Are We Helping Them to Pass or Setting Them up for Failure? Assessment Related Experiences of Partially Sighted Students

Lawrence Meda

Teaching and Learning Coordinator, Faculty of Education, Cape Peninsula University of Technology, Mowbray Campus, P.O.Box 652, Cape Town, 8000, South Africa
E-mail: medal@cput.ac.za

ABSTRACT The needs of visually impaired students are often neglected in South African universities. Partially sighted students are left to provide for themselves because of the invisibility of their barrier to learning. This paper is a presentation of assessment-related experiences of partially sighted students at a university of technology in South Africa. The study was guided by two critical questions: What are partially sighted students' assessment-related experiences, and why? A qualitative case study within an intepretivist paradigm was used. Four partially sighted students were purposively selected to participate in semi-structured interviews and a focus group discussion. Data was analysed using content analysis. It was found that partially sighted students' needs are neglected. Pre-requisites such as providing large font size and extra-time are taken for granted, yet they are consequential to every partially sighted student. Guided by a theoretical framework of the social model, the study concludes that an individualistic approach to supporting partially sighted students does not only make them feel included, but also enables them to realise their full potential.

INTRODUCTION

Visual impairment is an overarching term that includes partial sightedness and blindness (Hatton 2014). In other words, partial sight (also known as low vision) and blindness are components that constitute visual impairment. A student with partial sight is "one who has impairment of visual functioning even after treatment and/or standard refractive correction" (Sacharowitz 2005: 140). There is minimal scholarship particularly in developing countries about visual impairment in general and partial sight in particular. Hadidi and Al Khateeb (2013) contend that very little is known about partially sighted students in institutions of higher learning. Few studies that have been done concerning visual impairment, particularly partial sight, focused on issues of accessibility, retention and progression (FOTIM 2011). None of the studies focused on assessment-related experiences of partially sighted university students. The lack of information in the area of assessment-related experiences of partially sighted students in South African universities is what this study seeks to address.

In this paper, assessment is conceptualised as a process of measuring the performance of students (as in examinations, assignments, tests and other assessable work) against intended learning outcomes. Assessment is aimed at see-

ing if students acquire knowledge, values and skills which were taught. It is a fundamental principle that assessment should be inclusive of all students regardless of their special needs.

South Africa's inclusive policy clearly articulates that all students with any form of disability have to be included and afforded support they require in order to pass their assessments (Department of Education 2001). The South African Constitution (1996) prohibits any form of discrimination in social life as well as learning institutions. Despite that, partially sighted students who require support in order to succeed in their academic endeavours are often neglected in South African universities (Mushome and Monobe 2013). Van Jaarsveldt and Ndeya-Ndereya (2015) postulate that some lecturers have a tendency of distancing themselves when it comes to supporting students with disabilities including visual impairment. Similarly, Kasiram and Subrayen (2013) argued that university students in South Africa with visual impairment experienced exclusion and marginalisation from family, mainstream schools, the community and university.

South African universities offer partially sighted students little support which is similar to what they afford students without any disability. Mushome and Monobe (2013) postulate that partially sighted students in many South African universities are faced with a challenge

of learning under the conditions of students without any visual impairment. It is the responsibility of partially sighted students to obtain extra support in an environment where there is non-availability of learning and assessment equipment. Research about South African universities revealed that needs of visually impaired students are generally unmet (FOTIM 2011). The situation made Kasiram and Subrayen (2013) arrive at a conclusion that disabled students in many South African universities are academically abandoned. The creation of an inclusive environment in South African universities is elusive (Van Jaarsveldt and Ndeya-Ndereya 2015).

Exclusion of partially sighted students in universities is not only peculiar to South Africa. Hadidi and Al Khateeb (2013) argued that partially sighted university students in Jordan had some degree of loneliness. This was mainly caused by higher learning institutions' inability to adequately cater for all their needs. In a different and more recent study, Hadidi and Al Khateeb (2014) reported results which were not consistent with findings of their previous studies. They postulate that in some parts of Jordan, students who were partially sighted received more support than students without any visual impairment. It is not always the case that partially sighted students are neglected in institutions of higher learning.

Polish partially sighted students obtained enough support and consequently coped well with their studies and passed their examinations (Klinkosz et al. 2006). Similarly, Sahin and Yorek (2009) attest that partially sighted students in Turkey were contented with support they were getting from universities. Students were particularly intrigued by the way in which their university did a needs assessment of visually impaired students. The assessment was done in order to identify the kind of support each student required. This approach is vital as opposed to viewing students as visually impaired and offering them generic support.

Generic support should not be given to partially sighted students because of varying degrees of their low vision. Yamanashi (2015) advocated for an individual needs based approach to supporting partially sighted students. This is because it is very unusual for partially sighted students to have similar vision (Corn and Lusk 2010). Students with partial sight are heterogeneous. They have unique challenges that re-

quire different levels of support in order to make it in tests and examinations (Reed and Curtis 2012). Some students' conditions of partial sight could be so severe that they require braille, audio and magnifying devices to cope with learning and assessment strategies at a university. Other partially sighted students' conditions could be so mild that they can read and write without braille and magnifiers.

Some students may require extra support because they could be nervous about taking part in tests and examinations because of their sight conditions. In the Australian context, Datta (2014) argues that partially sighted students and those with intellectual disabilities often develop high levels of anxiety before tests and examinations. Consequently, they require additional aid and support from teachers, support staff and the university counsellor before appearing for any examination or test.

Institutions of higher learning are challenged to put in place adequate support for partially sighted students in order to make them realise their full academic potential. The support begins by providing basics such as large print, extra-time in tests and examinations and availing assistive technological programmes and gadgets. Smith and Kelly (2014) contend that students with partial sight require a diverse set of educational, programmatic, and technological components in their programmes in order to succeed in their assessments.

Assistive technology should be put in place in order to make students access assessment-related information in the same way as their normal sighted counterparts. Assistive technology allows partially sighted students to use internet, talking maps, digital cameras like flipper and screen reading software (Reed and Curtis 2012; Smith and Kelly 2014). In that way, they would have access to information to prepare for their tests and examinations just like any other student without a visual impairment. Small (2015) argues that the ability to meet needs of partially sighted students enables them to enjoy quality education and life just like those with good sight. In this 21st century, technology is considered the best tool of making partially sighted students learn just like students without any learning barrier. Technology enhances partially sighted students' learning and preparation for examinations (Smith and Kelly 2014).

This study was guided by two critical questions: What are partial sighted students' assessment-related experiences at the university, and why? A theoretical framework guiding this study is the social model of disability. The social model proclaims that a person's disability is not looked at from the medical perspective, but the environmental viewpoint (Swart and Pettipher 2011). An environment has to be furnished with all aspects that are needed by a person with a disability so that he/she would be able to do the task. If a person fails to perform a task because of his/her so-called disability, the blame does not go to an individual, but to the environment for failing to provide support that is adequately needed by the disabled person to compete.

The social model differs from the medical model in the sense that the latter holds individuals responsible for failing to perform tasks because of their disabilities. The former blames the environment for failing to cater for the needs of disabled people (Swart and Pettipher 2011). According to Humpage (2007), the medical model perceives disability as an individual problem to be cured or contained, while the social model focuses on the relationship between people with disabilities and their social environment. Proponents of the social model view disability not from the medical point of view, but from environmental and social dimensions (Anastasiou and Kaufmann 2013). Thus, if a disabled student fails to do an academic task because of the nature of his/her disability, the problem would be with the institution's failure to provide support that is needed by that student to succeed.

In the social model, disability is conceptualised as exclusively social. It is a society which disables people (Union of the Physically Impaired Against Segregation 1976). From a social constructivist's point of view, a teacher ought to provide adequate support to students with any form of disability in order for them to perform well in assessment tasks (Vygotsky 1978). If a teacher or lecturer does not provide for partially sighted students, the problem will be with the teacher who constitutes the environment. The social model is suitable to guide this study because of its underlying principle that a learning institution has to provide support to students with any form of disability. Partially sighted students are entitled to obtain support which enables them to compete on the same platform with other students in tests and examinations.

METHODOLOGY

The study was conducted using a qualitative approach within an intepretivist paradigm. A qualitative approach was ideal for this study because it allowed the researcher to collect data by interacting extensively and closely with partially sighted students during the study. According to Leedy and Ormrod (2001), qualitative research enables a researcher to interact with respondents in order to gain insight about the nature of a particular phenomenon. Qualitative approach allowed the researcher to gather data by fully intermingling with respondents when they were giving complex details of their experiences. Mack et al. (2005) argued that the qualitative approach is suitable to use when the researcher intends to obtain complex textual descriptions of people's experiences.

The theoretical framework for most qualitative research emerges from an interpretivist perspective. In support of that view, Lapan et al. (2012) argued that every qualitative research has an interpretive perspective which focuses on uncovering participants' experiences. Since this research was qualitative in nature and was about partially sighted students' experiences, the intepretivist paradigm was ideal to guide this study. Lincoln (2010) argues that interpretivist theories long to answer why. They often come with stories and are derived from pure lived experiences. Consequently, interpretivism was the ideal paradigmatic position for this study since the researcher focused on partially sighted students' experiences.

A single-case explanatory approach was used in this study to explain partially sighted students' experiences. Rule and John (2011: 8) argued that an: "explanatory case study attempts to explain what happens in a particular case or why it happens." According to Cohen, Manion and Morrison (2007), case studies are very specific. They identify one participant, one setting, one situation or one event (Creswell 2008). A case study was ideal to use in this study because it had one setting (university of technology), one group of participants (partially sighted students), and one situation (assessment experiences).

The study was done using four partially sighted students (two boys and two girls) at a selected university of technology in South Africa. The university has a total of five partially

sighted students. One student declined to participate in the study because he was busy and not interested in sharing his experiences. Purposive sampling, which is characterised by deliberately targeting respondents (Fraenkel and Wallen 2007) was used to select only partially sighted students. A list of all partially sighted students was obtained from the university's disability unit. Students were contacted and asked to take part in the study. Students were from different faculties and their years of study ranged from first to fourth (final). Students had different levels of partial sight. Three students had very low vision which they described as close to blindness. They attended schools for the blind during their primary and secondary education. The fourth student did not have severe vision loss as he could read a small font size and see what the other three could not.

Data was collected using in-depth semi-structured interviews with each student and a focus group discussion with all four participants. Mack et al. (2005) argued that focus group discussions and in-depth interviews are ideal to use when the research is about experiences. Content analysis was used to analyse data. Ethical issues were observed in the following ways: permission to conduct the study was sought from the disability unity which is responsible for students with visual impairment. Students were informed about the purpose of the study. They were requested to participate voluntarily and each of them was given a consent form to sign. All students were informed that they were free to withdraw from the study at any point in time. Confidentiality and anonymity were guaranteed and pseudonyms were used.

RESULTS

Partial sighted students from Pathway University (pseudonym) felt unfairly treated when it came to assessment. They argued that their basic needs were not being addressed especially when it came to issues of format used in assessment strategies. They singled out font size as problematic and the main cause of negative experiences that they had in assessments. Font size used on the university's noticeboards and tests was not compatible with partially sighted students' vision.

Students unanimously singled out assessment strategies of the Reading Skills module as

one that was done unfairly. Reading Skills is a very crucial and compulsory module that is done by all first year students and it is assessed using computers. The module is designed to test students' reading and comprehension abilities by giving them computer timed comprehension passages. Students are expected to read a comprehension passage quickly and answer questions before the computer timing is out. Partially sighted students described the assessment practice of this module as a nightmare because computer timing is fast and the font size is too small. Nomsa said: "The font size is so small that I spend time struggling to read. The computer timing is too fast and the programme shuts before I finish reading, let alone answering questions."

Similarly, Lerato said:

I have to get my eyes close to the computer to be able to read what is on the screen. Before I finish reading a sentence, it will be gone and another one will come. As a result, the computer times out before I even attempt half of the questions.

Partially sighted students fail to perform in the Reading Skills module because their eyes can hardly read the small font size at the speed that the computer shows information on the screen. Had it been large font size, partially sighted students would have been able to compete with the timing of the computer.

Nomsa said:

What makes me slow is because sometimes I remove my eye glasses, use a fan glass and get my eyes closer to the computer to be able to read what is on the screen. All that would be against computer timing. If the programme had large font, I would not have a problem with the time because I am a fast reader.

There is no provision for giving partially sighted students extra-time because the exercise is programmed on computer software. Partially sighted students do not only face challenges in the assessment of the Reading Skills module. They also have problems when writing tests in a computer programme called SAM. The programme has timed tests which lecturers sometimes use even with final year students. Partially sighted students are treated just like students without any special learning need when it comes to assessments done using a computer.

Nomsa said: "We are timed by the computer just like any other student with perfect sight. To me, that is very unfair and a cause of my poor

performance in modules when I use SAM." All partially sighted students echoed the same sentiment that the use of SAM during tests was a disadvantage to them. It is a disadvantage because font size is not adjustable, timing is fast and there is no extra-time given.

In accordance with the policy and procedure for the granting of extra-time and other concessions during officially scheduled tests and assessments, the university offers a maximum of 15 minutes extra on each hour. However, this policy does not apply for computer programmed exercises or for pen and paper tests which are written in class. It is only implemented during examination times.

Lerato said: "Extra-time is given in examinations all the time and hardly in tests. Lecturers barely give us extra-time during tests because they have to go to attend other lectures immediately after the exercise."

Phelele concurred with the view that there is no extra-time given during tests:

The greatest problem is some tests are written during lecture periods. I may be having a lecture coming immediately after the period that I was writing a test. If I use extra-time in the test, that would mean getting to the next lecture late. Sometimes there would be three consecutive tests for different modules. That makes it impossible for me to get extra-time which I really need in all assessments.

Partially sighted students are compelled to finish tests in the same time as students without any special need. Lecturers do not collaborate with one another to space out their test times in order to accommodate students who require extra-time.

Nomsa said: "I just have to write quickly, finish with the others and jump to the next class for a lecture or another test. It is a big disadvantage that is caused by lack of coordination."

What makes it hard for partially sighted students to finish tests at the same time as students without special needs is that question papers do not have large font like they do in examinations. That leads partially sighted students to spend a lot of time trying to read small print before attempting questions. Due to the small font that is used in tests, some partially sighted students had negative experiences.

Nomsa said:

I once made an error in a test. I did not attempt questions which were at the bottom of the question paper. I did not see them because the font was too small. I only realised that there were such questions in the paper when I was out of the test room where I heard other students talking about those questions. I scored very low marks in that test and it affected my final mark.

Due to the small font size that is used, partially sighted students make errors which have drastic effects on their assessments. Small font is also used in attendance registers. Whenever students write a test or examination, a register is circulated for them to sign to confirm their presence. Phelele had a negative experience (in the examination) that was caused by small font on a register:

I signed an examination attendance register on someone's name because the font size and rows on the list were too small for me to read and follow. The person whose name I signed against simply cancelled my signature and put his besides mine. The lecturer was surprised to see my examination script appearing with others' yet I did not indicate my attendance in the examination room.

The issue of font size is very critical in every document that is read by partially sighted students. All material has to be in large font so that they can read with ease. The university does not take into consideration partially sighted students when they put up assessment-related notices on the noticeboard. Some partially sighted students had negative experiences with noticeboards which had small font. Nomsa said:

I asked another student who was also checking her coursework marks on the noticeboard to tell me what my mark was. She told me that I had a total coursework mark of 40 percent. The minimum coursework mark that was required for someone to sit for an examination in that module was 50 percent. I was shocked and hurt by the fact that I failed to obtain the minimum requirement. I cursed myself several times before going to the lecturer in charge of the module to make an appeal to re-write the test. The lecturer wondered what I was talking about because all students who did that module obtained marks which were above average (50%). I told him that a person who read my marks for me at the noticeboard said I got 40 percent. The lecturer told me that was wrong.

Lerato also had a similar experience with her assessment mark that was caused by small font on the noticeboard:

My experience is not with coursework marks, but final marks (combination of coursework and examination marks) which were on the noticeboard. I asked another student to read the marks for me because the font was too small. The final mark she told me was too low and did not make sense because I had a very high coursework mark on that module. My coursework mark was among the highest in the class. When I wrote the examination, I felt it was easy and I was hoping to get a distinction in that module. But, a final mark which the student read to me made me wonder and conclude that the lecturer must have made calculation errors. I went to verify with the lecturer. The lecturer told me the mark that I was told by the student was wrong. The lecturer and I went to the noticeboard only to see that the student read someone else's marks.

The university does not provide basics needed by partially sighted students in order to prepare for their assessments. Students need basics such as computers with a talking programme called flipper, or simply to label library shelves with a large font size.

Lerato said: "In the library, I struggle to find books because of the font size they used to label shelves."

Similarly, Phelele said:

For shelves that I cannot read, I get assistance from other students in the library. They read shelves for me which I am not very happy about because I would like to do it myself. I wish the library had a large font size on shelves, so that I may find books by myself without bothering other students who could be busy with their studies.

Without textbooks, it is very hard for a student to prepare for an assessment. Partially sighted students find it hard to prepare for their assessments because they can hardly read textbooks in the library because of small font. Nomsa and Lerato, who have severe vision loss, consider their sight condition to be close to blindness. They find it hard to perform well in assessments because there are no resources in the library which are compatible with their sight. Both Nomsa and Lerato attended their primary and secondary education in schools for blind people. They are used to braille. Hence, they find it extremely difficult to adapt to reading textbooks written in small font. Lerato said: "There is currently no text that is in large print. We are very

few partially sighted students at this university hence they should make at least one large font text for each of the textbooks that we have in the library."

Nomsa said:

It is difficult for me to adequately prepare for any assessment without reading. Lecturers ask us to buy recommended textbooks for their modules. I cannot buy these because of financial problems. I sometimes photocopy from friends' textbooks, but that does not help because my eyes cannot read a photocopied textbook because of the waterfront background that many books have.

Assessment-related needs of partially sighted students are not taken into account at Pathway University. The situation has made students conclude that the institution is biased towards physically challenged students only. Zweli said:

I feel the system at this university is very biased towards students with physical disabilities when compared with partially sighted students. Physically challenged students are provided with basics that they need to be able to perform well in assessments. They are given wheelchairs, crutches, and there are ramps all over campus to ensure that they reach any examination room. But when it comes to us partially sighted students, they do not put in place basics that we need to write any form of assessment. For example, ensuring large font in tests, library shelves and noticeboards, installing computer programmes such as JAWS and providing braille. They assume that since we can walk normally and our disability is not as visible as physically challenged students there is no need to provide for us.

Thinking that partially sighted students do not require special needs is a great misconception which has negative impacts on their learning at the university. All disabled students should not just be generalised and treated as if they have common barriers to learning which require similar support. Students must be categorised according to their disabilities and needs assessment should be done to afford them support that is relevant to their barriers to learning.

As it stands, partially sighted students feel neglected by the university. Some even wonder why the institution enrolled them without having the resources needed.

Lerato said:

I wonder why this university registered us when they do not want to support us. They have

the capacity to support us, but they don't. They assume that we can study like any other student without special needs, which is very wrong. We are just studying for failure and nobody cares.

Very little is being done to enhance the success of these students. They are neglected and treated as if they do not require any special need. Lecturers hardly check on partially sighted students in venues where they write examinations. All disabled students, including partially sighted ones, are put into one venue during examinations. It is essential that lecturers visit students at the beginning of an examination in case they have concerns which cannot be addressed by invigilators. Zweli said:

In my experience of writing exams at this university, lecturers do not come to check if we partially sighted students have queries at the venue that we are writing from. Most of the time we have invigilators who do not teach the module, or sometimes they are hired people from outside the university. We cannot ask invigilators technical questions, for example, there was once a printing error on my question paper. When I asked the invigilator, she did not know what the word was meant to be. So, lecturers should come to check on us at least at the beginning of their examination for a few minutes.

Similarly Phelele said:

I did not understand the question because of the way it was phrased. I asked an invigilator and she did not know. When I told the lecturer after the examination about the challenge that I had, he told me that he did not know where we partially sighted students were writing.

It would be helpful if lecturers in charge of examinations being written visit students for a few minutes after the examination begin to make sure that all candidates are clear and set to write. The university still needs to do a lot concerning educating members of staff about handling students with disabilities. Sometimes, lecturers penalise partially sighted students for bad handwriting. Due to problems that partially sighted students have with their eyes and hands which get tired, lecturers should be lenient with their handwriting in tests and examinations. Taking into cognisance that the majority of partially sighted students at Pathway University went to special schools for the blind where they were not used to writing using pen and paper, their handwriting should be tolerated. The view of

tolerating partially sighted students' handwriting is non-existent in an environment where they are treated just like any other student without a special learning need. Nomsa said:

Lecturers penalise us in tests and examinations for bad handwriting. I try to write very neat and presentable, but the problem is my eyes and hands will not let me. They get very tired. I cannot write well. I was using braille for a very long time hence I am not used to writing and drawing for about three hours in an examination.

Lerato, who was just coming from writing a test before attending the interview, said:

I find it hard to draw because my hand shakes, since I was using braille for a long time. I know what a diagram looks like in my mind, but I struggle to draw with my free hand. In a test which I wrote today, I was required to draw a diagram. I knew how the diagram looks including the flow of arrows, but my hands would not let me draw. I am not sure if the lecturer is going to give me full credit marks for what I drew.

Students with visual impairment must not be penalised for their writing. Some may not be able to write well because their eyes hardly see what is on paper. In some instances, they find it difficult to place their writing in the lines of an examination answer sheet. That results in some letters going up and down the ruled lines of an answer sheet.

DISCUSSION

Several scholars have expressed dissatisfaction with low level support offered to disabled students in various South African universities (Kasiram and Subrayen 2013; Mushome and Monobe 2013; Van Jaarsveldt and Ndeya-Ndereya 2015). The Pathway University's style of handling partially sighted students leaves a lot to be desired. It is a typical way of setting students up for failure. The university's approach is informed purely by the medical model which perceives disability as an individual problem (Humpage 2007). The main reason why partially sighted students are finding it hard to perform in their assessments is not because of the nature of their vision, but the institution's failure to provide their basic requirements. In a situation where a partially sighted student is not afforded large font in reading materials and is deprived use of braille and assistive technolo-

gy, it is tantamount to failing to provide teaching and learning resources to students without disabilities and expecting them to pass. When students fail in such a situation, it would not be because of their inability to prepare for tests and examinations, but the institution's incapacity to provide resources and necessary support needed.

From a social model perspective, the inability of partially sighted students to excel in assessment practices is because of the institution's incapacity to provide adequate support that they need. In other words, it is the university that is disabling students (Union of the Physically Impaired Against Segregation 1976). If a university fails to provide what is needed by partially sighted students, the problem would be with the institution, not an individual (Swart and Pettipher 2011; Van Jaarsveldt and Ndeya-Ndereya 2015).

Vygotsky (1978) argues from a social constructivist's point of view that every student, regardless of his/her disability, requires environmental support and to be scaffold by a teacher in order to learn and perform well in assessments. Partially sighted students from Pathway University are not peculiar to this group. They are being let down by the environment that is not ensuring a diverse set of educational, programmatic and technological components that are suitable for their poor sight (Smith and Kelly 2014). If partially sighted students obtain adequate support from a university, that puts them on the same platform with students without learning needs and it would be possible for them to reach their full potential (Waterfield and West 2008). If their needs are not met, they would have been deprived of their basic rights to citizenship and quality education which are accessible to students without visual impairment (Small 2015).

A university as an institution of higher learning is expected to lead in terms of support that is afforded to students regardless of their disabilities. A generic approach towards supporting students with special needs does not adequately cater for partially sighted students (Yamanashi 2015). All partially sighted students at Pathway University felt neglected and unsupported because of the generic type of support the institution gave. Students with different disabilities should not be afforded similar support. Similarly, students with partial sight require different support (Van Jaarsveldt and Ndeya-Ndereya

2015). They are heterogeneous and their remaining sight is not always the same. Corn and Lusk (2010) claimed that it is very rare that two students with partial sighted conditions use their remaining vision in the exact same way. Thus, universities ought to do a needs assessment for each partially sighted student in order to determine who needs braille and magnifying glasses and who does not (Yemanashi 2015).

Lecturers need to be aware of the cultural backgrounds of partially sighted students in order to develop and implement appropriate support required by each student (Hadidi and Al Khateeb 2014). If lecturers knew the background of each partially sighted student, it would make them more tolerant when they mark their handwriting. According to the University of Cambridge (n.d), when marking exam scripts, it is important to note that partially sighted students can make spelling mistakes and use poor handwriting. They should not be penalised for this. It is a situation that is beyond their control. Sometimes some partially sighted students may find it hard to read their own handwriting (Waterfield and West 2008). They struggle to write because their hands and eyes tire easily (Sahin and Yorek 2009).

CONCLUSION

Although it has long been advocated, there has to be a radical shift from viewing partially sighted students as having individual problems, to a social and environmental approach. Universities in South Africa still operate within the fraternities and guiding principles of the medical model. Partially sighted students are left to sink or swim when they join a university. Enrolling them at a university and failing to offer them support is tantamount to setting them up for failure. Institutions of higher learning in South Africa are challenged to adopt and adapt the Turkish individual needs assessment approach to partial sightedness. The generic approach which is currently in use should not be implemented. Support should be individualised because two partially sighted students' needs are hardly the same. Some may need braille while others may not. Some may need more extra-time than others. Braille readers cannot skim read and may take up to three times as long as other students to read a text.

RECOMMENDATIONS

This study recommends a need for the disability unit of a university to be vibrant and actively involved in researching and supporting the needs of partially sighted students. A disability unit should be mandated to monitor support that the institution affords to special needs students. That would counteract anomalies such as failing to give extra-time to partially sighted students in tests. Workshops should be conducted specifically about visual impairment. Such academic gatherings would educate staff members about how to support partially sighted students.

REFERENCES

Anastasiou D, Kauffman JM 2013. The social model of disability. Dichotomy between impairment and disability. *Journal of Medicine and Philosophy*, 38(4): 441–459.

Cohen L, Manion L, Morrisson K 2007. *Research Methods in Education.* New York: Routledge.

Corn AL, Lusk KE 2010. Perspectives on low vision. In: AL Corn, JN Erin (Eds.): *Foundations of Low Vision. Clinical and Functional Perspectives.* New York: AFB Press, pp. 3-34.

Creswell WJ 2008. *Educational Research. Planning, Conducting and Evaluating Quantitative and Qualitative Research.* New Jersey: Merrill Prentice Hall.

Datta P 2014. Test anxiety research. Students with vision impairment and students with mild intellectual disabilities. *International Journal of Special Education,* 29(2): 1-7.

Department of Education 2001. *Education White Paper 6, Special Needs Education. Building an Inclusive Education and Training System.* Pretoria: Department of Education.

FOTIM [Foundation of Tertiary Institutions of the Northern Metropolis] 2011. *Disability in Higher Education. Project Report.* Report of the FOTIM Project conducted 2009-2011, Ford Foundation.

Fraenkel JR, Wallen NE 2007. *How to Design and Evaluate Research in Education.* Boston: McGraw Hill.

Hadidi MS, Al Khateeb JM 2013. Loneliness among students with blindness and sighted students in Jordan. *International Journal of Disability, Development and Education,* 60(2): 162-172.

Hadidi MS, Al Khateeb JM 2014. A comparison of social support among adolescents with and without visual impairments in Jordan. A case study from the Arab region. *Journal of Visual Impairment and Blindness,* 108(5): 414-427.

Hatton DD 2014. Advancing the education of students with visual impairments through evidence-based practices. In: DD Hatton (Ed.): *International Review of Research in Developmental Disabilities. Current Issues in the Education of Students with Visual Impairment.* Waltham: Elsevier, pp.1-22.

Humpage L 2007. Models of disability, work and welfare in Australia. *Social Policy and Administration,* 41(3): 215-231.

Kasiram M, Subrayen R 2013. Social exclusion of students with visual impairments at a tertiary institution in KwaZulu-Natal. *South African Fam Pract,* 55(1): 66-72.

Klinkosz W, Sekowski A, Brambring M 2006. Academic achievement and personality in university students who are visually impaired. *Journal of Visual Impairment and Blindness (JVIB),* 100(11): 1-15.

Lapan DS, Quartaroli TM, Riemer JF 2012. Introduction to qualitative research. In: SD Lapan, TM Quartaroli, J Riemer (Eds.): *Qualitative Research. An Introduction to Methods and Designs.* San Francisco: Josey-Bass, pp. 3-18.

Leedy PD, Ormrod JE 2001. *Practical Research: Planning and Design.* New Jersey: Merrill Prentice Hall.

Lincoln SY 2010. ''What a long, strange trip it's been…'': Twenty-five years of qualitative and new paradigm research, *Qualitative Inquiry,* 16(1): 3–9.

Mack N, Woodsong S, MacQueen MK, Guest G, Namey E 2005. *Qualitative Research Methods: A Data Collector's Field Guide.* North Carolina: Family Health International.

Mushome AM, Monobe RJ 2013. The attitude of lecturers towards visually impaired students: A case study of one of the universities in the Limpopo Province in South Africa. *US-China Education Review,* 3(2): 108-113.

Reed M, Curtis K 2012. Experiences of students with visual impairments in Canadian higher education: *Journal of Visual Impairment and Blindness,* 106(7): 414-425.

Rule P, John V 2011. *Your Guide to Case Study Research.* Pretoria: Van Schaik Publishers.

Sacharowitz HS 2005. Visual impairment in South Africa. Achieve-ments and challenges. *The South African Optometrist,* 64(4): 139-149.

Sahin M, Yorek N 2009. Teaching science to visually impaired students: A small-scale qualitative study. *US-China Education Review*, 6(4): 19-26.

Small J 2015. Interconnecting mobilities on tour: Tourists with vision impairment partnered with sighted tourists, *Tourism Geographies*, 17(1): 76-90.

Smith DW, Kelly SM 2014. Assistive technology for students with visual impairments. A research agenda. In: DD Hatton (Ed.): *International Review of Research in Developmental Disabilities: Current Issues In the Education of Students with Visual Impairment.* Waltham: Elsevier, pp. 23-54.

South African Constitution 1996. *Bill of Rights*, *South Africa.* The Republic of South Africa.

Swart E, Pettipher R, 2011. A framework for understanding inclusion. In: E Landsberg, D Kruger, E Swart (Eds.): *Addressing Barriers to Learning: A South African Perspective.* Pretoria: Van Schaik Publishers, pp. 3-26.

Union of the Physically Impaired Against Segregation 1976. *Fundamental Principles of Disability*, London: Union of the Physically Impaired Against Segregation.

University of Cambridge (n.d) *Teaching Students with Visual Impairments.* Cambridge: University of Cambridge.

Van Jaarsveldt DE, Ndeya-Ndereya CN 2015. 'It's not my problem': Exploring lecturers' distancing behaviour towards students with disabilities. *Disability & Society*, 30(2): 199–212

Vygotsky SL 1978. *Mind in Society. The Development of Higher Psychological Processes.* California: Harvard College.

Waterfield J, West B 2008. *Meeting The Specific Requirements of Blind and Partially Sighted Students Studying in Higher Education in the UK.* University of Plymouth: Plymouth.

Yamanashi J 2015. Reading groups, libraries and social inclusion: experiences of blind and partially sighted people. *International Journal of Disability Development and Education*, 62(4): 465-467.