Students with disabilities face physical, social, and emotional barriers in their postsecondary education. Some barriers may include obstruction in the environment, lack of awareness in the university community and peer participation. This article explores the experiences and challenges faced by visually impaired students in a public university in Malaysia. The article delves into the feelings and aspirations of the students as they study in the University. It gives an insight into the lives of the students with disabilities and how they cope throughout their stay in the university.

Keywords: Visual impairment, challenges faced by visual impaired, institution of higher learning

Postsecondary education is an important transition towards attaining a successful adulthood and positive employment outcomes. Although students with disabilities have shown a greater participation in postsecondary education, the rate of students with disabilities enrolled in postsecondary institutions are below their peers without disabilities (Powers, Gil-Kashiwabara, Greenen, Powers, Balandran, & Palmer, 2005). The involvement in postsecondary degree courses is a critical part of the transition process stipulated in the Individual with Disabilities Education Act 2004 (IDEA). The Act mandates that appropriate support services need to be provided for students with disabilities in postsecondary education settings to enable them to live in an inclusive community. Attainment of post-secondary education is often a transition goal
and a pathway towards successful transition from school to employment (Powers et al., 2005). It has been found that students with disabilities are less likely to attend college and have much lower income than their peers (Scarborough & Gilbride, 2006).

Over the past few decades, the development of the labor market demands had increased the necessity of possessing a postsecondary degree. The merits and skills earned through pursuing a postsecondary degree are important assets for successful future employment. Individuals with disabilities require vocational-technical training and employment skills to become employable (Stodden, Conway, & Chang, 2003). Therefore, it is necessary to ensure that postsecondary education is made more accessible for students with disabilities. The incorporation of technology support has been documented to have a positive effect on improving the accessibility of postsecondary education for persons with disabilities (Stodden et al., 2003). It has also been found that there is a strong positive correlation between the attainment of post-secondary education to securing successful employment for individuals with disabilities (Stodden et al., 2003). Past research has shown that accessible postsecondary education is influenced by the use of assistive technology and teaching students about self-advocacy skills to know their responsibility in undertaking the postsecondary program (Stodden et al., 2003). Hence, postsecondary degree, technology and instructional supports are seen as the great equalizer for individuals with disability to secure employment.

Post-secondary education enables an individual to increase employability as it positively affects lifetime earnings and economic self-sufficiency. Studies have shown that 78% of high school students enter postsecondary education while only 37% of individuals do so. College adult education in vocational-technical field or other areas are vital for transition to employment and for individuals with disabilities to become productive and contributing citizens of the country.

However, a pressing issue faced by individuals with disabilities is being unable to access postsecondary education due to various barriers in the environment (Stodden et al., 2003). Barriers to accessible postsecondary education include lack of support, absence of accessible technology and poor individualized education planning catering to the special needs of the students (Stodden et al., 2003).

**PURPOSE**

The purpose of this article is to describe the social development, individual development, cognitive development, support system, physical and financial assistance of students with visual impairment in an institution of higher learning in Malaysia.

The following questions were posed to the students to collect the information:
1. How is the social development on campus for the students with visual impairment with the other students and staff on campus?

2. What is the self-concept of and motivation to learn among students with visual impairment as they enter the university campus?

3. What are the problems faced in learning academically?

4. How is the facility and personal support on campus?

5. How is the support system to transition from university to employment?

6. How is the financial management and financial assistance for the students?

CHALLENGES FACED BY STUDENTS WITH VISUAL IMPAIRMENT

Based on the information collected, the following are some common challenges faced by students with visual impairment from an institution of higher learning:

Socializing on Campus

Adjusting to the life on campus involves many challenges. The main challenge is adjusting to living in an integrated setting with other students without disabilities after studying in a special school for individuals with visual impairment. Campus life may be the first experience of socializing with peers without disabilities which requires a period of time to integrate with others on campus. The students at the university are also for the first time experiencing meeting and making friends with individuals with visual impairment. Special assistance and care must be provided for them to settle in as quickly as possible.

Students on campus have various perceptions towards the visually-impaired among them. Some may perceive them negatively which causes segregation between students with disabilities and students without disabilities.

Mobility on Campus

Students with visual impairment are placed in a particular residential college in the university. A special van is provided to transport them from the residential colleges to their respective faculties for lectures. They may also depend on their friends for assistance in commuting from one place to another. However, many prefer to walk around the campus and eventually become quite independent in finding their way around.

Even though at a few places where the drains are not covered, holes in the ground as well as construction sites may pose a danger to them, they are able to overcome most of the obstacles or barriers.

As most of the buildings on the campus are old, the amenities for individuals with visual impairment are limited. However, they are aware that there is an on-going effort by the university management to make the campus more disabled-friendly.
Reading Materials and Resources

It has been found that almost all of the materials used by the lecturers are not available in Braille. Students with visual impairments are required to seek assistance from volunteers to be their readers to translate the written notes into Braille. They found themselves restricted especially when there is a shortage of volunteer readers. However, the library has been supportive in helping the students to recruit volunteer readers.

According to Khoo (1998), the lack of textbooks and reference materials as well as the difficulties in obtaining them are among the most challenging barriers faced by individuals with visual impairment. However, this challenge is overcome with the recently introduced technology where brand new books can be scanned and converted into Braille. However, it is quite time consuming and costly. The visually-impaired students have to be very selective in this as some textbooks are changed quite frequently.

Most of the time, the visually-impaired university students depend on other student volunteers and librarians to find the reference materials before translating them into Braille or recorded in an audio tape recorder. This procedure is very time consuming and they have to manage this well as no preferential treatment is given to them in terms of assessment.

The visually-impaired find it even more challenging when it comes to drawing graphs and embossed mapping as there is a lack of synchronization in the preparation of pictures and embossed mapping. There is a lack of standardization of equipment and materials used. This is very confusing for the students with visual impairment as the graphs which had been used in class are not similar to the graphs used during the actual examination.

Acceptance Among Lecturers and Staff at the University

As a whole, the lecturers and staff in the university accept individuals with visual impairment in the campus. However, some are not as open and accommodating. This results in various difficulties faced by the visually impaired as they need to change courses since they are unable to follow the course work well. Occurrences like this are infrequent but should be eliminated.

It is also found that sometimes lecturers are unaware of the presence of students with visual impairment in their class. This poses a great problem to the students because they have difficulty in understanding what is being taught in class. For example, the lecturer will refer to a subject on the board by saying “that” or “this” which results in the visually impaired being unable to follow the lesson well. The awareness and attitude of the lecturers play a vital role in ensuring that the students are able to study in the class along with their peers.
Personal Difficulties

Based on the information collected, it is found that some individuals with visual impairment are too dependent on others for assistance, too quiet or fussy and so forth. However, the majority are quite independent and will only seek assistance only when they really cannot help it.

ICT Facilities on Campus

The following are some information on the ICT facilities available on campus for the visually impaired. There are two computer labs for students with disabilities in the university. One is Computer Lab S at the Main Library and the other is at Seri Jati Room at a residential college.

At Computer Lab S, there are 7 computers which are equipped with JAWS and a Braille embosser. The library also conducts computer classes for the students with disabilities in the campus. At the Seri Jati room, there are 20 computers. Most of the computers have JAWS. There is one LCD projector and a printer in the room.

Computer Facilities

According to the information gathered, computer facilities are currently available in the university includes screen readers. There are many screen readers such as Window Eyes and NVDA. NVDA is an open source software which can be downloaded by the general public. Most students with visual impairment prefer to use JAWS compared to Window Eyes and NVDA because they find it most user-friendly.

There is a need for a screen magnifier for students with long or shortsightedness. There are many computer software available in the market but they are rather expensive. Such items include the Braille Display which costs approximately RM20,000, Packmate desktop which is about RM12,000 and Braille memo which some visual impaired are currently using which costs approximately USD2500. The visually impaired students provided this information but unfortunately as the number of users is small, they understand why such equipment is not purchased.

Financial Difficulties

With regard to financial difficulties, there are individuals with disabilities who have the PTPTN study loan and there are also some students who have obtained a scholarship from the government or private sector. Other than that, the Ministry of Higher Education also provides monthly allowance of RM300 to visually impaired students who have enrolled in the university. Since the 2010-2011 academic years onwards, visually impaired students who are undertaking their first degree are entitled to RM700 allowance from the government every semester.
Education Opportunities for the Visually Impaired

Generally, students with visual impairment have limited opportunities to enter university compared to individuals with disabilities from other categories. Some universities are inconsistent in their intake of students with visual impairment. There have been cases where the visually impaired students are transferred to another university after the orientation week in the university. This is related by students who have personally gone through the predicament.

The visually impaired are well informed that a particular university, that is, University of Malaya, provides the best facilities to students with visual impairment compared to other universities. It is a fact that University of Malaya is the first choice for students with visual impairment to pursue higher education.

The role of the Ministry of Education and the Social Welfare Department is apparent in the lives of individuals with visual impairment. However, there are other ministries in the government who are not as involved in the affairs of students with disabilities in the university. Other than the Ministry of Higher Education, the Department of Development of Individuals with Disabilities in the Ministry of Social Welfare is becoming more active in the welfare of students with disabilities in the Klang Valley. Other than sending a representative in the Committee of Development of University Students with Disabilities in University of Malaya, the officer has also been to other universities. The Department of Development of Individuals with Disabilities has also conducted courses for work preparation for students with disabilities. Work preparation courses were attended by students from the University of Malaya, International Islamic University and National University of Malaysia.

Role of Societies or Non-governmental Organizations

There are many departments in the University of Malaya that look into the welfare of students with disabilities. The focus is on the facilities and amenities for individuals with disabilities on campus.

It is found that the university is more focused on providing and upgrading the facilities and infrastructure for individuals with disabilities. The students appreciate it very much. However, the students wish that more opportunities are created and provided for them to get involved actively in social activities. This is one way for them to socialize and integrate with other students.

The counselling program at University of Malaya has done a few programs which focuses on career. The visually impaired would love to participate but could not fit in as the programs did not cater to their needs. It is suggested that the programs conducted need to be studied on its effectiveness in meeting the needs of individuals with disabilities.
Choice of Programs Available at the University

The choices of academic programs and courses are found to be limited for individuals with visual impairment in the University. There are only four faculties which are the Faculty of Law, Faculty of Economics and Administration, Faculty of Arts and Social Science and Faculty of Education which are open to enrolment of individuals with visual impairment. Recently the Faculty of Islamic Studies also opened its doors to students with disabilities.

Daily Facilities

Za’ba Residential College was set up in September 1974. The college is equipped with facilities such as the dining and office area as well as the ‘Seri Jati’ building which is the block where activities are held for students with disabilities. At the beginning of the establishment, there were 600 students and currently this has increased to 800 students in which there are about 25 students with disabilities in each session.

Individuals with disabilities, namely those with visual impairment, would like to go through daily activities on campus as ordinary students. They would like to have the mobility to enter the university administration building, the faculty and the chancellery. They would like to go for recreation, have meals together and go shopping as well as enjoy the daily lifestyle on the university campus.

The major barrier faced by the individuals with disabilities on the campus is to accept their own shortcomings. This is one aspect that the university needs to provide the necessary support and interventions. The university could provide the best amenities, facilities and equipment such as motorized wheelchairs, computers with voice activation and software but if individuals with disabilities are still self-captivated in their own world, their personal, social and psychological developments will still be impeded.

DISCUSSION AND CONCLUSION

Students with disabilities are required to be responsible for declaring their disability and be self-advocated in initiating for the support and assistance provided by the post-secondary institution (Stodden et al., 2003). The process of initiating for support can be daunting for individuals with disabilities who may not have the skills to manage the situations encountered. This approach may deter the participation of individuals with disabilities in postsecondary education. Thus, a more viable and accessible course of postsecondary education would be to set a structured program which enables students with disabilities to have access and support during the course of study.
Research indicates that mentoring can assist students with disabilities develop skills and knowledge as they transit from school to postsecondary and employment. Mentoring instils more motivation in academic achievements and career development. Positive relationships between mentors and mentees can enhance the social, emotional and academic aspect of individuals with disabilities especially among individuals with disabilities, has been shown to be effective in encouraging better career development and postsecondary outcomes.

The DO-IT (Disabilities, Opportunities, Internetworking, and Technology) programs in the United States emphasize the role of peer mentoring and people with disabilities becoming role models for their peers. This is found to be an effective part of the DO-IT program in developing positive outcomes in postsecondary settings. The DO-IT program uses electronic communication among mentor and peers in combination with residential schooling in the University of Washington, Seattle. The DO-IT program provides a supportive and accessible platform for students to develop their career in science, engineering and mathematics through the support of assistive technology and peer mentoring (Whelley et al., 2003).

The DO-IT Malaysia aspires to replicate the DO-IT project in USA and had just been kick started in September 2012. Individuals with disabilities are under represented in science and technology enterprises because of low career expectation for students with disabilities. However, the DO-IT project, including the DO-IT Malaysia, paves the way towards a career in science and technology (Whelley et al., 2003) and to promote independence in life. Learning information technology and computer skills is also an important element of the program which enables individuals with disabilities to be equipped with relevant skills for the labor market in Malaysia. A current issue faced by individuals with disabilities is being ill equipped for jobs which are available in the corporations. Job duties often require the usage of computers and knowledge of computer software which is a skill that needs to be developed in individuals with disability, particularly individuals with learning disabilities. With the issues faced by students with visual impairment, it is also the aim of the DO-IT Malaysia project to help solve some of these constraints.

Self-advocacy skills training are found to be an important component of post-secondary education. Coordinating self-advocacy skills development in post-secondary education programs can help students with disabilities to gain positive experiences and good career development. Programs with work-based learning experiences are able to provide students with the relevant experiences and skills towards a rewarding career. The experience of peer mentoring at the workplace and the development of self-advocacy skills also enable students with disabilities to become leaders in their community (Burgstahler, 2003).

Greater emphasis has been placed on assistive technology supports in recent years as technology has become a great equalizer between the disabled and non-disabled. Past researches have documented a higher frequency of usage of
assistive technology as an important tool in creating accessible postsecondary education. Assistive technology such as talking books, specialized tape recorders, portable note-taking devices and mouse/switch options are used by students with disabilities for accessible formats of learning (Stodden et al., 2003).

REFERENCES


