

Research Article

Experiences of Students with Visual Impairments at an Open Distance and e-Learning University in South Africa: Counselling Perspective

Enid Manyaku Pitsoaneⁱ & Tonny Nelson Matjilaⁱⁱ

Abstract

The purpose of the qualitative study on which this article is based was to explore the experiences of students with visual impairments, registered at an Open Distance and e-Learning University in South Africa, through a phenomenological research design. Literature was reviewed on student support in distance education and concepts from the critical disability theory, biopsychosocial model of disability, connectivism, and affect theories formed the conceptual framework for the study. Telephonic semi-structured interviews were used as a technique to collect data from seven participants. Data were transcribed and then coded employing ATLAS.ti. The emerged themes centred on students' counselling experiences, the synergy between the departments, and accessibility of services. It was also determined that students lose academic time due to the lack of resources and study materials in alternative and accessible formats. While policies and implementation plans were claimed to be in place, they do not address the reality on the ground, due to a lack of coordination of disability issues, and late referral of students to counselling services. The study recommends the prioritisation of disability issues, and it needs to be incorporated in the wider university strategic plan to accelerate its implementation. This will translate in (i) training ICT staff on various computer software programs needed to support students with visual impairments, (ii) developing alternative, formative, and summative assessments, (iii) developing a job readiness intervention programme for graduates to empower the students financially and to add value to the university's employment equity agenda, and lastly (iv) putting the disability unit at the centre of all disability matters for coordinating purposes.

Keywords

Counselling, access, Open Distance and e-Learning, visual impairment

i **Dr Enid Manyaku Pitsoane**, Head of Counselling, University of South Africa (UNISA),
tlhabem@unisa.ac.za

ii **Tonny Nelson Matjila**, Research Training and Development Officer - University of South Africa (UNISA),
tmatjit@unisa.ac.za

Introduction

The Post-School Education and Training (PSET) system in South Africa has made significant strides in ensuring that students with visual impairments have the right to decent, appropriate, reasonable accommodation, and services (DHET, 2018). However, despite the transformed social reforms and aligned policies to move from inclusion and equality to promote equity, students with visual impairments in the mainstream education system continue to experience ineffective support (Singh & Mahapatra, 2019).

The White Paper for PSET (DHET, 2013), emanating from the South African National Development Plan Vision 2030, states that counselling should be an integral part of the post-school system for both Open Distance e-Learning (ODEL) and contact universities (The Presidency - South African Government, 2012; Department of Higher Education and Training, 2013). Furthermore, it strives to complement the career guidance engagements for institutions of higher learning and high schools, which could ensure that institutions of higher learning positively contribute to sustainable development goals (SDGs). The SDGs are the blueprint for each governing state to create a stable, prosperous future at institutions of higher learning through its policies. The White Paper aims to promote inclusivity by highlighting factors that should not be overlooked regarding first-time students' academic readiness for institutions of higher learning when they register at such an institution. There is an increasing lack of access for students with disabilities in the higher education landscape, yet little is known about their academic attainment, and how counselling services contribute to their learning experiences (Richardson, 2015). It is based on this rationale that the study sought to investigate the experiences of students with visual impairments from a counselling perspective.

Role of Counselling

Counselling services at institutions of higher learning represent a scientific domain that primarily assists prospective students who have to decide which qualification to pursue. The process consists of guidance, which entails the analysis of an individual's abilities, interests, and personality, to assist students in choosing the most relevant course of study to suit their capabilities. It is important to enable the visually impaired student to choose a career that is most suitable to their interests and talents, instead of having this choice mainly determined by the availability of support. For this reason, institutions of higher learning should accommodate and support students with disabilities. However, issues of disability, power, race, and class are traditionally seen as being outside the curriculum, which leads to the danger of separating knowledge from social issues (Mutanga, 2017). Also, while much emphasis is placed on the curriculum itself, the provision of counselling services is often left out of this debate.

Leyser (2008) asserts that the success of most students with disabilities in institutions of higher

learning depends not only on their actions and physical accessibility or service quality, but also on the expertise of the staff, their attitudes towards students with physical disabilities, and the willingness of the university to provide appropriate accommodation. This is corroborated by Ngubane-Mokiwa (2013) who highlights that the perceptions of blindness from the students' perspective illustrate that the academic community does not clearly understand the condition, or how students with visual impairments in particular, cope with being at an ODeL institution. There seems to be a gap between academic and counselling departments in working together to help the students with visual impairments to adjust in an ODeL context.

Student Support in ODeL

Counselling is viewed as a point of entry for students to adjust to institutions of higher learning. Student counselling aims to bridge the gap between high school and university, by giving guidance and support to students; linking students with their lecturers; and introducing them to services that will assist them in coping with their studies. Students with visual impairments are often excluded from this service, as they make up a small percentage of the student community and may not be visible in regional service centres.

In the ODeL context, students need to understand the challenges of studying on their own and from a distance before they register (Ngubane-Mokiwa, 2017). To encounter a new environment in institutions of higher learning, where their autonomy and advocacy are paramount to their success, is daunting. Thus, the student with a visual impairment requires support services to facilitate their full integration into campus life, which consequently influences their transition into the employment setting.

Although student counsellors may have limited experience in dealing with students with visual impairments, through collaboration with lecturers and rehabilitation counsellors, the student counsellors can help students with disabilities to plan for careers that match their skills and abilities (Milsom & Hartley, 2005). Moreover, an individual's knowledge about their disability, as well as the strengths and limitations associated with it, increases their likelihood of achieving career success.

To answer this study's research question, the Critical Disability Theory (CDT) was employed to understand the concept of disability and visual impairment through the biopsychosocial model of disability. Furthermore, concepts from connectivism and affective theories were employed to analyse the provision of counselling and career-related services at an ODeL institution, while attending to the participants' affected domain.

Conceptual Framework

The connectivism theory asserts that learning occurs when knowledge is actuated through the

process of a learner connecting to, and feeding information into, a learning community (Kop & Hill, 2008). It further examines learning within technology, where counselling services can accommodate students with visual impairments through the use of technology to bridge the distance gap. Alves, Monteiro, Rabello, Gasparetto and Monteiro de Carvalho (2009) emphasise that information technology allows individuals with a visual impairment to overcome a significant part of the difficulties they experience in daily life and offers them independence and autonomy on information management and access to communication, just like their peers with normal vision. The connectivism theory also offers a platform for students with visual impairments to navigate their studies wherever they are with assistance from the university, without physically being present.

Learning in an open distance context is centred on the theory of connectivism, which asserts that knowledge is distributive; that is, it is not located in any given place (and therefore not 'transferred' or 'transacted' *per se*), but rather consists of a network of connections formed from experience and interactions within a knowing community (Downes, 2010). The starting point of connectivism is an individual who is receptive to knowledge and has the ability to navigate sites to acquire information. Connecting to nodes or technology allows students to remain current in their field through the connections they have formed. The intensity of learning, gaining knowledge, and understanding, through the extension of a personal network, is the personification of connectivism (Siemens, 2004).

Students visit counselling services to address issues relating to academic, career, and personal challenges, hence the incorporation of the affect theory is relevant, as it is focused on emotions. According to Massumi (1995), affect is a matter of autonomic responses that occur below the threshold of consciousness and cognition, rooted in the body. Affect increases with the capacity to act, and the start of being capable resonates with empathies of the body and the world being more open to life (Massumi, 2002). Affect can be described as feelings that produce a change or action in our body.

There is also no single, generalised theory of affect (Gregg & Seigworth, 2010); however, there are many ways in which affect can be viewed. Gregg and Seigworth (2010) define 'affect' as the persistent, repetitive practice of power that oppresses the body and provides it with the potential to realise there is a world outside of these practices of power. This relates to the oppression of certain groups in institutions where students with disabilities are expected to study and progress in the same way as their counterparts. The affective nature of common behaviour belonging to certain fields of study, and focusing on a specific mode of study, affect students with disabilities. Hence, Hughes, Corcoran and Slee (2016) assert that an emotional or psychological illness, rather than a physical, intellectual, or sensory one, is a possible precursor to difficulties in engaging with the university. This relates to the bodily experiences of students who are visually impaired, how they navigate their learning, and how studying from a distance affects them in their studies.

The United Nations (UN) Convention on the Rights of Persons with Disabilities (UNCRPD, 2016) deemed disability as a growing phenomenon that needs to be addressed at all levels of society, including universities. According to the UN, disability results when there are barriers limiting full participation in society, rendering others unequal. This is a move from the clinical-pathological model, where those students with visual impairments were viewed as the minority, unable to perform a task, and needing assistance. It is from this stance that disability was then viewed as a socially constructed phenomenon due to limitations and barriers created by society (Possi, 2018).

The socio-cultural model, unlike the clinical-pathological model, emphasises social justice, decent living standards, fair access, equitable opportunities for services and benefits and a determination to meet the needs of all, with a focus on the needs of the most vulnerable people, including students with visual impairments. This approach is inspired by the principles of universality, inalienability, equality, and non-discrimination, and emphasises human rights in the design and implementation of policies and programmes. The PSET system in South Africa has adopted the human rights-based model (DHET, 2018), and Unisa has consequently incorporated this legal framework in the policy for students with disabilities (2012).

Scotland (2012) considers philosophical assumptions to be important as it shapes the formulation of the problem statement and establish knowledge of the research questions of the study. Therefore, this study followed a socially formed stance that is subjective and multiple in nature. Since reality is not fixed, it gave participants the freedom to share their worldview in terms of how they see it, based on their subjective learning experiences.

While ontology is linked to truth, epistemology is the perspective of knowledge and its acceptability (Creswell & Creswell, 2019; Ishtiaq, 2019). The subjectivist epistemological grounding of this study suggested that the participants constructed their knowledge based on their different experiences, despite having a similar categorised impairment; that is, visual.

Moreover, as the CDT provides a conceptual framework to understand the relationship between impairment, disability, and society, it injects disability interests into all policy arenas (Hosking, 2008). As an emerging theoretical framework, the CDT was used to approach literature and inform the methodological process for this study, while providing answers to the research question:

- What are students' counselling experiences of studying at an ODeL university while having a visual impairment?

Research Methodology

The study employed a qualitative approach in soliciting the experiences of students with visual impairments studying at an ODeL university. The qualitative approach, unlike the quantitative, provides a means of gaining a deeper understanding of the participants' experiences (Ivankova

& Wingo, 2018). Consequently, the qualitative research approach was suitable for this study since it assumes the philosophical assumptions are a multi-layered, interactive, and shared social experience interpreted by the participants, based on the philosophy of qualitative research as a constructivist meaning (Creswell, 2015).

Population and sample frame

The population of the study consisted of students with visual impairments who were registered at the University of South Africa (Unisa). The sample frame, as guided by Au, Li and Wong (2018) and Creswell and Creswell (2019), consisted of all students who indicated that they are visually impaired. A purposive sampling technique was selected to recruit students with visual impairments registered in the College of Education, which has the highest enrolment of students at 116 234, which constitutes 31% of the overall registered student population at Unisa (2018).

Data collection techniques

Leedy and Ormond (2010) and De Vos, Strydom, Fouché and Delpont (2011) state that semi-structured interviews are a technique researchers use to obtain a detailed view that the participants hold about a phenomenon. Semi-structured, in-depth interviews were conducted telephonically to reach out to all participants since they were in different provinces in the country due to the nature of the ODeL environment.

Semi-structured interviews were conducted with all 18 participants who responded with signed consent forms. Five participants were removed from the list after it was determined that they dropped out and were thus not appropriate for the study based on the inclusion criteria. Four participants experienced network connectivity challenges, and after several attempts were made to reconnect over a period of three weeks, their data were not integrated with those who remained in the study. Each interview lasted a minimum of 20 minutes. Ultimately, the data informing the findings of this study were from seven participants: three females and four males of different races, who satisfied the inclusion criterion of either being blind or having limited vision.

Data analysis

The raw data were transcribed verbatim and the thematic data analysis method was applied, as well as the guidelines provided by the Interpretative Phenomenological Analysis (IPA). The full scope of personal interactions with participants was guided by the researchers creating a list of significant statements, scrutinising significant statements for repetition and similarity,

grouping significant statements into codes and themes, and explaining ‘what’ the participants encountered in terms of the phenomenon. The process included a textual description, presenting a conceptual explanation (Smith, 2004; Smith, 2011).

ATLAS.ti qualitative data analysis software was used to analyse data by segmenting transcribed data into codes, categories, themes, and sub-themes in conjunction with the research question. Although ATLAS.ti was employed to minimise data, the researchers further manually revised the coding to ensure consistency and to avoid repetition. Data were not forced to fit with the coding (Cohen, Manion & Morrison, 2011; Cunningham, Weathington & Pittenger, 2013).

Ethical considerations

The study underwent a thorough ethical clearance process, and permission to conduct the research was granted by the College of Education. Furthermore, the research principles of beneficence and non-maleficence ensured that participants’ risk of harm was minimised. Moreover, the researchers protected participants’ anonymity, confidentiality, and rights, including that of withdrawing from the study without penalty (two participants withdrew while participating in the study).

The recruitment criteria involved sending emails to the sample that included information about the nature of the study and its objectives. This ethical consideration was in line with the Protection of Personal Information (POPI) Act (2013), as the sample is considered and classified as a vulnerable group.

Findings

The transcendental (descriptive) approach of IPA guided the data analysis process. It required the researchers to reflect on the aims and objectives of the study, which were to explore the experiences of students with visual impairments registered at an ODeL institution in South Africa. The transcribed data were coded, and the emerged themes were classified as counselling experiences, synergy between the departments, and accessibility of services.

Counselling experiences

The findings confirmed the ontological assumption that students with visual impairments do visit the counselling department for career counselling services and personal support. While a few did not use the career counselling services, the majority were aware of the range of services offered by the counselling department and used the services to choose their career path before they registered:

P1: *I first used counselling services because I did not know what to do and was not sure if I should do teaching or another degree because of my disability. I am blind, totally blind. After the sessions, I then decided that I will do the teaching.*

Some participants accessed the services after being referred by other departments when they needed personal support:

P5: *I have used counselling. I was stressed and frustrated after I received a lack of support from the student finance regarding the NSFAS bursary.*

Though students did not necessarily receive counselling when they first registered, most were later referred by other departments. The counselling services then provided a safe space where students with visual impairments were able to share their frustrations. As reflected, Participant 5 knew that her bursary was declined, yet she needed someone to share her disappointment and frustration with, and find out what options were available to ensure that she continued with her studies.

At times, the participants experienced the counselling department as their primary contact with the university. This department assisted them in connecting with other departments and followed up for them due to the transactional distance between the participants and the university:

P2: *The counselling staff helped me to contact NSFAS for my devices and also ARCSWiD sometimes because I use the electronic version, the voice material, MP3 so they have to convert for me at Pretoria while I am in KZN.*

One participant indicated that he had no counselling experience and had not accessed the services as he was unaware of it. He was under the impression that one had to access the services by being physically present at the campus. He specified that his visual impairment made it difficult for him to travel to the campus as and when he needed to:

P7: *I haven't needed to utilise the counselling services. I have managed thus far. Also, transport to Unisa has been a problem for me to arrange.*

Accessing and experiencing other student support units were emphasised, and this was one of the reasons participants ended up being referred to the counselling department.

P4: *I am disappointed with Unisa. Despite several communications, I never received a response. Hence I do not qualify to write my exams.*

This notion was confirmed by another participant:

P3: *I did not write all my first semester modules and I am frustrated.*

Although Unisa has policies in place with regard to reasonable accommodation, students who enrolled in the College of Education are expected to complete practical sessions according to the requirements of the streams they chose. For instance, in the foundation phase, they perform teaching practicals at primary schools, or in the intermediate phase, they perform them at a high school, and so forth.

It was determined that while teaching and learning seem to be accessible at Unisa, it is a

challenge at places where participants are expected to do practicals, negatively impacting their learning experience:

P6: *Teaching is accessible, and I like it, but it is difficult I don't want to lie. When I was doing my practical, they did not allow me to do them. I had to find a special school to do practical, can you imagine that?*

The participant further experienced additional financial costs due to hiring an assistant so that she could realise the learning outcomes.

The synergy between the departments

While sharing their experiences, it became evident that the student support departments at Unisa are not as interconnected as students were made to believe. Upon registration, participants indicated that they require counselling services and would like to be referred for further services support in their studies, as they are first-time students in an ODeL university. This was important to participants because it would assist them in adjusting after transitioning from high school to university, specifically with the distance mode, which they were unfamiliar with. They now had to study on their own, in their own space and time, without attending classes, as they used to in high school:

P3: *I was referred to one department after the other and could not be helped. I have a plan that, in future, I should familiarise myself with all the departments.*

This response shows that there is a disjuncture in this interconnection, which impacts negatively on the response time for students to acclimatise to the system. This participant, however, took it upon herself to acclimatise to the system and attend orientation services and events where possible.

While Unisa delivers services in a distance mode, it does have counselling services at all regional centres across the country, with convenient online services to those who cannot access the campuses and regional centres, including international students. Some participants raised concerns that when they needed counselling-related services, they were always referred to Pretoria, where the counselling Head Office is. This raises the question of whether Unisa's regional centres have sufficient resources to assist visually impaired students:

P4: *The counselling staff did not help me, but I was referred to other departments which also did not help me. I contacted the lecturers about the assignments, but they said they could not help me with that. As a result, I did not sit for this time's exams because I did not submit my assignments.*

Accessibility of services

Accessible study material in braille and electronic formats was a challenge for most participants. After they registered, they had to apply for their study material to be converted at the Pretoria

campus, and this took time.

P6: *The braille and MP3 come from Pretoria, so I could not do anything at all.*

The late arrival of study material has an impact on students submitting summative and formative assessments in time. The registration department receives the information that study material needs to be converted, and it is assumed that this request will reach the Advocacy and Resource Centre for Students with Disabilities (ARCSWiD), but in most instances, students must follow up to ensure this is the case.

Moreover, though the Unisa regional service centres across the country have computer labs that students use to complete assignments and study-related activities, students with visual impairments found them to be inaccessible in terms of programs that convert written information to voice:

P3: *There are computer labs with NVDA but there are only two computers and there are many of us so that is a challenge. I use NSFAS and they were unable to buy me assistive devices.*

The findings also suggest that a lack of technical abilities among staff in regional service centres to fix the specialised devices for visually impaired students, posed a challenge. Students must wait for assistance from Pretoria for such devices to be fixed, which delays students submitting their assignments timeously.

P7: *I approached the staff about the accessibility of the computer lab for students with disabilities but was told that people from Pretoria will come to help us and I have been waiting ever since.*

The students with visual impairments felt disgruntled and not supported in their study journey, due to the unavailability of resources, lack of support, and delayed responses from the university.

Discussion

The study was aimed at exploring the experiences of students with visual impairments studying at an ODeL institution in South Africa. Even though the university has a dedicated unit (ARCSWiD) and policy for students with disabilities in place, challenges continue to arise in accommodating students with visual impairments in one of its largest faculties, the College of Education.

This occurs despite a policy implementation plan being clear on how the services for students with disabilities will be managed and coordinated through ARCSWiD. The findings reveal that the responsibility is delegated to all relevant stakeholders at Unisa, who collectively need to ensure that equal access for students with disabilities is realised. The students with visual impairments are referred to the counselling department to intervene late in their year of study, when the students have already lost a significant amount of time in the current academic year. In addition, the intervention by counselling staff was deemed ineffective, and some participants indicated that they had to drop out, while considering registering in the following

semester. The evidence of a disjuncture between the departments confirms the absence of synergy between the departments, leaving no one to take accountability for services not being rendered, as indicated by the participants.

Moreover, students registered in this college not only experience institutional barriers, but also face challenges when doing practicals at assigned schools. The institutional policy does not take this into account in ensuring that its students are protected and continue to receive support services accordingly.

Although the findings of this study cannot be generalised due to the nature of the small sample size, the study has demonstrated research rigour and trustworthiness, and congruence between the findings and the reality at Unisa's counselling department. The researchers and participants engaged in an interactive process where research data were collected and analysed, and multiple realities were explored and realised meaningfully through interaction and engagement (Punch, 2005). It was determined that Unisa's counselling department at Pretoria (head office seems to be well resourced and inspire confidence among students with visual impairments from the College of Education, which might not be the case at some regional service centres across the country.

From the findings it was also noted that the strategies that were applied to ensure that the participants received information sheets and were requested to sign the consent form, binding themselves to share honest experiences, increased the credibility of the collected data. This suggests that the findings may be applied to other settings, and with a different sample frame of a similar population, to ensure transferability.

The findings further reiterated the view by Teferra and Altbach (2004) regarding this century being a knowledge era, because it has created an unstoppable demand for access to higher education in Africa, since higher education is recognised as a key force for modernisation and development. Nonetheless, this access seems to be lacking for students with visual impairments, as they struggle to access information at Unisa's regional centres near their homes. Students with visual impairments are accessing information and communications technology (ICT) services at the regional centres, only to find that the computer labs do not have enough computers installed with compatible software to reasonably accommodate the visually impaired, or there is a low turnout of skilled staff members to orientate the students.

Recommendations

The following recommendations flow from the findings of the study. The first recommendation responds to the actions to be undertaken by the institution of higher learning to address the synergy between departments. This should be approached by ensuring that the disability unit is linked to broader strategic priorities to enhance the access and participation of students with visual impairments in ODeL.

Secondly, the ODeL University should look into alternative methods for the conversion of material to braille and electronic formats. The impression was that this is a lengthy process, and by the time students receive study materials and prescribed textbooks in the requested formats, the semester is halfway through, thus creating pressure and causing some students to drop out in the current semester. This affects Unisa's overall progress and student success rate.

As a result, there should be alternative formative and summative assessments, since the conversion of study material takes time, thereby, disadvantaging the said population.

The ODeL University should also consider designing and implementing graduate and job readiness workshops specifically for students with visual impairments, to improve their chances of finding employment. The university may also empower this population of students by employing them as student workers or on fixed terms to gain work experience. This will address matters raised by the participants regarding transport costs and the challenges they experience when coming to campus, the financial costs associated with teaching practices when they are placed at schools, including payment for assistants should the need arise. This move will also enable the university to accelerate its employment equity plan should the assumption that they are lacking in that area be found to be true, as this is a national imperative.

Lastly, all staff employed at the computer labs should be trained in using and providing support for students with visual impairments on specialised computer programs like JAWS and NVDA, since Abner and Lahm (2002) believe that university training and professional development should address competence in teaching. It was established in the findings that where there are computer labs, either computers do not have the necessary software, or staff members are unable to assist.

It is envisaged that the presented findings will inform Unisa's strategies regarding students with disabilities, as well as other related student support services to accommodate students with visual impairments. by making counselling services central to student support.

Future Research

Future research should be conducted on retention strategies for students with visual impairments in ODeL institutions. The strategies may inform the attrition and retention rates for this population of students. Secondly, the College of Education should develop inclusive strategies to accommodate students with visual impairments in their teaching practice modules, and ensure reasonable accommodation where they are placed when conducting their teaching practicals.

References

- Abner, G., & Lahm, E. (2002). Implementation of assistive technology with students who are visually impaired: Teacher readiness. *Journal of Visual Impairment and Blindness*, 96, 98-105.

- Alves, C., Monteiro, G., Rabello, S., & Gasparetto, Monteiro de Carvalho, K. (2009). Assistive technology applied to education of students with visual impairment. *Pan American Journal of Public Health*, 26, 148–152.
- Au, O.T.-S., Li, K., & Wong, T. M. (2018). Student persistence in open and distance learning: success factors and challenges. *Asian Association of Open Universities Journal*, 13(2), 191–202. <https://doi.org/10.1108/aaouj-12-2018-0030>
- Cohen, L., Manion, L., & Morrison, K. (2011). *Descriptive statistics. In Research Methods in Education* (7th ed., Vol. 35, pp. 622–640). Routledge.
- Creswell, J.W. (2014). *Research Design: Qualitative, Quantitative and Mixed Approaches*. SAGE.
- Creswell, J. W., & Creswell, J. (2019). *Research design: Qualitative, Quantitative, and Mixed method Approaches* (5th ed., Vol. 3). Retrieved from <http://repositorio.unan.edu.ni/2986/1/5624.pdf>
- Creswell, J.W., & Plano Clark, V.L. (2011). *Designing and Conducting Mixed Methods Research*. SAGE.
- Cunningham, C.J., Weathington, B.L., & Pittenger, D.J. (2013). *Understanding and conducting research in the health sciences*, John Wiley & Sons.
- De Vos, A. S., Strydom, H., Fouche, C. B., & Delpont, C. S. (2011). *Research at grassroots for the social sciences and human service professions* (4th ed.). Van Schaik.
- Department of Higher Education and Training. (2014). *Post-School Education and Training White Paper for Post-School Education and Training*. [http://www.dhet.gov.za/SiteAssets/Latest News/White paper for post-school education and training.pdf](http://www.dhet.gov.za/SiteAssets/Latest%20News/White%20paper%20for%20post-school%20education%20and%20training.pdf)
- Department of Higher Education and Training. (2018). *Strategic Disability Policy Framework on Disability for the Post-School Education and Training System*. <https://www.dhet.gov.za/SiteAssets/Gazettes/Approved%20Strategic%20Disability%20Policy%20Framework%20Layout220518.pdf>
- Department of Justice. (2013). Protection of Personal Information Act, 2013 Ensuring protection of your personal information and effective access to information. <https://www.justice.gov.za/inforeg/docs/InfoRegSA-POPIA-act2013-004.pdf>
- Goldie, J. G. S. (2016). Connectivism: A knowledge learning theory for the digital age? *Medical Teacher*, 38(10), 1064–1069. <https://doi.org/10.3109/0142159X.2016.1173661>
- Gregg, M., & Seigworth, G. (2010). An inventory of shimmers. In M. Gregg & G. Seigworth (Ed.), *The Affect Theory Reader* (pp. 1–25). Duke University Press.
- Hosking, D.L. (2008). Critical Disability Theory: A paper presented at the 4th Biennial Disability Studies Conference at 4th Biennial Disability Studies Conference, (1972), 1–17.

- Hughes, K., Corcoran, T., & Slee, T. (2016). Health-inclusive higher education: listening to students with disabilities or chronic illnesses. *Higher Education Research & Development, 35*(3), 488–501.
- Ishtiaq, M. (2019). Book Review. Creswell, J.W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (4th ed.). Thousand Oaks, CA: Sage. *English Language Teaching, 12*(5): 40. <https://doi.org/10.5539/elt.v12n5p40>
- Ivankova, N., & Wingo, N. (2018). Applying Mixed Methods in Action Research: Methodological Potentials and Advantages. *American Behavioral Scientist, 62*(7), 978–997. <https://doi.org/10.1177/0002764218772673>
- Kop, R., & Hill, A. (2008). Connectivism: Learning theory of the future or vestige of the past? *International Review of Research in Open and Distance Learning, 9*(3), <https://doi.org/10.19173/irrodl.v9i3.523>
- Leedy, P., & Ormrod, J. E. (2005). *Practical research: planning and design*. Pearson Merrill Prentice Hall.
- Leyser, Y. (2008). College students with disabilities in teacher education: faculty attitudes and practices. *European Journal of Special Needs Education, 23*(3), 237–251.
- Massumi, B. (2002). *Parable for the Virtual, Movement, Affect Sensation*. Duke University Press.
- Milsom, A., & Hartley, M. T. (2005). Assisting students with learning disabilities transitioning to college: What school counsellors should know. *Professional School Counselling, 8*(5), 436–441.
- Mokiwa, S. A., & Phasha, T. N. (2012). Using ICT at an Open Distance Learning (ODL) institution in South Africa: The learning experiences of students with visual impairments. *Africa Education Review, 9*(sup1), S136–S151. <https://doi.org/10.1080/18146627.2012.755286>
- Mutanga, O. (2017). Students with disabilities' experience in South African higher education – a synthesis of literature. *South African Journal of Higher Education, 31*(1): 135–154. <https://doi.org/10.20853/31-1-1596>
- Ngubane-Mokiwa, S. A. (2017). Implications of the University of South Africa's (UNISA) shift to Open Distance e-Learning on Teacher Education. *Australian Journal of Teacher Education, 42*(9), 42. <https://doi.org/10.14221/ajte.2017v42n9.7>
- Ngubane-Mokiwa, S. A. (2013). *Information and communication technology as a learning tool: experiences of students with blindness* (University of South Africa). <http://uir.unisa.ac.za/handle/10500/13246%0Ahttp://files/401/Ngubane-Mokiwa-2013-Information-and-communication-technology-as-a-learning-tool-experiences-of-students-with-blindness.pdf>
- Possi, M. K. (2018). Gender and Education of People With Disabilities in Tanzania. *LDAFITJ* (New Series), 3(25), 155–168.
- Presidency. (2012). *National Development Plan 2030: Our future - make it work*.
- Punch, K. (2005). *Introduction to Social Research: Quantitative and qualitative approaches*. SAGE.

- Rembis, M. (2019). *Challenging the impairment/disability divide*. In N. Watson & S. Vehmas (Eds.), *Routledge Handbook of Disability Studies*. <https://doi.org/10.4324/9780429430817-27>
- Richardson, J. T. E. (2015). Academic attainment in deaf and hard-of-hearing students in distance education. *Open Learning*, 30(2), 164–177. <https://doi.org/10.1080/02680513.2015.1071245>
- Rose, J., & Johnson, C.W. (2020). Contextualizing reliability and validity in qualitative research: toward more rigorous and trustworthy qualitative social science in leisure research. *Journal of Leisure Research*, 51(4), 432–451.
- Scotland, J. (2012). Exploring the philosophical underpinnings of research: Relating ontology and epistemology to the methodology and methods of the scientific, interpretive, and critical research paradigms. *English Language Teaching*, 5(9), 9–16. <https://doi.org/10.5539/elt.v5n9p9>
- Shakespeare, W. & A. (2017). Blaming the victim, all over again: Waddell and Aulward's biopsychosocial (BPS) model of disability. *Critical Policy*, 37(1), 22–41. https://scholar.google.co.za/scholar?hl=en&cas_sdt=0%2C5&cas_vis=1&q=Shakespeare%2C+Watson+%26+Alghaib%2C+2017&btnG=
- Siemens, G. (2017). Connectivism. In *Foundations of Learning and Instructional Design Technology*. <https://lidtfoundations.pressbooks.com/chapter/connectivism-a-learning-theory-for-the-digital-age/>
- Singh, R. K., & Mahapatra, S. K. (2019). Education of Deaf Learners through Open Schooling System in India. *Asian Journal of Distance Education*, 14(2), 26–31.
- Smith, J. A. (2011). Evaluating the contribution of interpretative phenomenological analysis. *Health Psychology Review*, 1(1), 39–54. <https://doi.org/10.1080/17437199.2010.510659>
- Stanley, K. (2017). *Affect and Emotion*. In S. Ames, Dewey, Tomkins, Damasio, Massumi (Ed.), *The Palgrave handbook of affect studies and textual criticism* (pp. 97–112). Palgrave Macmillan.
- Swart, E., & Greyling, E. (2011). Participation in higher education: Experiences of students with disabilities. *Acta Academica*, 43(4), 80–110.
- Teferra, D., & Altbach, P. G. (2004). African Higher Education: Challenges for the 21st Century. *Higher Education*, 47(1), 21–50.
- UNESCO. (2019). Discussion on SDG 4 – Quality education. *High-Level Political Forum on Sustainable Development*, (pp. 1-8). https://sustainabledevelopment.un.org/content/documents/23669BN_SDG4.pdf
- UNISA. (2012). Policy on Students with Disabilities. Pretoria.
- UNISA. (2016). Policy on Research Ethics.
- UNISA. (2017). Policy on Academic Integrity.
- UNISA. (2018). Student enrolments. <https://www.unisa.ac.za/sites/corporate/default/About/Facts-&-figures/Student-enrolments>

United Nations. (2016). Convention on the Rights of Persons with Disabilities and Optional Protocol.