WHY ODL IS AN ALTERNATIVE FOR VISUALLY IMPAIRED LEARNERS IN 21ST CENTURY

Wong Huey Siew

Open University Malaysia wonghueysiew@oum.edu.my

Wong Huey Siew is a senior lecturer at OUM. He obtained his PhD in special education/disabilities studies. He is also social activists among the visually impaired community. He has served as a chairperson for several main committees in National Council for the Blind Malaysia (NCBM) and Society of the Blind in Malaysia (SBM). Also, he had served on several committees in Malaysian Association for the Blind (MAB).

ABSTRACT

Open and distance learning (ODL) as "a way of providing learning opportunities that is characterised 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 (COL's; 2009). Today, ODL allows learners to access instruction and learning materials including those with disabilities. With regard to this new era of learning approach, it raised several significant questions as to why visually impaired learners choose to pursue their study in ODL institution, does ODL accommodate visually impaired learners' for higher education particularly in the 21st century? This is a qualitative study which in-depth interviews being done on 10 visual impaired graduates either with low vision or totally blind who were studying in OUM, to find out why they chose ODL University to pursue their study. Besides, this study is also meant to detect what is their main difficulties and needs in the ODL environment. The finding indicated that ODL is an alternative for visually impaired to pursue their higher degree although they had face some accessibilities issues.

Keywords: Open and Distance Learning, Visually Impaired Learners

INTRODUCTION

Today, many institutions of higher education provide greater access to learners to meet market demands, and are adopting online delivery of instruction at the course and programme level at a rapid pace. In fact, this instruction approach has become a very popular choice for teaching and learning in tertiary education level. Almost 3.9 million students were enrolled in at least one online class during the fall of 2007. The 12.9% growth rate for online enrolment is much greater than the 1.2% growth overall of the higher education student population (Allen & Seaman, 2008).

In the world of digitalisation, online or e-learning education is seen as an alternative to everyone to acquire their knowledge and skills. It is considered as a flexible and appropriately inclusive to deliver inclusive education to all including for persons with disability (PWD). Through online education, technology could be used to support inclusion education. The advent of technology and ODL could go a long way in widening access to education for the majority of children and PWD, flexibly so that the learning process can go on. These special needs groups may 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 centre and a form of blended learning that incorporates Open Education Resources (OERs) such as Open Learn (Khokhar, 2007).

LITERATURE STUDIES

Distance education is practiced around all parts of the world to provide study opportunities for those who cannot or do not want to take part in classroom teaching (Holmberg, 1995). Online courses could enhance 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. Then, students who had print impairments which now can access course materials, notes and handouts on the website without assistance, as long as those are designed to be accessible.

In the design of ODL, instruction materials should enhance access for all. However according to Burgstahler (2002) the issues of access focus of the separation of student and instructor and rarely include consideration of needs of students with disabilities. In order to establish the positive environment for providing support students with visual impairment, it is imperative to interrogate the concept of inclusion, its pedagogical implications for the learner in the context of a universal design in ODL.

According to Sindile Ngubane-Mokiwa (2018), feedback from visually impairment learners to assignment is often inaccessible; the software used is incompatible; learning and assessment is designed in exclusionary approaches; assessment facilities are not conducive; and lack of proactive innovative assessment strategies. This lack of genuine inclusion is also evident in the challenges the blind students face during assessment. These barriers are experienced at both formative and summative stages. He recommended ways in which barriers to assessment can be removed. These include addressing inclusive assessment strategies in professional development initiatives.

Cuthbert Majoni and Julieth Mashatise (2017) conducted a study on visually impaired learners in ODL. The study found out that the students with blindness should have the technical equipment that can be presented or adapted to be relevant to them. The study concluded out that ODL is ideal for students that are blind because they learn at their own pace and in the comfort of their homes. However, there is great need for highly trained personnel to assist such students. The study suggests that there is need to establish resource centres at ODL institutions for internet, Braille computers and e-learning to facilitate training of students with blindness.

In the past, McBroom (1997), found that visually impaired students in ODL faced the problem of navigation accessing resources and accessing information. They fail to access e-resources and have little access to computers gargets or software. Open and Distance education by increasing use of webpage adverts and resources in support of students studying at their institution. Blind students need specialized qualified personnel to take care of their educational and social needs. Today, online or distance education is seen as an alternative to everyones to acquire their knowledge.

One of the universal design principles is recognition of the ideal that access to education is one of the basic human rights (Harrison 2006). Therefore accommodation of learners with special needs is essentially ensuring that access to high quality instruction is provided to all. Universal design principles ensure cognitive, affective and systemic learner support in ODL which reinforces student's confidence; self-esteem and progress, (Tait, 2003).

Consequently, the preparation of instructional materials, using universal design principles in the context of Moore's theory on ODL, would enhance access and inclusion of students with disability. Inclusive education appreciates every learner's fundamental right to learn and acknowledges that each child has unique abilities and needs. Seemingly, if given the right opportunities, all children can develop their potential. Inclusive education considers differences in the learning and physical abilities of children as

opportunities for making education system and schools more responsive and dynamic. Inclusive education enables both teachers and learners to feel comfortable with diversity and to see it as a challenge and enrichment in the learning environment, rather than see it as a problem. (Tait, 2003).

PROBLEMS STATEMENT

In general, visually impaired learner's experienced challenges in their studies and this could impact on their academic success including in ODL environment. Most ODL institutions indicated that they would welcome and interested in terms of providing support and will try their level best to enable visually impaired learners to cope within the ODL system. Visually impaired learners without adequate support are unlikely to succeed in their studies. According to Mapuranga and Nyenya (2014) these services and facilities are not readily available in institutions of higher learning. However the quality of support and services offered to students with disability requires to be identified and requires a unit to effectively support their learning. Thus, this paper intends to find out the reasons why visually impaired learners chose to enroll in ODL university like OUM and analyze the data to conclude whether ODL is fit or not fit them as an alternative for pursuing higher education in the 21ST century.

The rationale to carry out this study is because PWD 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. Traditionally they tended to be considered only as 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. UNESCO (2003).

OBJECTIVES

The objectives of this paper are below:

- 1. Explore why visually impaired learners chose ODL University as an alternative mode to pursue their study.
- 2. Analyze whether ODL accommodates visually impaired learners' for higher education?
- 3. Identify their main challenges face in ODL environment.

RESEARCH QUESTION

There have several research questions to be address in this paper and there are as follow:

- 1. Why visually impaired learners chose ODL University as an alternative mode to pursue their study?
- 2. Does ODL accommodate visually impaired learners' for higher education?
- 3. What are their main challenges in ODL environment?

THE SIGNIFICANT

This paper aims to contribute to the limited literature on special needs learners particulars the visually impaired learners within the ODL environment in Malaysia. it is hope that the finding would be useful as a fundamental ground knowledge for the relevant bodies to explore appropriates strategy to make ODL be more inclusive and accommodating the visually impaired learners in 21ST century. Besides, this primary data also significantly to help the ODL providers such as OUM to adopt more effective measures to achieve the goal of education for all. With regards to this, it could contribute to the empowerment of visually impaired community in era of new Malaysia.

BASIC TERMS

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 teaching is conducted by someone removed in time and space from the learner, and that the mission aims to include greater dimensions of openness and flexibility, whether in terms of access, curriculum or other elements of structure.

In this case, OUM have introduced a friendly management learning system named as MY Virtual Learning (myVLE) and now named as myInspire. The virtual learning environment or through myVLE 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. Some examples of online resources like interactive study materials, quizzes, video lectures and I-radio.

Visually Impairment

Visual Impairment is defined as loss of vision for an individual to complete tasks without specialized adaptation, (Mason, McCall, Arte, McLindell and Stone, 1997). This means that the loss of vision impedes learning unless modifications are made to teaching methods, materials and learning environment. The degree of impairment varies from low vision to total loss of sight (blind). The low vision category includes those with remaining or residual vision. According to Webster and Roe, (1998) people who fall into the category of 'blind' depend on tactile, auditory and other sensory input other than sight, as means of learning and require specialized equipment.

METHODOLOGY

This was a descriptive study. The respondents involved in this study were referring to visually impaired who had graduated from OUM. Interview method was used to interview 10 OUM visually impaired graduate. They had graduated either at bachelor degree with honors or master degree. Data were generated through phone interview. The primary data were obtained directly from the respondents. The data analysis was done through thematic analysis as required by the research question.

FINDING AND DISCUSSION

Open University Malaysia (OUM) has become one of the top leading service provider in ODL in Malaysia so that, OUM would be chosen as a case study. The rationale was OUM offers access to education to people with disabilities. This means that OUM has provided a great opportunity for visually impaired learners to pursue their studies in a university. In fact, this form of study is widely adopted in many countries to enable disabled people to improve their academic qualifications and social integration within a community. Huey Siew and Normahliza (2012).

According to Mapuranga and Nyenya (2014) the services and facilities are not readily available in institutions of higher learning for PWD. However the quality of support and services offered to students with disability requires to be identified and requires a unit to effectively support their learning. With regards to this current development, it is important to explore why many visually impaired persons tends to choose ODL as their choice to further their study in tertiary education. The finding and discussion would be divided into several subthemes accordingly. It includes why they chose ODL to further study, does ODL accommodates them and what issue and challenges face by visually impaired learners. It is important to note that the symbol of R used in this context is refers to respondent, M represent male and F is refers to female.

Why Choose ODL?

There have various reasons why many visually impaired adults would like to pursue their study in OUM.

"I am a working adult and it is a reason why I choose OUM. It also more flexible and Therefore, OUM is convenience and suitable for me. Of course, the attractive factors are OUM give me discount for the tuition fees" (M and R_{-1})

One learner had said "I choose OUM as it has flexible time and the class is only 4 to 5 times per semester. So, it is more suitable for working people like me." (F and R.₂)

This learner described "OUM give me 75% discount which it help a lot in reducing my financial burden." (M. and R.3)

In addition, one respondent shared her view as "I come to OUM because Ministry of Education send me here to further my study. It also located nearby to my house and work place. I found it very convenience and fit my goals" (F. and R.4)

Meanwhile, e-resources has becomes one of the key factors to determine the visually impaired learners to choose ODL. For instance, "I chose OUM because e-learning would enable me to manage my study. It could reduce my burden and stress due to many e-resources such as e-library and e-book which I can read through computer" (M. and R.5)

Equipment and support services have been identified to adequately serve their needs. Visually impaired learners felt there was need to have qualified and trained staffs designated to the various needs of them, appropriate resources for their learning environment should be provided, encourage faculty, academic advisors, staff and other students to proactively respond to the needs of learners with visual impairment.

Does ODL Accommodating Visually Impaired Learners?

Based on the finding, it demonstrated that ODL could become one of the options for visually impaired persons to pursue their higher education. It could be justified as "ODL provide wider opportunity for us to enrich ourselves. So, visually impaired persons could have more opportunity rather than just depending on the conventional university to give us the opportunity. Furthermore, it is not all the conventional university either public or private university to accept us." (M. and R.10)

There have another respondent further to elaborate this positively. "In Malaysia, many visually impaired persons have not much choice to further their higher education especially after completing their for six and even after living the school. Therefore, ODL could be considering as a hope for us to access to the degree and post graduate courses." (M. and R.9)

Besides, from the digital perspective, "today, many visually impaired had acquired better computer skills and with more disabled friendly device as well as special software application, it is surely could enable more visually impaired to brows internet and also used the online facilities to improve their quality of life including obtain better education qualification via ODL." (M. and R.5)

"Since many visually impaired persons could use computer to perform their daily lives so that, ODL absolutely could help the visually impaired to study through online. Probably, ODL would be able to reduce our mobility barriers if we studying in the campus and we can do our stuffs in a more easy way such as could access to e-library to get various learning materials. The most happy part is we can get our material in a softcopy whereas, if we study in conventional university, students have to search for a hardcopy book and for the visually impaired learners, we have to spend more times to scan the book and then, convert it into word copy." (F. and R.4)

Since the finding demonstrated that ODL could fit well for visually impaired learners and many of them did voiced up that ODL could facilitate their learning process effectively. Therefore, in 21ST century, more efforts should be given to help the marginalize group to obtain better education and wider their access to education at tertiary level. "Visually impaired should be given more opportunity to equally to access online study. Since, there have various ICT device and support services already available for improving the quality of visually impaired persons life; therefore, education providers also need to fully aware on the needs and supports resources to deliver effective online education for visually impaired." (M. and R.3)

Furthermore, "since many visually impaired persons have an opportunity to learn computer skills and gadgets like smart phone; so, online or e-learning should become another platform for us to pursue for higher education." (F. and R.₂)

"Through online study, we could easily connect to the Virtual Campus to check the forum or announcement via certain communication channel or search for our learning materials. In fact, we can do it independently without much assistance from sighted persons." (M. and R.₇)

In overall, it is happy to say that ODL could be an alternative for visually impaired persons to pursue their higher education. In order to enable visually impaired persons to enjoy full participation via ODL in the near future, commitment and responsibilities from ODL provider is equally important. This scenario supported as "the greater awareness that exists regarding visual impairment, the more likely it is that ODL institutions will meet the students' needs." Further studies need to be done on facilitating

the smooth inclusion of visually impaired students in ODL institutions of higher learning (*CH Tichauya*, *CR Alexander*, *M Paul*, *and D Emanuel*; 2012).

Inclusion involves many stakeholders and it is a process that is difficult to implement. It is also controversial in the sense that it has multiple interpretations; it means different things to different people. Poverty, ethnicity, disability, gender or membership of a minority group may limit access to or marginalize within education. Cultural, social and economic consequences of these factors vary from time to time, country to country and from location to location (UNESCO, 2003). Therefore, ODL provider could integrate this philosophy and approaches to make ODL available to visually impaired persons in more holistic approach. Finally, visually impaired learners need specialized qualified personnel to take care of their educational and social needs Chikukwa and Chimbwanda (2013).

It is important to note that the right to education is promoted by Article 24 of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) which states that:

States Parties recognize the right of persons with disabilities to education. With a view to realizing this right without discrimination and on the basis of equal opportunity, States Parties shall ensure an inclusive education system at all levels and lifelong learning. States Parties shall ensure that persons with disabilities are able to access general tertiary education, vocational training, adult education and lifelong learning without discrimination and on equal basis with others. To this end, States Parties shall ensure that reasonable accommodation is provided to persons with disabilities.

Issue and Challenges

One of the objectives of this paper is to detect visually impaired learners main difficulties face and needs in the ODL environment. Through the interview, the finding indicated that although visually impaired learners could adapt and abled to managed their study well but, they did face certain degree of challenges. There have one respondents pointed out that "in overall, I am happy to study here. However, I also faced some difficulties such as no visually impaired peers support to share and exchange experiences. We have to try and error in everything until we can solve our problems. It really need a lot of hardworking and individuals efforts." (F. and R.8)

As one of the respondents said "sometimes, the e-book and e-learning materials are not able to access due to the accessibility issue." (M. and R.10) besides, "it was common that not all e-materials can be read by our computer. Such as scan image document or some softcopy document with too many graphic so, we have to seek for assistance." (F. and $R_{.4}$)

In terms of social support, "in ODL, it was a bit lonely; we have not many friends like in our school times. Class-mates were come and go and always change in each semester. So, it quite challenging to seek for friends help." (M. and R.₇).

"My best friend was my computer because I have not many course-mates around. Sometimes, they did not come to the class. This means that it was difficulty to have face to face interaction and discussion." (M. and R.9)

From the computer skills perspective, "it is a fact that engage in ODL always required good computer skills and the software application also need to be updated at all time. Otherwise, we have difficulty to access to the e-learning materials." (M. and R.3)

Furthermore, "sometimes, the internet connections also have problem and it causing a lot of troubles and the data can be lost. E.g., if having connecting problem then, I am not able to access e-library and my assignment progress was delay" (M. and R.6)

Meanwhile, access to instruction and learning material for visually impairment learners always becomes a challenge. There have one very common issue faced in ODL by visually impaired learners were "Sometimes, the available format for the content is not accessible, so we have to seek for the solution. In relation to this, we have to change it into an accessible format, or maybe ask our relatives or friends for helping to convert to word file such as Convert pdf document to word document. When come to the images or picture, we need to get sibling to describe it." (M. and R.10) so, it is significantly to mark that the e-learning materials should be user friendly.

No doubts, e learning had encouraged the inclusion of students with various disabilities to further their knowledge (Di Lorio, Feliziani, Mirri, Salomoni and Vitali 2006). Even though these e-learning opportunities had greatly benefit learners with disabilities with learning amenities, there are still many barriers that hinder with 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. For example, many public building such as library, schools, classroom, restroom access, and entry to building were not equip for disable person prior to the American with Disabilities Act of 1990 (ADA).

Despite facing such difficulties, there have some recommendation made to overcome such challenges. We could provide several possible formats (Braille, audio, web, PDF, Word, etc.) so that each student can choose the one that best meets their specific needs. If the ODL provider could provide accessible and usable materials so that student with visual impairment can enjoy equal education conditions compared to students who do not have a visual disability. Besides, Train staffs or lecturers to develop accessibility content to ensure that contents and access are comply with accessibility standards. (Pablo Rebaque Rivas, Llorenç Sabaté Jardí and Eva P. Gil-; 2011).

CONCLUSION

This finding has provided a greater insight to ODL institution to have better understanding on the visually impaired learners engagement in ODL. As discuss above, ODL or online study can be concluded as an excellent method of reaching the marginalize group. This paper also could create greater awareness of the need for inclusive approach within ODL mode of delivery for visually impaired learners. In order to make ODL to be the choice of visually impaired persons in 21ST century, it is very importance for all to address the needs of special need learners when planning online educational programs and designing instruction. Of course, the issue and challenges face by visually impaired learners raised in this paper is crucial for ODL providers to seriously to look into it in order to move forward for inclusion education. ODL providers need to think of diverse learning needs when designing learning courses and support services for all learners particularly the needs of learners with visual impairment. Finally, ODL is the answer for accessible and inclusive for visually impairment learners because it brings education to anyone's door step. However, it becomes fully beneficial when all the necessary equipment as well as the technical aids is being provided.

ACKNOWLEDGEMENT

Firstly, I would like to thanks all the respondents who had given a full cooperation in this research paper. Secondly, special thanks to reviewers for their so-called insights or comment given to improve this paper significantly. Finally, I would like to extend my sincere gratitude to my entire assistant for helping in whatever forms.

REFERENCES

- Allen, I. E., & Seaman, J. (2008). Online Nation: Five years of growth in online learning. Retrieved December 23, 2018, from http://www.sloan-c.org/resources/onlinenation.pdf
- Belinda Patterson, & Cheryl McFadden. (2009). Attrition in Online and Campus Degree Programs Online *Journal of Distance Learning Administration*, Volume XII, Number II.
- Burgstahler, S. (2002). Real Connections: Making Distance Learning Accessible to Everyone Disabilities, Opportunities, Interworking, and Technology (DOIT) Dysan, A. & Millard, A. (2000). Schools and special Needs: Issues of Innovation and Inclusion. London, Paul Chapman.
- C. H. Tichauya, C. R. Alexander, M. Paul, & D. Emanuel. (2012). The Forgotten Tribe in ODL Systems: Challenges Faced by Visually Impaired Students in Institutions of Higher Learning *Journal of the Open University of Tanzania*. Vol 13, No 2.
- Chikukwa. H, Chimbwanda. (2013). F, The forgotten tribe in Open and Distant Learning Systems. Challenges faced by visually impaired students in institutions of higher learning. *International Journal of Innovative Research in Management*. Vol 5 Issue 2 PP1-5.
- COL. (2009). Quality assurance toolkit for distance higher education institutions and programmes. Vancouver: Commonwealth of Learning.
- Cuthbert Majoni, & Julieth Mashatise. (2017). Challenges faced by students with blindness studying through open and distance learning retrieved on 20-February 2019 from www.idpublications.org/.../Full-paper-CHALLENGES-FACED-BY-STUDENTS-WIT
- Debenham, M. (2002). Computer-Mediated Communication and disability support: Addressing barriers to study, retrieved 31 July 2017 from http://www.techdis.ac.uk/
- Di Iorio, A., Feliziani, A. A., Mirri, S., Salomoni, P., & Vitali, F. (2006). Automatically producing accessible learning objects. Educational Technology & Society.
- Fichten, C. S., Asuncion, J., Barile, M., Fossey, M. E., & Robillard, C. (2001). Computer technologies for postsecondary students with disabilities I: Comparison of student and service provider perspectives. *Journal of Postsecondary Education and Disability*, 15 (1), 28–58.
- Harrison, L. (2006). Accessible Web Based Distance Education: Principles and Best Practices.
- Holmberg, B. (1995). Theory and practice of distance education. 2nd edition. London: Routledge.
- Khokhar, B. (2007). Widening Participation: How Can New Technologies Best Be Used To Enhance, Learning And Teaching And Ensure Educational Inclusion And Engagement For Excluded Groups? Proceedings of the 12th Forum On Distance Education. Cambridge, UK.
- McBroom L.W. (1997). Making the Grade, College Students with visual Impairments, *Journal of Visual Impairments and Blindness*. 9 *I* (3) 261–271.
- Mapuranga. B, Nyenya. T. (2014). Open and Distance Learning Accessibility to Learners with disabilities. *International Journal of Humanities, Social Sciences and Education (IJHSSE)*. Vol 1 Issue 4 PP1-12.

- Mason, H., McCall, S., Arte, C., McLindell, M. & Stone, J. (1997). Visual Impairment: Access to Education for Children and Young People. London, David Fulton Publishers.
- Pablo Rebaque Rivas, Llorenç Sabaté Jardí, & Eva P. Gil-Rodríguez. (2011). Distance Education for Visually Impaired Students: Recommendations Based on Case Study CSUN Conference 2011.
- Regina K. Masalela. (2014). Inclusive education and the role of distance education University of Botswana.
- Sindile Ngubane-Mokiwa. (2018). Removing barriers in assessment for blind students in open distance learning. Conference December 2018, Pretoria, South Africa.
- Tait, A. (2003). Reflections on Students Support in Open and Distance Learning. *International Review of Research in Open and Distance Learning*. ISSN: 14923831.
- UNESCO. (2002). Open and distance learning: trends, policy and strategy Considerations.
- UNESCO. (2003). Overcoming exclusion through inclusive approaches in education: A challenge & a vision. Paris: UNESCO.
- Webster, A., & Roe, J. (1998). Children with Visual Impairments. Social interaction, Language and Learning. London, Routledge.
- Wong, H. S., & Normah Liza, A. (2012). Education opportunities for people with disabilities: a case study in Open University Malaysia Seminar on Special Education Ipoh, UPSI.



ICE 2019 SECRETARIAT

International Conference on Education Open University Malaysia Jalan Tun Ismail, 50480 Kuala Lumpur, Malaysia

Tel: 603 2773 2622 Fax: 603 2697 8825

Email: ice2019@oum.edu.my Website: http://ice2019.oum.edu.my

