

Education Opportunities For People With Disabilities: A Case Study In Open University Malaysia

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Abstract

Open and distance learning (ODL) offers a great opportunity to people with disabilities or learner with disability to pursue their studies in a university. This form of study is widely adopted in many countries within the rehabilitation context to enable disabled people to improve their academic qualifications and social integration within communities. In Malaysia, there are several universities that provide ODL opportunities to its citizens including people with disabilities. Prominent among these universities is the Open University Malaysia (OUM). This paper aims to discuss the initiatives taken and role played by OUM to encourage people with disabilities to further and complete their tertiary education through open and distance learning. The paper also reports the major findings of a survey conducted through phone interviews of learners with disabilities. The survey findings focus on why students with disabilities choose to study in OUM and the learning difficulties faced by these learners in an ODL environment. Finally, some recommendations are made to improve the effectiveness of ODL for learners with disabilities.

Introduction

This paper mainly examined and discusses the education opportunities for people with disabilities (PWD) especially in an open and distance learning (ODL) environment. Open University Malaysia (OUM) has become one of the top leading service provider in ODL in the country, therefore it is deem as the most suitable setting to be selected as a case study. The rationale is OUM had provided great opportunity for PWD or learner with disability to pursue their tertiary studies. This form of study is in fact widely adopted in many countries as

part of rehabilitation perspective to enable disabled people to improve their academic qualifications and social integration in a community.

In the context of education opportunities for PWD, according to Hanimah (2007), the Department of Social Welfare had set up various institutions to fulfill the education needs of the disable people in Malaysia such as Industrial Training and Rehabilitation centers, State home for disable and Community-based Rehabilitation Centers. On top of it, the Ministry of Education do provides special education programs at primary and secondary school level for three types of disabilities, namely, hearing, visual and learning disabilities (Mohd Ali 2006). At the same time, several local public and private universities did offered learning opportunities for PWD too. In the recent global political and economic development as well as in the highly intense competition, education has become one of the effective tools to enhance the capability of human capital to remain sustainable. This scenario also applies to PWD in Malaysia therefore, as a consequence; they need more education opportunities to upgrade themselves.

On the other hand, it is a fact that, PWD, their families and friends are often overlooked as one of the important market segment in economic growth. The truth is, PWD represent a great deal of untapped source of skills and talent including soft skill and technical skills if they have the opportunities to access education, training and problem-solving skills in daily life (Thakker, 1997). Therefore, PWD required more training and education opportunities to develop their untapped potential. This group of people which stand at 15 percents of world population, or over one billion of them, is the “world largest minorities”. They often faced with varieties of barriers towards participation in all aspects of society, including physical environment, information technology, legislation, policy or societal attitudes and discrimination. These result to unequal access to society, services, education, employment, health care, transportation, political participation or justice. In the past, they only considered this as an issue of social welfare and protection, but nowadays the approach towards disability has gradually been considered as part of overall development and human rights agenda.

In this sense, distance education is seen as an alternative to everyone’s to acquire their knowledge and skills. Distance learning are considered as flexible are appropriate and comprehensive for delivering education to all including for PWD community. In distance education, technology is used to support education. The advent of technology and ODL could go a long way in widening accessibility to education for the majority of children and PWD. Flexibly in the learning process enable these special need groups to be able to access materials from

home, which is seen as the safest, least expensive environment. This could be incorporated with occasional attendance at local study centers as a form of blended learning that incorporates Open Education Resources (OERs) such as Open Learn (Khokhar, 2007).

In addition, online courses had enhanced the learning opportunities for people that experience barriers to attending classroom base courses which could be due to health, climate, transportation, physical accessibility or even disabilities factors (Debenham, 2002). These e-learning facilities were similar to those traditional classes, therefore, students who had print impairments now can access course materials, notes and handouts on the website without assistance, as long as there are designed to be accessible.

While, these e learning had encouraged the inclusion of students with various disabilities to further their knowledge (Di Lorio, Feliziani, Mirri, Salomoni and Vitali 2006) also present opportunities that had greatly benefit learners with disabilities with learning amenities, there are still many barriers that hinder their usage (Fichten, Asuncion, Barile, Fossey and De Simone, 2001). These barriers could be from the attitude of the learners, or those of architectural ones such as the favorable classrooms for disable people to study. Currently many public building such as library, schools, classroom, restroom access, and entry to building were not equip for disable person especially those that are prior to the American With Disabilities Act of 1990 (ADA).

Limited education or training for the instructors in teaching students with disabilities was also a barrier. E-learning via ICTs which were applied by the professor in many colleges and universities in United States and Canada (Abrami, P. C., Bernard, R. M., Wade, C. A., Schmid, R. F., Borokhovski, E., Tamim, R., Surkes, M., Lowerison, G., Zhang, D., Nicolaidou, I., Newman, S., Wozney, L., and Peretiatkowicz, A., 2006) and the United Kingdom (Weller, Pegler, and Mason, 2005) such as PowerPoint presentation, web-based discussion or coursed delivered via internet had help to bridge these shortcomings. Most important especially for PWD (Kruse, Kruneger and Drastal, 1996; Abrami et. al., (2006) is applying ICT and having skills in using ICTs which has become mandatory especially for those with disabilities (Snyder and Dillow, 2007). In fact Ezzaine, (2007); Stodden, Conway and Chang 2003) mentioned that in recent investigation it was found that computer usage in education is necessary and computer savvy on the job is associated with higher salaries for employees both with and without disabilities.

In the developing countries, the major constraint of the move toward inclusive education for PWD is attributed mainly to serious shortage of resources such as lack of schools or inadequate facilities, lack of teachers and/or shortage of qualified staff, lack of learning materials and absence of support (UNESCO, 2003). These scenarios reflect the education opportunities restriction faced by the students with disabilities in general from pre-school up to tertiary level. Based on the above situation, online instruction has become more and more importance. Today, it is considered as a very attractive choice for teaching and learning. However, it is a great challenge to university or educational institutions to implement distance learning or e-learning for excluded communities like PWD. Therefore, this paper would like to address issue like how OUM could help in providing educational opportunities to PWD in ODL. This study also tries to find out whether the learners with disabilities enjoyed their studies within ODL environment. What are the challenges and finally, recommendation to enhance the ODL for people with disabilities.

Background of Open University Malaysia

OUM is a private university with the primary role to democratize education in line with its motto: "University for all". It was established in the year of 2000. In fact, OUM was the first ODL University in the country and have a unique status of being indirectly owned by the eleven Malaysian public universities. The vision of OUM is "to be the leading provider of flexible learning" and its mission is, "to widen access to quality education and provide lifelong learning opportunities by leveraging on technology, adopting flexible mode of learning, and providing a conducive and engaging learning environment at competitive and affordable cost".

OUM have at least one learning centre in every state with well-equipped computer labs, tutorial rooms and Wifi Internet facilities as well as meeting rooms and reading areas. The learning centers have been designed to provide learners with a friendly and conducive environment. Currently, OUM offers more than 70 programs in various disciplines and at various levels ranging from Diplomas to Ph.D. It has about 60 learning centers that are located at all major towns and cities across the country including Sabah and Sarawak. At the international level, OUM has been working with several foreign partners offering both undergraduate and postgraduate programs. OUM have collaborated with various higher learning institutions from Yemen, Bahrain, the Maldives, Sri Lanka, Ghana, Hungary and Vietnam.

Purpose of the study

In order to meet the market demand, OUM have provide greater access to educational opportunity to all including PWD to further their studies. To meet these goals, OUM has adopted online delivery of instruction through ODL approach. As a result, many PWD have enrolled as OUM learners throughout the country. Therefore, the purposes of this study are to:

1. Find out what initiatives has been taken by OUM to encourage people with disabilities to further their tertiary education
2. Examine whether the student with disabilities enjoy their studies in OUM or not
3. Investigate what are the learning difficulties faced by student with disabilities in an ODL environment
4. Recommend some appropriate suggestion to improve the effectiveness of ODL for student with disabilities.

Research question

There were four research questions to be examined in this study. There includes the following:

1. What initiative taken by OUM to facilitate student with disabilities to pursue their studies?
2. Why student with disabilities chose to study in OUM?
3. Does student with disabilities enjoy their studies in OUM?
4. What major challenges faced by student with disabilities in ODL environment?

Significant of the study

Through ODL approach, OUM has adopted a new forms of education opportunities for all including PWD in the country due to the development of information and communication technologies such as Internet and the Web. As a result, many PWD could be integrated into the mainstream education system. Since OUM is one of ODL University by May 2011, it has enrolled more than 200 students with disabilities, therefore, this study is crucial and very significant to service provider such as OUM to obtain direct feedback from learners with disabilities concerning some issue related to ODL. The data also can be used for service provider to enhance their services for students with disabilities in the future. The finding could also benefit either to student with disabilities or university itself and act as a win-win situation to both party. Eventually, OUM

could be a role model in championing the education opportunities through ODL for PWD in the country as well as in the South East Asia region.

Definition of concept

1. Open and Distance learning (ODL).

The meaning of Open and distance learning is refers to education and training in which using the learning resources, rather than attending classroom sessions, is the central feature of the learning experience as defined by Commonwealth of Learning (COL, 2003)

COL's (2009) also defined ODL as "a way of providing learning opportunities that is characterized by the separation of teacher and learner in time and or place; ...the use of a variety of media... [for] two-way communications that allow learners and tutors to interact; [and] the possibility of occasional face to face meetings between tutor and learners.

The term open and distance learning reflects both the fact that all or most of the teachings is conducted by someone removed in time and space from the learners, and that the mission aims is to include greater dimensions of openness and flexibility, whether in terms of access, curriculum or other elements of structure.

In this context, OUM have implemented friendly management learning system known as My Virtual Learning Environment (MyVLE). Through the virtual learning environment or MyVLE OUM, provides learners with learning experience almost similar to a normal classroom. Learners can interact with their peers, tutors and facilitators as well as to access course materials and the digital library. They can also access key information such as academic records, timetable and latest information. Learners can study from printed modules or access the online learning resources. It also provides some examples of online resources like interactive study materials, quizzes, video lectures and I-radio.

2. People with Disabilities (PWD)

A person with disabilities is a person with a physical or mental impairment who is significantly restricted in his or her ability to perform daily living activities either "continuously or periodically for extended periods" and, as a result of these restrictions, requires assistance with daily living activities. Assistance could come from another person, an assistance animal or an assistive device. (www.disabled-world.com/disability/types/-).

Then, "Disability" can be divided into several sub-categories, which include the following:

- a) **Mobility and Physical Impairments:**
This category of disability includes people with varying types of physical disabilities including: Upper limb(s) disability, lower limb(s) disability, manual dexterity or disability in co-ordination with different organs of the body. Disability in mobility can be either an in-born or acquired with age problem. It could also be the effect of a disease. People who have a broken bone also fall into this category of disability.
- b) **Spinal Cord Disability:**
Spinal cord injury (SCI) can sometimes lead to lifelong disabilities. This kind of injury mostly occurs due to severe accidents. The injury can be either complete or incomplete. In an incomplete injury, the messages conveyed by the spinal cord are not completely lost. Whereas a in complete injury results in a total dysfunction of the sensory organs. In some cases spinal cord disability can be a birth defect.
- c) **Head Injuries - Brain Disability:**
A disability in the brain occurs due to a brain injury. The magnitude of the brain injury can range from mild, moderate and severe. There are two types of brain injuries: Acquired Brain Injury (ABI) Traumatic Brain Injury (TBI). ABI is not a hereditary type defect but is the degeneration that occurs after birth. The causes of such cases of injury are many and are mainly because of external forces applied to the body parts. TBI results in emotional dysfunction and behavioral disturbance.
- d) **Vision Disability**
There are hundreds of thousands of people that suffer from minor to various serious vision disability or impairments. These injuries can also result into some serious problems or diseases like blindness and ocular trauma, to name a few. Some of the common vision impairment includes scratched cornea, scratches on the sclera, diabetes related eye conditions, dry eyes and corneal graft.
- e) **Hearing Disability**
Hearing disabilities includes people that are completely or partially deaf, (Deaf is the politically correct term for a person with hearing impairment). People who are partially deaf can often use hearing aids to assist their hearing. Deafness can be evident at birth or occur later in life from several biologic causes, for example Meningitis can damage the auditory nerve or the cochlea. Deaf

people use sign language as a means of communication. Hundreds of sign languages are in use around the world. In linguistic terms, sign languages are as rich and complex as any oral language, despite the common misconception that they are not "real languages".

- f) **Cognitive or Learning Disabilities**
Cognitive Disabilities are kind of impairment present in people who are suffering from dyslexia and various other learning difficulties and includes speech disorders.

- g) **Psychological Disorders**
Affective Disorders are disorders of mood or feeling states either for short or long term. Mental Health Impairment is the term used to describe people who have experienced psychiatric problems or illness such as - Personality Disorders which is defined as deeply inadequate patterns of behavior and thought of sufficient severity to cause significant impairment to day-to-day activities and Schizophrenia which means as mental disorder characterized by disturbances of thinking, mood, and behavior.

- h) **Invisible Disabilities**
Invisible Disabilities are disabilities that are not immediately apparent to others. It is estimated that 10% of people in the U.S. have a medical condition considered a type of invisible disability.

Methodology

1. Respondents

The respondent in this study are referring to those who still studying in OUM throughout the nation. They are PWD who are currently registered with the Department of Social Welfare Malaysia. They were 20 respondents from two major categories of students with disabilities (physical and blind) who were involved in the telephone interview. There have another 10 respondents who responds the survey via e-mail. Their demographic are shown in the table below.

Table 1- Respondents via telephone interview

Items	Category of Disabilities	Male	Female	Total
1	Physical	6	5	11
2	Blind	5	3	8
3	Hearing / Deaf	1		1
	GRAND TOTAL	11	7	20

They were 20 respondents have been interviewed by the researcher via telephone. They are mainly from 3 different category of disabilities such as physical, blind and hearing.

Table 2-Respondents via e-mail

Items	Category of Disabilities	Male	Female	Total
1	Physical	3	4	7
2	Blind		1	1
3	Hearing / Deaf	1	1	2
	GRAND TOTAL	4	6	10

The table above shown they were only 10 respondents participates in the e-mail survey from the 149 e-mails being sent out to the respondents.

2. Method

In this study, a qualitative study method was adopted. The data was collected through telephone interview and e-mail survey to find out why the student with disabilities chose to study in OUM, whether they enjoy or not in an ODL environment, challenges faced by them and the suggestion from themselves to enhance the effectiveness of ODL approach for learners with disabilities.

3. Data Analysis

The qualitative data collected by telephone interview and e-mail survey were recorded and translated into English medium. In order to organized the data and presented them in the systematic manner, the data were organized in accordance to the respective sub-themes as per the following:

- a. Why do PWD choose to study in OUM?
- b. Do they enjoy studying in OUM?
- c. What are the major challenges as ODL learners?
- d. Suggestion from PWD

Finding

According to OUM (May, 2011), there are more than 200 PWD registered as OUM learners but only 141 of them are active learners. They were from several types of disabilities. Their categories are shown as per the table below.

Table 3: Active students with different Type of Disabilities in OUM until May 2011

Items	Type of Disabilities	Total Number of Learners
1	Physical Disability (Amputation, Hand, Leg, Foot deformity, Cripple, Nape, Spinal and Backbone)	88
2	Hearing with Aid, Deft & Mute	11
3	Blind and vision impaired	8
4	Learning Difficulty	1
5	Severely Paralyze and Half Paralyzed	2
6	Mental health and Neurological Problems	2
8	Spastic	1
9	Stammer	1
10	Other disabilities	27
	Total	141

Based on the table shown above, the physical disabilities are the majority group (88) as compared with other type of students with disabilities. Then, the hearing difficulties are the second largest group enrolled as OUM learners.

In this session, the data collected through telephone interview and e-mail survey will be presented to answer the research question as discuss in the previous session. Let see the following:

Research question 1: Initiatives taken by OUM for PWD or learners with disabilities

In spite of being a private university, OUM does not exclude itself from fulfilling its corporate social responsibilities (CSR). OUM had devised very attractive incentives for several groups of the society including the PWD or physically disabled members of our society where in August 2005, YB Dato' Dr Adham Baba, Parliamentary Secretary, Ministry of Higher Education Malaysia officiate the event of Launching the Partial Study Fee Exemption Scheme for senior Citizen and Disabled person (OUM Today, 2005). Under this scheme PWD students will enjoyed 50 percent discount for tuition fee even though the student

receive full PTPTN loan. The basic criteria's is they must be registered with the Welfare Department. In fact, it has amended the 50% discount to 75% in 2008. However, due to certain circumstances, OUM had adjusted the discount rate from 75% to 40% effectively on January 2012.

Meanwhile, OUM also trying its best to fit the complexity needs of the PWD to facilitate their studies in the university. For example, the Centre of Instructional Design and Technology (CIDT) could provide softcopy module in the form of PDF file to enable the blind learners to read the module directly through their computer at home. Then, CIDT also uploaded certain module in the portal for the student to download. Of course, I-lecture and I-radio also part of the CIDT efforts to assist all OUM learners to have better access to the education resources.

In addition to this, OUM examination Department is sensitive to the needs of special needs students. They provide Braille examination questions and Brailier to the blind student to enable them to take their examination in a disabled friendly environment. Perhaps, OUM do allow some of the blind student to take their examination by using computer with JAWS application software. On top of that, many of PWD students were encourage and entitled to have extra time in seating their exam. Of course, OUM is taking more proactive efforts to enhance the facilities, services and environment for all and PWDS in the future undertaking.

Research question 2: Why PWD choose to study in OUM?

In order to answer this research question, the findings will be presented according to two major categories of students with disabilities. There are physical and blind students. The word P represents physical disabilities and B stand for blind. Then M is referred to male and F is representing female. The findings summarized are as below:

a. Let see the finding from students with physical disabilities:

1. "I choose OUM because it is more flexible and I am a working adult. Therefore, OUM is convenience and suitable to me. Of course, the attractive factors are OUM give me discount fees rate and this up to 75%. Before that, other university does not offer as much discounts to OKU". (P1-m)
2. "I study in order to improve my education. Now I work as a clerk at IPD Police in Sandakan. I think if I study maybe I can have chance for promotion. I choose OUM as it has flexible time and the class is only 4 or 5 times per semester so most suitable for working people like us or me". (P2-f)

3. 3. "As I am PWD and it is very hard to find job even part time job. Now, OUM had given me hope to work and study. Furthermore OUM give me 75% discount which this help a lot in reducing my financial problem. (P3-m)
4. "The main reason is the discount 75% given to OKU. This amount really encourage me to study as I only work as Admin Assistant at MOSTHI and with that small salary I could not afford much for further study, OUM has given me great chance to improve myself. (P4-f)
5. "The 75% discount is really a great help to me. I choose OUM because it has many facilities suitable for people like me who use Wheel Chair. I am studying in Shah Alam LC and I am a paralyze waist down and could not walk". (P5-m)
6. "I choose OUM because of the flexible classes. And also the 75% discount for OKU which help me a lot as I also have children studying in a university. The facilities at OUM are also very good". (P6-f)
7. "Class is very convenience as it is held on Sunday. The 75% discount also a great help as now studying become very much affordable. OUM also have good facilities". (P7-f)
8. "I choose to study in OUM because they offered the program as per what I want. Of course, it is a flexi way of study because while working and I still continue to study. Finally, I think the factor that interests me is the discount rate can be up to 75%. This is very helpful to me". (P8-f)

b. The following are responds from blind students:

1. "I study in OUM because OUM accept the blind learners especially in Sarawak. The study moods in OUM are flexible and have internet facilities. Staff here is friendly and helpful. They take care and are tolerance with the blind student". (B1-m)
2. "I didn't choose but was placed by the Ministry of Education. I will accept wherever places as long as they take me in. To me, ODL system is ok and it quite convenience for us while working". (B2-f)
3. "We choose OUM because OUM is flexible and most suitable for OKU blind. The main problem with blind student is time and

distance i.e. UKM program which were held on Friday night and Saturday morning it is not easy for OKU to come. OUM schedule is fixed and their timetable suit for off campus students learning off campus method". (B3-m)

4. "I think to study in OUM is it give us a second chance to further our study and the mood of study also is friendly because we can search and get the material through online. This system is suitable to us because we have family and also working". (B4-m)

5. "I never choose but it was offered from the Ministry of Education. Anyway, being an OUM student, I am ok and feel good. I think to study anywhere is the same. However, I like OUM because is located at JB and near to my house and working place". (B5-f)

Research question 3: Do you enjoy studying in OUM?

The finding described as follows:

a. Physical disabilities students responds:

1. "I think everything is ok and I really enjoy to study in OUM. The management in the learning centre (Bangi) is ok and friendly to me. Then, it practicing flexi learning and all this under my control. Self-management and forum online is very helpful to me. I can easily to access to the surrounding areas and the physical environment is ok. Happy lah". (P1-m)

2. "Yes, I enjoy my time with OUM as I am able to get to know many friends. OUM also have good facilities for study". (p2-m)

3. "Yes, I really enjoy my study in OUM as the class is flexible and not too often. I also got good tutor and lots of friends. The class is also during weekend so it did not really disturb my work. I am the types that prefer individual study so my classes do not need me to work in group. Good. My disability is I am using artificial leg, so I am almost like any normal students". (P3-f)

4. "Yes, I enjoy studying in OUM as the staff give great help, friendly and will give me whatever I need as soon as possible. Any problem that I faced will be assist by them". (P4-f)

5. "I think everything is ok and I am satisfied to study in OUM. The system is not that pushing and student have more flexi time and I can choose for self-study too. The forum online is very helpful and I like it. I can do according to my pace and time". (P5-m)

b. Blind students responds:

1. "Enjoy: I am ok to study in OUM because I not facing much problem. I can easily to come to the learning centre. I like OUM because they have provided module and many e-resources. OUM give extra time for exam, providing Braille question and the staff helpful in the learning centre. Sometime, they are willing to read to us. Therefore, I am happy to study here". (B1-m)
2. "I feel happy to study at OUM as the facilities are very good and completely suitable for OKU". (B2-m)
3. "I am satisfied because it is convenience to me. I am proud too because OUM do accept us to further our study here. It is flexi and we can study on our own and do our work at home. Then, the forum online is good and useful to us". (B3-m)
4. "Overall, it is ok and I enjoy to study in OUM because ODL system is easy to us. These learning approaches enable us to get a lot of reading materials through online and e-library. This is the best way for blind student and we are ok to that system. Anyway, I am ok at the learning centre because the staff started to understand us and they will do their best to help us". (B4-f)
5. "I am happy to study in OUM because I can cope with ODL environment. It is easy for me because I am a teacher have to work during week day. The location also near to my house and school. The learning centre is very nice and helpful. They were very caring. Then, the best way is OUM provide module and I find it is very convenience to the blind student. The MyVLE system also helpful for OUM student to communicate and managed our studies". (B5-m)

Research question 4: What are the challenges that you faced in OUM?

The finding indicated various issue and difficulties faced by student with disabilities. It could be a very positive feedback to OUM. All this can be seen as follows.

a. Responses from the Physical disabilities students:

1. "I believed that the most challenges to me are the ODL environment is quite lonely and I have to do it on my own. At first, I have some friend but we all have no contact and this causing a bit stressful to me. Another aspect is I have to go to another learning centre to take my exam and this has causing problem to people like me (OKU). We have to find transport and the most difficult part is we never go to that place". (P1-f)
2. "The greatest challenge to me is OUM did not provide assistance to help OKU student especially to those who are hand handicapped. When I asked the examination officer and they said I can't do anything. It is quite disappointed and they should look into OKU need. Then, the OKU parking also an obstacle to physical challenge student". (P2-m)
3. "The greatest challenge to study in OUM is I have time constrain. Therefore, I have to cope with this challenge. I think the most challenge is myself, and the university is ok". (P3-m)
4. "Infrastructure such as toilet in KK centre, the design is not for PWD. It is more for normal users. For OKU we need toilets as you always see in hospital with big door and bigger area for easy maneuvering of wheelchair about 2 meter wide and also rail and bigger and longer sink for easy access also hand holder. Then, No prayer room at ground floor for OKU too so it is very difficult to pray. another aspects is Previously when the staffs do not know me, they would ask me to climb stairs for classes at 1st floor etc. Now they give classes at ground floor. One more thing there is no ramp for OKU from the road to the entrance. There is also no access 'rising route' for wheelchair either. So for me I still can use my cane therefore I will slowly walk up the stairs but it really is a lot of hard work. Lift also not available to go up stairs". (P4-m)
5. "First challenges are I always feel shy to ask from other people. I feel that I am lacking in knowledge and also resources therefore I feel ashamed and 'rendah diri'" (P3-f)
6. "Then, "Secondly, The infrastructure in LC Sandakan have too many stairs – it just too much walking. Sometime the class is located at top floors and it is really an effort to climb all those stairs. I usually end up in pain until night time" (P3-f)

7. "Furthermore, "No lift or ramp provided in the building for OKU. Except for exam where I request for sitting at the ground floor I still have to climb the staircases. I am also sometime not feeling well. My leg always in pain every time I walk too much. This prevents me from being active and also studying too like doing revision as cannot control the pain. Doctor only gives me pills and also physiotherapy but it still depend on my workload to attend the physiotherapy session". (P5-f)
8. "Sometime I feel really tired to study after coming back from work or after a full day of class as I have to use a lot of my hand to ride the wheelchair and my energy is fully drained after full day of work (P4-m)
9. "Another one is "Most of the time I feel shy to ask questions, as I am the type of person who like to ask a lot of questions but my friends always quiet in class. I feel like I am the only one lacking in understanding of the subject. Why it is always me that ask question" (P4-m)
10. "It is important to stated here that "Toilet in Shah Alam LC only have 1 for OKU at the ground floor so if I am at the 2nd floor I have to come down to ground floor to use the toilet" (P4-m)
11. "Meanwhile, "Parking space also very limited for OKU. Sometime when the parking is full I have to park quite a long way and therefore I have to cycle quite far to reach the class. The same scenario, after for lunch and canteen as the canteen if quite a long way it is hard to go. Also not many people that help as everyone also have their own thing to do". (P6-m)
12. "My main problem is I do not have transport and Shah Alam is also far from public transport such as train station. I have to ask my friends from OUM or my other friends to send me to class. Especially during final exam it is really difficult to find transport. Depending on others for transportation is really hard". (P7-m)
13. "The most challenges is to adapt with study environment, example I have never experience life in university and the experience that I got compared to during my school years is so much different. I need time to adapt with being independent and not relying on other people to do it for me. OUM teach me to be independent and manage my time to suit the need of a person who study and work at the same time" (P7-m)

14. "The second is other people perception towards OKU regardless other students or public. Normal person without disabilities always think that OKU is weak and not able to do anything and need help about every single things. Person such as I am, I can drive on my own and survive on my own, usually normal people need to see that OKU prove themselves that they are not weak than only they say the person is OK". (P8-f)
15. "The challenge is mostly due to time management as there are always lots of works in School. I also have kids still studying so I really need to divide my time carefully" (P8-f)
16. "In addition, "Sometime the tutorials are also not very easy to understand. The tutor approach towards the subject we also difficult to follow. But that was not very often I also have not seen that tutor again as too many student complaints about her." (P8-f)
17. "Then, "Sometime my friends said the language used in the module is difficult to understand, but to me it is still ok and I can understand them well, maybe because I teach English at school." (P8-f)
18. "It is a fact that "People perception towards OKU also sometime make things very difficult, example at one time I went to ask for assistance from Baitulmal and the people there said that studying in OUM means that the persons have money to spend and are working so do not need any monetary assistance. I only got the assistance from the help of my friends. Now I also ask from PTPTN to assist in my study, luckily the 70% discount help in reducing the financial problem". (P9-f)
19. "Even though I do not use wheelchair, my deform food prevent me from climbing lots of stairs, but my classes usually at the top floor, if it is on the 1st floor it is still ok. There are no lift or ramp either, it is really hard to walk long distance." (P9-f)
20. "Probably, "I do not know the real problem but last few semesters I keep on not receiving my module on time. I did register early but I never got my books early. Some others who register late receive their books early. I always got it on the 3 Tutorial or on the 4 tutorial. Last semester I could not attend exam as they do not tell me that the book that I got is similar to the one that received by my other friends. Reference on the study guide also mentioned those in the thick book and not the one that I received which is the thin one. I

am so confused. I told them to the Administrator but no action taken and no explanations given either.” (P9-f)

21. “Sometime, Tutor online hardly ever around, if they ever responded to us it is only towards the last minute prior to submission of assignment and we have to rush like mad”. (P10-f)

b. Responses from the blind students:

It is important to note that the challenges faced by the blind student were totally different as compared with physical disabilities students. The blind students mainly have difficulty to access OUM website and e-resources. However, the physical disabilities students were have more comment on the physical environment within the campus. Let see the following from the blind students' perspective.

1. “One of the major challenges studying in OUM is open and distance approach have not much contact and interaction with classmate and also tutor as compared with normal university. (B13-m)
2. “As a consequence, I felt lonely in my studies. Then, I think another great challenges faced by the blind student like me is OUM website is not disabled friendly and hardly for us to access. The server also always down and causing a lot problem to us such as download and upload our assignment, module, check announcement and checking results” (B1-m)
3. “I believed that the most difficult part as OUM student especially to the blind is their MyVLE is not that disabled friendly. If the blind student couldn't access to the MyVLE effectively then, we all can not get the prompt info such as announcement, time table, result, upload or download assignment etc. I think the most serious part is OUM website is not friendly used by the blind student). (B2-f)
4. “...as a blind student, we need to spend a lot of time to search for information. Lucky, I have my wife to assist. The website OUM is not that disabled friendly. Therefore, I have to get help from her to access OUM MyVLE to do my work. Others than module, the extra materials is limited and I have to go to Google and library to search for references to do my assignment”. (B3-m)
5. “...as a PWD student, we have a bit challenged such as to get the staff to understand our unique need is very tough. The staffs here do not really understand PWD needs and sometime, they are not that helpful. However, all this just at the beginning stage and now is

better. This mean that many staff is not really how to help PWD learners. Therefore, they need to learn and to be more disabled friendly university. Another aspect is OUM website is not stable and always causing problem to us to download and upload assignment. We really hope OUM can improve their website and make sure is disabled friendly. If the website is good then, we can manage our study well.” (B4-f)

6. "The greatest challenges to OKU student is, it feel lonely and hardly to get friend to support each other. Sometime, we also feel a bit difficult to do assignment on our own due to the difficulty to search for the material. Therefore, we wish to have more friends". (B5-m)
7. "The most difficult part is the learning centres have no café facility and this is causing a lot problem to us. We have no transport and it is hard for us to find food". (B6-m)

Suggestion for improvement from the students:

There are various idea have been suggested by the respondents. It covered various aspects e.g. physical environment, facilities, web-accessibility, administration etc. They include the following:

1. "The most significant is PWD need a ramp for the entrance door and at lease to make it easier to enter OUM. They are also a need for toilets and praying room at the ground floor, in most learning centers". (P1-m)
2. "If possible to have the ramp for OKU to enable us to climb the stairs. Of course, it will be much better to have lifts". (P-2-f)
3. "It will be good if OUM have its own canteen". (P3-m)
4. "I would like to suggest that OKU students are also allowed to study in Bangi Learning Centre, as Bangi have less staircase and easier to walk. Classes can always be held at the ground floor. There are currently many OKU in Putrajaya as we mostly work for the Government so Bangi is much nearer compared to Shah Alam and it will reduce our cost to pay toll and also fuel". (P4-f)
5. "I would like to suggest that OUM have career help unit where people like me who want to look for job can refer to". (P5-m)

6. "Hope OUM to be more supportive to PWD student and friendlier to PWD student too". (B1-m)
7. "I Hope OUM to improve its website to be more disabled friendly especially to the blind learner. Currently it has too many images and flash". (B2-m)
8. "I "hope OUM will take the necessary action to improve the website. We want education for all inclusive of disabled students. Then, hope OUM will take more disabled students especially the blind and we know that some OUM learning centre is not that friendly to the disabled student so that, we hope this might not be happening again and Wish OUM will do their best". (B3-f)
9. "Module should be change to CD forms as it is more suitable for blind people. Pen drive will be much better and more cost saving than books. If possible, maybe to provide external hard disk with all the module put in for reading. OKU blind need to read first before coming to class as most lecturers forget about PWD student. Mostly, lecturer may forget OKU student and it is hard for us to catch up". (B4-m)
10. "I hope OUM will accept more PWD student and welcome us. This is because at the beginning stage, we did face some difficulty when want to enroll in OUM. Lucky, it can be overcome. Therefore, we wish OUM will be more confident and open minded to PWD learners". (B5-m)
11. "Hopefully OUM still can open it door to PWD because this is the convenience approach to the blind student. Therefore, we hope there are more and more PWD such as the blind to join OUM. Then, staff at learning centre should know and learn how to help the OKU student and more disabled friendly". (B6-f)

Discussion

As we all know Distance learning, E-learning or ODL are another alternative for education and career enhancement to those who have a chance to access to the information communication technology. Today, this learning approach has been adopted widely and globally by many countries including Malaysia. ODL unlock the possibility to make education easily accessible to potential students with a wide range of abilities and disabilities. Based on the previous discussion, it is proven that OUM has committed itself to contribute to the corporate social responsibility by providing educational opportunities to all including PWD in pursuing higher education. This can be seen when many students with

disabilities had enrolled in various programs that range from Diplomas, undergraduate and the postgraduate programs. Without their strong commitments, PWD definitely will not be able to pursue their studies in OUM.

It is proud to say that the ODL approach had helped many students to complete their studies in OUM. The numbers of OUM graduate keep on increasing every year, among them are those with various disabilities. Until May 2011, there were 31 students with disabilities who had successfully completed their studies and graduate with OUM degrees or diplomas. This record can be seen at the table shown below.

Table 4: Students with Disabilities who Have Graduated in OUM until May 2011

Items	Type of Disabilities	Total Number of Learners
1	Physical Disability (Amputation, Hand, Leg, Foot deformity, Cripple, Nape, Spinal and Backbone)	20
2	Blind and vision impaired	4
3	Hearing with Aid, Deft & Mute	1
4	Other disabilities	6
	Total	31

This development is in line with the Convention on the Rights of Persons with Disabilities (2007). According to this Convention, it stated that persons with disabilities should be guaranteed the right to inclusive education at all levels, regardless of age, without discrimination and on the basis of equal opportunity. In addition, the convention stated that state parties should ensure that:

1. Children with disabilities are not excluded from free and compulsory primary education or from secondary education;
2. Adults with disabilities have access to general tertiary education, vocational training, adult education and lifelong learning;
3. Persons with disabilities receive the necessary support, within the general education system, to facilitate their effective education; and
4. Effective individualized support measures are put in place to maximize academic and social development.

Meanwhile, this study did investigate some important issue; e.g. why PWD choose OUM to further their studies, does PWD enjoy their studies in OUM, difficulty faced and suggestion from PWD themselves. Overall, the data collected were from two major categories of PWD, the physical and the blind. It could be concluded that the majority of the respondents' voice up that they choose to study in OUM because of OUM generosity to give 75% discount for their tuitions

fees, could study while working without having to sacrifice their current jobs, the flexi study, weekend class, online, various e-resources and also the convenience factors of the Learning Centers.

The respondents also expressed that they enjoyed studying in OUM via ODL method. Some of the reasons given were they felt very happy because they could further their higher education, interact with new friends, satisfactory facilities, could get assistance from the staffs, and able to seek for career advancement after graduation. On the other hand there are still some difficulties that they have to face while studying, among them are the ODL method were quite a lonely journey, the website were not disabled friendly especially for the blind, and some of the learning centre have no lifts facilities, no adequate disabled friendly toilet, class scheduled at top floors, and some administrative issue etc.

Based on previous literatures, all distance learning students need certain degree of flexibilities. For example, the structure of distance learning gives adults the greatest possible control over the time, place and pace of education, Jill M. Galusha (2000). The nature of ODL or distance learning are most appropriate and convenience for adult learners. In fact, Jill M. Galusha (2000) said that distance learning is an excellent method of reaching the adult learner as due to the competing priorities of work, home, and school, adult learners' preferred high degree of flexibility. This study indicated that the learners with disabilities in OUM also welcome and preferred ODL to enable them to obtain their tertiary education. Almost certainly, many of them stated that study in OUM is convenient, flexible, easily within their control, and the MyVLE is very helpful. In this instance, Debenham, (2002) and Di Lorio, Feliziani, Mirri, Salomoni and Vitali (2006) also share similar view and agree that ODL did present flexible method of study. Additionally, the UNESCO (2002) report also supported the above development as ODL will ensure that the learning needs of all young people and adults were met through equitable access to appropriate learning and life-skills programs and through harnessing new information and communication technologies to help to attain these goals.

However, in reality for ODL provider such as OUM and their students, both party may encountered some problems and challenges. The finding presented in the previous part also shown many learners with disabilities faced some difficulties while perusing their studies. These includes no available lifts at certain learning centre, class located at the top floor without lift or ramp facilities, limited disabled friendly toilet, no owing own transport, time constraints and financial problems. This phenomenon also mentioned by Fichten, Asuncion, Barile, Fossey and De Simone (2001).

This means that all students using distance learning method or ODL may encounter with various challenges throughout their journey of obtaining higher education and their efforts are not without problems. For example, loss of

student's motivation due to lack of face-to-face contact with teachers and peers, potentially prohibitive startup costs, and lack of faculty support are all barriers to successful distance learning, Jill M. Galusha (2000). In addition, these problems and barriers could be classified into several distinct categories. It includes costs and motivators, feedback and teacher contact, student support and services, alienation and isolation, lack of experience, and training. Some of the issues include lack of instructor training, poor course design, lack of student interaction, and personal commitments.

Nevertheless, ODL has become a choice to PWD in Malaysia to enable them to access into the mainstream education especially at the tertiary level. It also recognized the importance of ODL in providing PWD with the best and convenient as well as up-to-date educational program. This growth has been stimulated by the interest among educators and students themselves in the use of Internet-based and multimedia technologies. Therefore, it is proud to state that in spite of being a private university, OUM does not exclude itself from fulfilling its corporate social responsibilities to the needy. OUM has enthusiastically committed to provide very attractive incentives and endless efforts for several groups of the society including the PWD. Despite of PWD learners facing some difficulties, in overall they are enjoying their study in OUM. It is with hope that all challenges would be able to overcome by OUM in future. Therefore, this finding would be useful to OUM management to take the necessary action and eventually to improve the learning environment for PWD.

Recommendation

In order to become a leader in ODL, it would be much better if OUM could focus on the learners support need inclusive of PWD rather than on the technology as well as the infrastructure itself. Therefore, we would like to recommend the following:

1. Adopt the universal designed principles. If the management agreed to adopt these principles, whatever needs within the university would be designed based on the universal principles. As a result, nobody would be neglected. In other words, issues such as web accessibility, barriers access into building and the infrastructure is accordance to all human needs.
2. Provide training to the staffs on handling disabilities issues and diversity culture especially in relation to support services for various types of PWD within the university context. Therefore, it would help to create a very disabled friendly culture. Consequently, PWD and administration staffs would be able to understand and help each other.
3. Carry out more research on the PWD needs to obtain their feedback in relation to the supports and services for minority groups within ODL

- institution in the country. With that measure, the university and learners could have better learning environment and supports to facilitate their studies.
4. Based on the finding, it is good for OUM to have a policy and guidelines for learner with disabilities. It would be able to help OUM to become a very disabled friendly university. It also in line with the motto of “education for all”.

Conclusion

Today, the global economy and new social model requires many people including PWD to learn new knowledge and skills in a timely and effective manner. The establishment of OUM through its ODL with the support of information, communication and computer technologies has enable PWD to easily access information and knowledge even with a certain degree of restriction to access for education at university level. In fact, ODL would be able to support learning in a more personalized, flexible, portable, and on friendly manner. We hope that with the good efforts of OUM and its motto of “education for all” would be materialized and benefited everyone especially the PWD. The provision of higher education opportunities would be able to give positive impact on PWD to improve their own life. If the universal designed principles are to be adopted by OUM in its ODL system then, OUM can be even more disabled friendly and it definitely could accommodate everyone including PWD. All learners either able body or disabled person deserve to have high quality education and training that would provide them with opportunities for lifelong learning.

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