online bulletin aimed at addressing a variety of learning issues.

**Face-to-Face (F2F) Learning.** Figure 2 illustrates the F2F learning component of the blended mode of learning at OUM. Each subject incorporates at least five tutorials in the normal semester (twice a year) and three tutorials in a short semester (one a year). Based on the online poll, the majority of OUM learners enjoy the F2F Learning the most. It is to be noted, that many learners take at least an hour to reach their respective learning centres. In the states of Sabah and Sarawak in East Malaysia, many learners travel the whole night, arriving early in the morning for their tutorial classes and stay overnight for tutorials on the next day. It is not expected that in spite of this hardship, online lectures or video conferencing of lectures would have attracted or sustained the interest of learners had these been made part of the "blend."
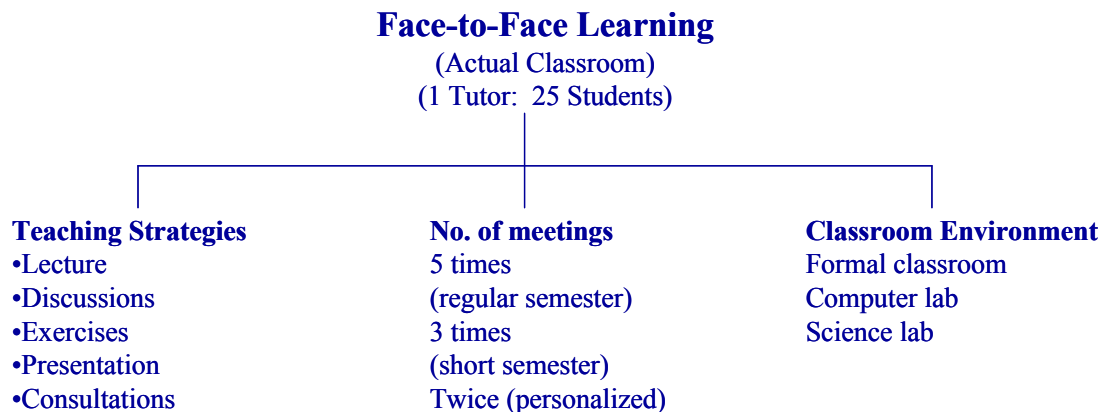
**Face-to-Face Learning**
(Actual Classroom)
(1 Tutor: 25 Students)

| Teaching Strategies | No. of meetings | Classroom Environment |
|---|---|---|
| •Lecture | 5 times | Formal classroom |
| •Discussions | (regular semester) | Computer lab |
| •Exercises | 3 times | Science lab |
| •Presentation | (short semester) | |
| •Consultations | Twice (personalized) | |

**Figure 2. Face-to-Face Learning at the Open University Malaysia**
**(adapted from Abdullah, 2003)**

The tutors appointed by OUM are from both the academia and industry and they provide the face-to-face learning once a fortnight. Tutors employ a blend of a variety of learning activities: lectures, group discussions, exercises and presentations. At times personal academic consultations are provided to those in need. Each tutor will have up to 25 learners per group. Tutors and learners usually meet in a classroom or computer laboratory at one of the 31 learning centres of OUM or in designated science or engineering laboratories. Where class enrolments are fewer than ten learners, the tutor offers personalized learning where they meet face-to-face at least twice in the semester.

**Online Learning.** Online learning at OUM takes place in what is called the virtual classroom. The same tutor who provides the Face-to-Face interactions also becomes the learners' online tutor throughout the entire semester. Online interactions between tutor and learners or between learners and learners may take place either asynchronously via discussion forums or synchronously via chat rooms. These discussion forums and chats are provided via the myLMS e-Learning platform developed for the university.

Online content are made available in the various folders in the respective courses in the myLMS e-Learning platform. The content could be slide presentations prepared by the tutor(s). Tutors are encouraged to share resources they have prepared or found on the Internet and this has generally worked out very well to support the needs of learners.
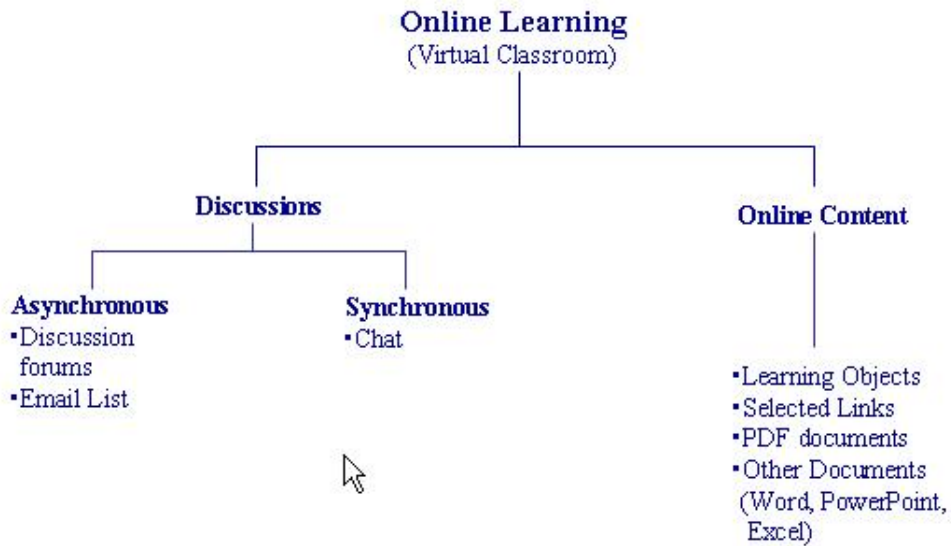
**Figure 3.   Online Learning at the Open University Malaysia (adapted from Abdullah, 2003)**

In addition, a tutor or the subject matter expert who contributed to the printed self-learning modules can also upload PDF or other electronic documents for their students to view or download.  These could be additional notes, journal articles, slide presentations, assignments and other related learning materials.  These are usually placed in the Digital Drop Box in the myLMS platform that can then be benefited by other tutors and learners of the same subject.  Similarly, OUM can make available specially created learning objects for the learning community.   In addition, selected links that would be useful to help learners achieve the learning objectives can be announced or made available online.  Announcements can also be posted online.

It is agreed that for online learning to work, all tutors and learners need to be connected to the network.   Ideally, they need to have access to the Internet from their homes.   In addition, discussion forums will work better if everyone knows what is expected and how they can each benefit.    To cite a case in point, OUM has piloted a fine-tuned approach to online discussions. Termed the Collaborative Online Learning (COL) model (see Figure 4) learners are given a content-specific activity for discussion online for a certain period of time.  Using asynchronous discussions, learners will be involved in several learning processes:  discussion, explanation, justification, sharing of information and resources, analysis and problem-solving.

The four components of the model are:    **General Forum, Academic Forum, Shared Responsibility** and **Common Goals**.  The **General Forum** allows learners to post questions and responses to their tutor or to their peers.  This forum is meant for exchange of information on non-content related matters such as schedules, deadlines and learning resources.  The **Academic Forum** is focused on the content-specific activity such as the assignment and tasks for formative assessment.   The crucial difference between the two is that the former may not be directly moderated by the tutor but by the learners themselves.  The latter is more structured and will require the tutor's presence on a regular basis and quality moderation is essential.
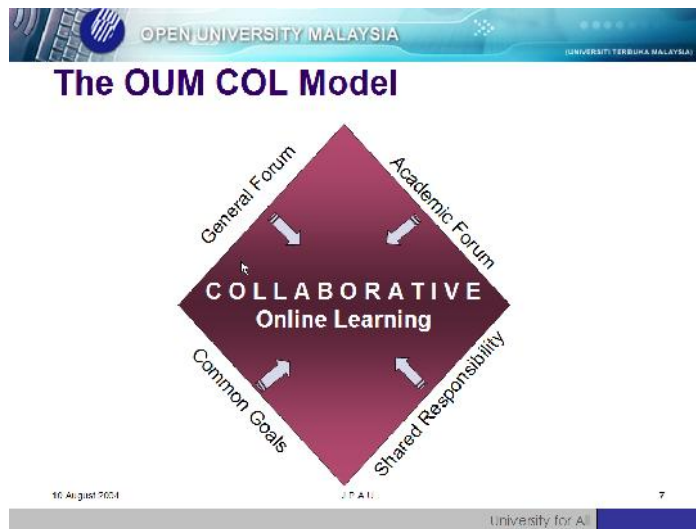
**Figure 4. The OUM COL Model**

**Shared Responsibility** refers to commitment from three parties: OUM, tutor and learner. Each has a significant role to play. While OUM is responsible for providing the means for online discussions and the understanding of content, the tutor is accountable for guiding and providing constructive feedback to learners. The learners are responsible for his or her own learning and are expected to contribute to the discussions by citing examples, discussing details, responding to each others' ideas by agreeing or disagreeing and sharing knowledge and resources that are related to the tasks.

The implementation of the model will not be effective unless the three parties share **Common Goals** toward the learning outcomes. This sense of common goals is the basis for providing a collaborative virtual learning environment, as well as the utilization of the communication channel (myLMS E-Learning platform) by the teaching-learning community.

**Self-Managed Learning.** Self-Managed Learning (SML) is the third important component in OUM's blended learning (see Figure 5). SML requires students to read their modules that provide the essential content and interspersed with activities to help learners understand and apply. There are tutorial questions, exercises and activities that require students to think. The modules have been designed to be as interactive as possible. They have also been specially written for OUM's needs and if perfect, should be able to stand on its own. Students are also encouraged to visit and read online resources, refer to library materials (physical or electronic), visit recommended Web sites and complete other learning activities at their own pace, wherever they wish and whenever they want.

OUM has an excellent digital collection comprising databases of over 40,000 titles of online books and online periodicals that the library subscribes to. However, SML is one of the more difficult modes for learners as a significant number of learners report that they find it difficult to find time to study. This is also corroborated by several tutors during a study conducted recently (Kuldip & Abas, 2004). The issue of time management has been recognized as one of the

challenges faced by learners at OUM.  This is, however, being addressed by OUM in the form of counseling sessions, seminars on time management or articles published in *Learner Connexxions*.
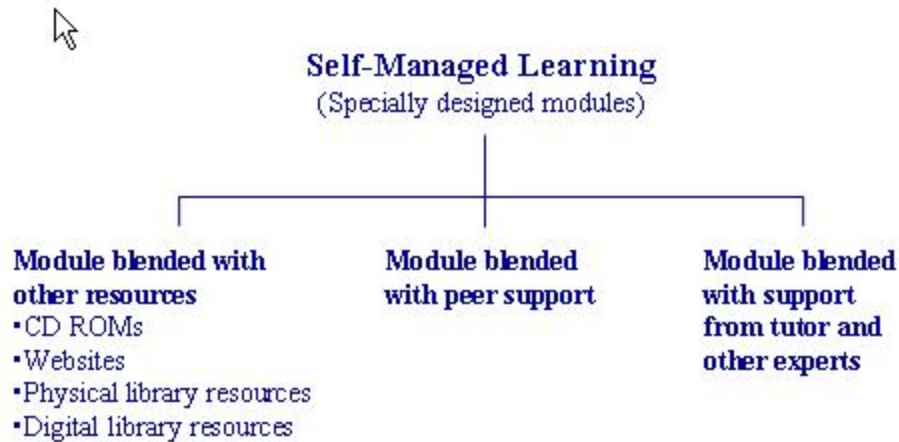


**Figure 5.   Self-Managed Learning at the Open University Malaysia (adapted from Abdullah, 2003)**

**Challenges in Implementation**

At OUM, a student will typically read the printed module, attempt the questions, think of how to apply some of the concepts in real life, participate in the online discussion forums with the other learners on some of the issues discussed, attend and ask tutors questions in class, seek assistance online and visit some of the Web sites to help with his or her own understanding.  In addition, the learner could download documents that are found in the Digital Drop Box that are meant to help with the understanding or to help produce better assignments.  Also, the learner would read the announcements posted from time to time about change of tutorial classes or instructions on how to access and participate in the discussion forums.  In addition, when bored, he or she could click on the *Learner Connexxions* icon to read some of the tips and pointers on how to study better, prepare for examinations, manage time better and so on.

In today's Internet age, creating and maintaining a high-touch in a high-tech environment is essential for the success of any form of learning.  Blending of the "e" portions of learning with traditional media or pedagogies may help ensure some degree of high-touch but more important is the planning that occurs before the "blend" is implemented among learners.

As highlighted in each of the blended modes of learning at OUM, each of the learning mode has its own set of challenges for learners.  F2F tutorials require the best tutors if possible as the total amount of F2F learning is about 10 hours per semester.  Tutor positions are part-time and they are advertised from time to time in the mass media to attract applications.  While attempts are made to identify the best, tutor monitoring may reveal that tutors who are so used to lecturing or being

lectured to tend to do the same with OUM learners. Conversely, OUM learners have been so used to being lectured to that to have anything else than a "lecture" is less than satisfying. This relates to being able to play the role of an independent learner which requires motivation and self-discipline. These are no easy matter for a majority of distance learners and need to be addressed. OUM does so by providing counseling sessions or conducting ODL seminars to help students address those issues.

It is also expected that for online learning to be effective, being ICT and Internet literate is a key factor. Access to ICT particularly the Internet for online discussions is also essential. It is thus a challenge for students living in the outskirts or in the much smaller towns without electricity or telephone lines. Fortunately, the percentage of the learner population living in areas without electricity or telephone line is low, perhaps less than five (5) percent of the learner population based on a rough estimate.

The President and Vice-Chancellor of OUM, Professor Tan Sri Datuk Dr. Anuwar Ali (Ali, 2004) had stressed the value of building online learning communities but as a nation, we will have to first bridge the digital divide. Access is most important. The issues of bandwidth and connectivity should be addressed. Fadzil and Bahroom (2003) had earlier highlighted similar and other challenges Internet users and education providers are facing in general. This includes digital divide, "the last mile," the lack of bandwidth and computer "downtime" that are at times, unavoidable.

For online discussions to be meaningful and practical, the training of tutors is yet another essential element. A majority of tutors have no prior experience with online discussions but after three years, OUM can now expect to see marked improvements as it refines the processes of online discussions to reflect collaborative online learning.

It is to be noted however, that while "lecturing" tends to be the normal mode of teaching in the classroom for most tutors, a recent study (Mohamed, Abas & Shamsudin, 2004) among the tutors at OUM revealed that out of the 115 OUM tutors who responded to a teaching style inventory, 58 tutors (50 percent) had identified themselves as "facilitators," and 34 tutors (30 percent) as "experts". The rest, that is, 23 other tutors (20 percent) indicated other preferred teaching styles ("personal model," "delegator," and "formal authority"). Hence, the preferred teaching style for about 50 percent of OUM tutors is the "facilitator" teaching style. The "facilitator" is what OUM wants from its tutors in the classroom, both physical and virtual.

Also, in an initial study to determine the e-readiness among a group of OUM learners, they were asked, "How ready are you for e-learning?" and the group of tutors was asked "How ready are your learners for e-learning?" Respondents indicated their response by circling a number from 1-10 to indicate their perception of degree of readiness. In the analysis, those who had circled 1, 2 or 3 were grouped under the category "low degree of readiness" while those who circled 4, 5, or 6 were grouped under the category "medium/moderate degree of readiness." Those who circled anything from 7 to 10 were categorized as "high degree of readiness." The findings are indicated in the bar graph in Figure 6.

About a third of the sample perceived that learners were in an advanced state of e-learning readiness. Tutors indicated that 32% of learners are at a high level of readiness (ratings of 7, 8, 9 or 10). Interestingly more learners, that is, 38 percent of learners felt that they were at a high level of readiness. While many learners and tutors perceived that learners were moderately ready (49% and 40% respectively) twice as many tutors (18%) than learners (7%) rated learners being at a low state of readiness for e-learning (Kuldip & Abas, 2004).
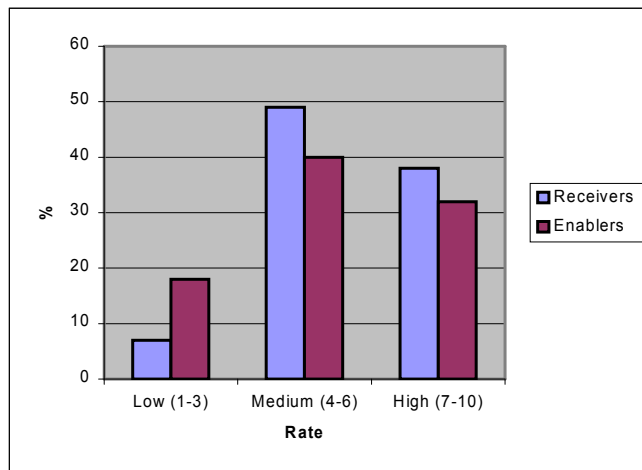
**Figure 6.  E-Readiness among OUM tutors and learners**

The researchers further observed that "the preference for face-to-face lectures or interactive sessions as preferred channels of communication and modes of learning point to a particular learning style that is common among Asian societies.  Many Asian learners are reticent in the classroom, and have an inclination to exercising their receptive skills (such as listening) as opposed to speaking or conversational skills."

**Conclusion**

The evolution of blended learning is new.  It has, however, been encultured and well-accepted at OUM and has become a model for other institutions to follow.   OUM has chosen not to leverage on the E-learning mode totally but to incorporate it as one of the blended learning modes.  OUM has succeeded in attracting over 25,000 students in the last three years and the first batch is expected to complete the degree requirements at the end of 2004.  Generally speaking, based on verbal feedback during face-to-face dialogues with learners, they are generally satisfied with the blended pedagogies of OUM.  Challenges have been identified and are being addressed where possible by OUM in terms of motivating learners or in helping them to overcome some of the hurdles.   More research will be conducted to ensure that the blended pedagogies of OUM are successful in breeding lifelong learners as well as to help keep attrition rates low.  It is believed that blending the 'e' with traditional or past generation modes of learning is more effective than either conventional methods or individual forms of E-Learning.  However, in building learning communities via online learning, ICT or Internet access is crucial.  Presently Internet connections may be unavailable in some of the remote parts of the country but it is expected that as the country progresses into a Knowledge-based economy, Malaysia's Internet broadband plans will have been implemented to benefit a larger majority of the population.

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