



Integrating students with disabilities into nursing education: A South African perspective of nurse educators' experiences

Selvarani Moodley^{a,*}, Gugu Mchunu^{b,c}

^a KwaZulu-Natal College of Nursing, South Africa

^b Durban University of Technology, Faculty of Health Sciences, South Africa

^c University of KwaZulu-Natal, School of Nursing and Public Health, South Africa

ARTICLE INFO

Keywords:

Student nurses with disabilities
Nurse educators' experiences
Integration
Nurse training

ABSTRACT

Nurse educators play a pivotal role in integrating student nurses who have disabilities (SNWDs) in nursing education. Understanding the specific experiences of nurse educators may help reduce negative attitudes and discriminatory practices and improve the integration of SNWDs. This article aims to explore and describe nurse educators' experiences of integrating SNWDs into nursing education institutions training programmes in KwaZulu-Natal, South Africa. A qualitative, descriptive, and exploratory design using a multiple embedded case study approach was adopted. Purposive sampling was used to collect data from five key informants via individual interviews and two focus group discussions comprising of nurse educators who had experience training SNWDs. Trustworthiness and ethical considerations such as obtaining individual written consent from each participant was maintained. Recordings were transcribed verbatim and analysed using conventional content analysis. This study concludes that while every effort was made to integrate SNWDs into nursing education, there are still important gaps not yet captured in the research, relating to the direct experiences of nurse educators. Nurse educators' understanding of disability accentuates the call for nurse educators to broaden their understanding of disability beyond the medical model. Moreover, the lack of early disability disclosure disadvantages SNWDs from timeous support and reasonable accommodation.

1. Introduction

More than a billion people of the world's population have some form of physical, intellectual or mental disability, with four out of five living in low and middle-income countries (UNAIDS, 2014). According to the Disability Status report, 10.4% of the working age of people, being between the ages 21–64 years, have a disability (World Health Organisation, 2012). In South Africa, 7.5% of the population is estimated to have disabilities (Statistics South Africa, 2016) with less than 1% of students with disabilities (SWD) enrolling in higher education institutions (HEIs) (Graneheim & Lundman, 2004). A study conducted in 23 universities in SA revealed that from the total population of students per university, only 21–400 were students with disabilities, with a very low representation in health sciences (Foundation of Tertiary institutions of the Northern Metropolis (FOTIM), 2011). This suggests that student nurses with disabilities (SNWDs) are underrepresented in HEIs.

The lack of consensus on the meaning of disability could be one of the reasons for this underrepresentation, equally applicable to SNWDs in

nurse training programmes. Channey (2011) asserts that the understanding individuals give to a concept impact on the way they interact with that concept. He further adds that aspects of a curriculum are influenced by the personal beliefs and understanding of the teacher. This can be equated to nurse training programmes where nurse educators may view disability through different lenses. For example, the disability model that nurse educators adopt will influence their perception of disability and impact on the support and reasonable accommodation which they provide to SNWDs. It is therefore important to explore the meaning of disability from the perspective of nurse educators in understanding their experiences of training SNWDs.

South Africa has relevant policies and legislation promoting non-discrimination of people with disabilities while promoting an equitable education for all (Republic of South Africa, 1996). This is similar to other countries like the United Kingdom that have very good policies on prevention of discrimination for SWD. However, the implementation of the policy is not supported by training educators who are in pivotal positions to improve access to higher education (Vickerman & Blundell,

* Corresponding author.

E-mail address: desiganmdl@gmail.com (S. Moodley).

<https://doi.org/10.1016/j.ijans.2022.100414>

Received 23 July 2021; Received in revised form 30 March 2022; Accepted 11 April 2022

Available online 14 April 2022

2214-1391/© 2022 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

2010). Countries such as the United States of America also have policies which promote equal education but implementing those policies created challenges in that support for SNWDs were lacking. This gap between policy and practice applies equally to SA (FOTIM, 2011) explained by the lack of guidelines specific to integrating student nurses with disabilities in nurse training (Moodley & Mchunu, 2018).

Additionally, a study conducted at the University of Cape Town found that while faculty members adopted a positive reaction to accommodating students with disabilities, they had limited knowledge on reasonable accommodation due to a lack of disability training (Mayat and Amosun, 2011). Other findings suggest there to be lack of knowledge and experience of nurse educators to support SNWDs (Aaberg, 2010). In Matshediso (2010) study, some students perceived the lecturer's lack of disability awareness resulted in lecturers failing to provide the necessary reasonable accommodation and support. Lombardi, Murray, and Dallas (2013) posit that training higher education institutions members' faculty personnel and graduates on disability matters increases the likelihood of providing reasonable accommodation to SWD.

Nurse training and assessment occurs both in the classroom and in the clinical setting, as student nurses are required to complete a minimum number of clinical practice hours before being entered for an examination (SANC, 2020). This places the nursing education institutions (NEIs), as well as educators, in a difficult situation, to ensure SNWDs meet the course requirements and are deemed competent prior to completing the programme (Ashcroft et al., 2008). Marks and Ailey (2014) affirm that the determination of appropriate accommodations in license-based programmes such as nursing depends on if the accommodations would pass the student's development of "essential skills" necessary for competent performance in the nursing profession.

Essential skills are tasks that nurses in specific employment are expected to perform. This term is often confused with the technical standards applicable to nursing education for those clinical skills a student needs to perform to meet the objectives of the course (Matt, Maheady, & Fleming, 2015). Technical skills are those skills that nurse educators recognize as essential for students to perform in nurse training (Betz, Smith, & Bui, 2012). A recent survey regarding admission policies reveals that most nursing schools (60%) used technical standards such as being able to move a patient, withdraw medication with a syringe and manual dexterity instead of admission criteria for the inclusion of SNWDs in nurse training (Betz et al., 2012). Thus, technical skills are not exit criteria and should not reflect skills that students must demonstrate by completion of the programme. Those would be considered competencies and must be taught and evaluated in the programme (Matt et al., 2015). Examples of technical skills required by student nurses include: observation, communication, physical capabilities and motor skills, cognitive skills and intellectual capabilities, and behavioural-social skills (Drexel University College of Nursing and Health Professions, nd; Marks & Ailey, 2014).

While research on people with disabilities in higher education is well established (Mutanga, 2018; Ndlovu, 2019; Gow, Mostert, & Dreyer, 2020), research which explores the actual experiences of nurse educators training SNWDs to graduate into the nursing profession in South Africa is uncommon (Ndlovu & Walton, 2016). The perception of nurse educators towards SNWDs reveals that even though educators feel that SNWDs have a place in nursing, they were uncertain as to how to actually support such student nurses in clinical practice (Ashcroft & Lutfiyya, 2013). Moreover, a literature review by Mutanga (2017) raises concerns that students with disabilities (SWD) in South Africa experience negative attitudes and support for SWD is left to the discretion of individual lecturers (Emong & Eron, 2016). Further, findings of a study by De Cesarei (2014) reveal that negative attitudes and stigma attached to disability, as well as discrimination by nurse educators can influence the recruitment of SNWDs (Ryan, 2011). Citing a 2006 study by Howell (2006), SWD who access higher education in the United Kingdom are still faced with discrimination and negative attitudes from both their

peers and staff.

These studies suggest there to be an extent of discrimination against SNWDs by educators, yet the voices of nurse educators in most of the South African literature are missing. It is therefore important to do in-depth research into nursing education and SNWDs. This article therefore aims to describe nurse educators' experiences of integrating SNWDs which may inform how nurse educators understand disability in the context of nursing education.

2. Theoretical framework

Various models are employed to explain disability, such as the medical model which focuses on the disability or impairment itself and the social model which does not. According to the medical model, disability is usually regarded as having to "care for someone or to be taken care of" which emphasises disability as inherent within an individual, rendering them incapable (Scullion, 2010). The social model explains disability in terms of interaction with barriers in the environment that isolate and exclude them from participation in mainstream society (Shakespeare, 2006). The weakness of the social model, however, lies in its neglecting to acknowledge the existence of the impairment inherent in an individual. Therefore, this study is guided by the critical disability theory, which is a combination of both the social and the medical model of disability (Hosking, 2008).

The critical disability theory (CDT) adopts the social model of disability where disability is due to social constructs in the environment and is not a consequence of a medical condition or impairment. In this theory, disability is seen as an interrelationship between the impairment, the individual's response to the impairment and the social environment which fails to meet the needs of people who do not meet the expectations of society as being "normal". The WHO calls the CDT the "bio psychosocial model" (World Health Organisation, 2002) which is the synthesis of both the medical and social model of disability and which balances the contribution of impairment, personal response to impairment and the barriers imposed on the social environment within the concept of disability.

The CDT was used to guide the study because it provides a conceptual framework to understand the relationship between student nurses with impairments and disabilities and society and to introduce disability awareness into all policy areas. Its purpose is to explain oppression and to transform society with the objective of human emancipation. The CDT identifies the social conditions of people with disabilities to be more than what they are thought to be (Hosking, 2008).

According to Hosking (2008), public policy must consider both the medical and social model of disability. Hence, the CDT provides for different policies to meet the unique needs of people with disabilities – including policies of inclusion, equality, and autonomy. The CDT is therefore appropriate to guide this article, as SNWDs are usually viewed from the medical model of disability rendering SNWDs as incapable of providing safe patient care.

3. Methodology

3.1. Research design and method

This article focuses on one objective of a much larger PhD study aimed at developing policy guidelines for integrating SNWDs into NEIs' training programmes. This article aims to describe nurse educators' experiences of integrating SNWDs into NEIs' training programmes and their understanding of disability in the context of nurse training. The study adopted a qualitative descriptive design using the multiple embedded case study approach (Yin, 2014). Qualitative designs are used to describe the experiences of individuals regarding a phenomenon of interest (Creswell, 2014).

Furthermore, case studies are used to perform an in-depth exploration of a programme, event or activity of one or more individuals, as was

done in this study (Yin, 2014). The multiple embedded case study approach was selected, as it enabled the researcher to collect data from more than one case and more than one unit of analysis. Furthermore, it allowed the researcher to examine the case within a specific context such as private NEIs and one HEI in KwaZulu-Natal (KZN) (Yin, 2003).

3.2. Research question

How have nurse educators and principals experienced integrating SNWDs in the classroom and during clinical placement and what is their understanding of disability in the context of nursing education?

3.3. Setting

The study was conducted in NEIs in KZN, South Africa, which included private nursing colleges and one HEI.

3.4. The study population

The study population included all private NEIs and higher education institutions (HEIs) in KZN.

3.5. Sampling

3.5.1. Sampling of cases

Using a sampling frame from the SANC (SANC, 2015), a self-administered survey was administered to 27 private NEIs in KZN in phase one to determine which of those NEIs had experience training SNWDs. A student nurse who has a disability was described as having a physical or mental impairment that limits one or more life activities, resulting in participation restrictions. It included both students with congenital disabilities and those who became disabled prior to commencement or during the nurse training programme. The three NEIs known to have trained SNWDs were purposively selected for participation. Deviant sampling was also used to identify if any of the two HEIs in KZN had SNWDs as it was very difficult to obtain respondents for this type of study (Graneheim & Lundman, 2004). And after snowballing and consultations with key stakeholders, one local University was identified as having a student nurse with a disability. Amendments were made to the proposal and thereafter sent for ethics approval to include the student as a deviant sample; these were the cases ($n = 4$). The unit of analysis were the educators and principals of the NEIs. Defining the unit of analysis at the beginning of the study helps with replication and attempts to make comparisons (Yin, 1994).

Inclusion criteria: Nurse Educators must have experienced training/integrating SNWDs and.

NEIs must have had SNWD training at their institution.

Exclusion criteria: NEIs and educators that did not experience training SNWDs.

3.5.2. Sampling of embedded cases

Non-probability purposive sampling was adopted to select three principals of the private NEIs. Theoretical sampling was used to select the undergraduate programme coordinator and one academic at the university. There was no sampling of the educators. All educators who met the inclusion criteria of having experienced training SNWDs were invited to participate. These participants were the embedded cases.

3.6. Sample size

Tellis (1997) asserts that it is not necessary to have a minimum number of samples. The sample size is instead influenced by the resources available and the purpose of the research.

3.7. Case study protocol

A case study protocol was developed to guide this study. According to Yin (2003), case study protocols are essential in multiple embedded case studies, as they increase the rigor of the study. The case study protocol included an overview of the case study project, project objectives, data collection procedures, guide for the report (Yin, 2003), research instruments and the guidelines for implementation (Yin, 2014).

3.8. Case description

Case 1 was a public university in KwaZulu-Natal offering the R425 course (Diploma in Nursing [General, Community, Psychiatry] and Midwifery). Cases 2, 3 and 4 were three different private NEIs offering the R2175 programme (Course leading to enrolment as a nurse), the R683 programme (Bridging course for an Enrolled Nurse leading to registration as a General Nurse) and the R2176 programme (Enrolled Nurse Auxillary).

3.9. Data collection

Individual face-to-face interviews and focus group discussions were conducted. A semi-structured interview guide was used for the first data collection. Section A obtained demographic information about the respondent such as gender, age, period of employment and highest level of education. Section B obtained qualitative information from participants about their experiences integrating SNWDs such as what was their understanding of disability/ how they defined disability, how they felt about integrating student nurses with disabilities into nursing programs, were they aware that there were SNWDs training at their colleges, what were their experiences of integrating SNWDs both in the clinical and academic environment and suggestions for improving their experiences of integrating SNWDs. Data was collected at a date, time and venue convenient to the participants during the period December 2016 to August 2017. Data was collected in an environment convenient to the participant. All the interviews were audio recorded and lasted for 45 min to an hour and a half.

3.9.1. Individual interviews

Face-to-face, individual, semi-structured interviews guided by prompts were conducted with three principals, as they were mostly involved in the recruitment and selection of SNWDs, providing a rich data source (Silverman, 2001). Since recruitment and selection at the selected university is done by the central application office, theoretical sampling was used to select the programme coordinator and one academic from the undergraduate nursing programme for individual interviewing. The selected NEIs were contacted telephonically, followed by an email to inform them of the study and possible participation. The interviews were conducted in the participants' office which was convenient for the participants.

3.9.2. Focus group discussions

The four NEIs that responded to the survey indicating that they have experienced training SNWD were invited to participate in the focus group discussion. However, only two focus group discussions guided by prompts which emerged during individual interviews were held with educators and clinical facilitators from two private NEIs to confirm the findings. One NEI declined to participate explaining that firstly, the SNWDs had been asked to leave the programme, and secondly, some educators who had known the SNWDs were no longer employed at the school, hence they would not be able to offer adequate insight. As there were too few academics involved with the SNWDs at the university to hold a focus group, only individual interviews were conducted with the purposefully selected programme coordinator and the one academic closely involved in training the SNWDs. Interviews were held at a date, time and venue convenient for the lecturers. Interviews were held in the

NEIs boardroom and lasted between 45 min to an hour and a half. The main research question was “What were your experiences integrating SNWD and what is your understanding of disability in the context of nurse training?”

3.10. Data analysis

Data collection and analysis occurred simultaneously using the case study protocol and study objectives to guide the data analysis process. Information obtained from the focus group discussions and from individual interviews was transcribed verbatim and analysed using conventional content analysis (Hsieh & Shannon, 2005). Content analysis is utilised when there is a limited body of research or theory on the phenomenon being studied, as in the case of SNWDs in nurse training. Manual coding was done on the raw data prior to categorising and formulating themes.

3.11. Trustworthiness

Lincoln and Guba (1985) describe trustworthiness as the quality of the completed study findings, and use the terms ‘credibility’, ‘dependability’, ‘confirmability’ and ‘transferability’ to describe trustworthiness. Credibility, in this study, was maintained by member checking, peer debriefing and prolonged engagement with participants (Lincoln & Guba, 1985). The triangulation of data collection methods; a survey of all private NEIs, individual interviews with principals and educators of NEIs and two focus group discussions ensured truth value. All interviews were tape recorded and verbatim quotes were presented increasing confirmability (Holloway & Wheeler, 2010). Member checks were used to verify the data analysed. The researcher met with the supervisor to confirm the codes and categories to ensure dependability. A thick description of nurse educators’ experiences is presented to ensure transferability (Graneheim & Lundman, 2004). Dependability was ensured by keeping an accurate record of the sequential events that occurred.

3.12. Ethical considerations

Ethical approval was obtained from the University of KwaZulu-Natal (UKZN) Ethics Committee (reference number: HSS/1367/015D). An information letter, together with a copy of the ethical clearance was forwarded to each NEI. Thereafter, individual written consent was obtained from each participant to participate in the study and to audio-record their voices (Burns & Grove, 2009). Participants were informed that participation was voluntary and that they could withdraw from the study at any time without penalty.

Participants were reassured that there were no known risks for participation in the study and that their names and the names of the NEIs would be kept confidential and anonymous by utilising pseudonyms on transcripts. Information collected, such as audio recordings, was kept locked up safely in the supervisor’s office at the UKZN and would be destroyed after two years (Burns & Grove, 2009).

4. Findings

This article focuses on eliciting the experiences of principals and nurse educators at selected private NEIs and university in KwaZulu-Natal known to have trained SNWDs. Three themes emerged; namely understanding disability, early disclosure and integration experiences of nurse educator’s training SNWDs (sub themes: clinical setting related experiences and classroom related experiences of nurse educators) (Table 1). This article only addresses the first (understanding disability) and third theme, theme 2 on disability disclosure has already been published.

The findings are presented according to the socio-demographic data and experiences of nurse educators training SNWDs.

Table 1

Summary of themes and sub themes.

Themes	Sub themes
Nurse educators understanding of disability	Psychomotor domain (physical limitations, limited clinical competencies and functional incapacity) Cognitive domain (intellectual and psychological limitations) Affective domain (social limitations)
Early disclosure	published
Integration experiences of nurse educator’s training SNWDs	Recruitment practices of SNWDs published Clinical setting related experiences Classroom related experiences of nurse educators

Source: Authors own work (2019).

4.1. Sociodemographic data

All participating nurse educators had at one point taught students with different types of disabilities. Educators teaching experience varied; 41% (n = 9) had 0–5 years’ experience, 41% (n = 9) had 6–10 years’ experience and the remaining 18% (n = 9) had 11–15 years’ experience. All three principals, the programme coordinator and the academic who participated in the individual interviews were females between the ages of 31–65 years. Moreover, 17 educators participated in the focus group interviews; 15 females and two males aged between 30 and 65 years. In 2021, 89.6% of nurses registered with the South African Nursing Council (SANC) were female and 10.4% were male (n = 280 631) (SANC, 2021), confirming that nursing is a female-dominated profession with increased disability prevalence.

The majority of the SNWDs were females (n = 7). The men were in the minority (n = 3). Hearing impairment was the most common type of disability amongst the NEIs (n = 3), next was visual impairment (n = 2), followed by wheelchair use (n = 1), mobility impairment (n = 1), speech impairment (n = 1), dyslexia (n = 1) and panic attacks/narcolepsy (n = 1) (Table 2).

4.2. Theme 1: Nurse Educators’ understanding of disability

Nurse educator’s experiences were expressed in different ways but a common understanding amongst all educators was the need to reach consensus on the definition of disability. Educators defined disability in relation to the knowledge and skills (clinical procedures) that student nurses must be able to perform (Table 3). Participants further agreed that student nurses should possess psychomotor, cognitive and affective skills. Consequently, educators’ responses were coded using Bloom’s Taxonomy of Learning (1996). Six subthemes emerged from the three domains of learning; psychomotor domain (physical limitations, limited clinical competencies and functional incapacity); cognitive domain (intellectual and psychological limitations) and affective domain (social limitations) (Table 3).

Domain 1 (Subthemes 1, 2 and 3)

Responses from both the interviews and the focus group discussions revealed that educators and the NEIs’ management had a common understanding of disability, which (while informed by relative experiences in respective institutions, and perhaps more crucially by their training as health professionals) was based on functional incapacities or limitations. Students with functional incapacity were perceived as those needing assistance or adaptation in some way, expressed as follows:

Disability is when there is some physical anomaly that interferes with a student carrying out the activities of learning (case 1, Faith, female).

My understanding of disability is if a person is unable to perform certain procedures such as bed baths, lifting a patient out of bed and/or dressings (Focus Group 1 (FG1), participant 1).

I think it is anything where you need to make accommodations for a

Table 2
Demographic Profile of Student Nurses with Disabilities.

Type of disability	Case 1		Case 2	Case 3	Case 4
	Embedded case 1	Embedded case 2	Embedded case 3	Embedded case 4	Embedded case 5
Pseudonym	Faith	Hannah	Sarah	Hope	Elisha
Sight	Visually impaired	Visually impaired			
Hearing		Hearing impaired	Hearing impaired	Hearing impaired	
Mobility	Wheelchair user		Mobility impaired		
Communication				Speech impaired	Dyslexia
Psychological					Panic attacks Narcolepsy

Source: Authors' Own Work (2019).

particular student in your environment, someone who cannot function the same as the average student in the class (Focus Group 2 (FG2), participant 2).

A nursing programme coordinator was more lucid in her explanation of disability as a functional incapacity. "For me disability is either physical or mental; people have problems functioning because of either physical or mental issues in society" (case 2, Hannah, female).

She further expanded by giving examples of these impairments noting that:

Physical ones are things like blindness, deafness, and mobility problems for example amputation or things like that. Then the mental things are bipolar disorder, personality disorders, etc. (case 2, Hannah, female).

All participants had interactions with SNWDs who needed assistance with carrying out daily tasks or needed adaptations to be made to help them cope with learning in the nurse training programme. According to Faith, disability manifests "when an individual is unable to perform whatever is necessary, and needs either assistance or something being adapted for him to be able to cope with day-to-day activities" (case 1, Faith, female). This was echoed by all the other participants who made reference to functional limitations such as the "inability to dress patients" (case 3, Sarah, female), being "dysfunctional; not having the full function of a part of the body or brain" (Case 4, Hope, female) and "when the student experiences a challenge and cannot learn in an ordinary manner like other students" (Case 5, Elisha, female).

Domain 2: (Subthemes 4 and 5)

Cognitive skills included psychological and intellectual impairment where students had an "inability to think rationally" (case 1, Faith, female). Educators experienced mixed reactions to students with psychological impairments and explained that while students could be accommodated during academic learning in a controlled environment such as the classroom, concern was raised whether students might have a psychotic episode whilst with the patient.

We look at people with emotional disorders like your bipolar people, which is also considered a disability. They need to also make sure that they are on their medication and they stay mentally balanced, so that they are not a risk to our patients. It's all about the patient in this profession, so if you can provide what the patient needs then you're welcomed, but if you yourself are going to be needing care from someone else then you will also be a patient" (FG1, Participant 4).

The above understanding of SNWDs suggested some educators in the private NEIs appreciated the social model of disability, while the above quote illuminated participants' concerns about integrating students with psychiatric and/or emotional disabilities into nurse training.

Domain 3: (Subtheme 6)

Students with social limitations were described as having limitations in caring for patients and/or showing empathy. Participants expressed concern regarding how patients might respond if SNWDs "became emotional and cried in front of patients" (case 5, Elisha, female).

Notwithstanding these concerns, the study by Korzon (2014) revealed that nurses with a range of disabilities such as depression and panic disorders were found to be competent, knowledgeable, and skillful nurses. The above responses showed concurrence among all the participants that disability interfered with the students' abilities to complete the clinical aspect of the course.

4.3. Integration experiences of nurse educators

This theme was organised into two subthemes: clinical setting-related experiences and classroom-related experiences of nurse educators.

Subtheme: Clinical Setting-Related Experiences of Nurse Educators.

Nurse educators' experienced concern about the "ability" of SNWDs to undertake the practical component of the nurse training programme as seen in the following quote;

I don't think it's a problem when we are at college. The problem is when we take her to the clinical [setting]. The challenges there are enormous because she can't hear well, she can't take orders, she can't hear from the patient and physically she can't do bed baths and she cannot do things like the pressure care (case 5, Elisha, female).

Communication and collaboration in the clinical facilities were perceived as key elements to enhance the integration experiences of both educators and SNWDs. Nurse educators' experiences of open communication and collaboration that extended into the clinical environment received the students positively whereas the lack thereof resulted in misunderstandings amongst health care professionals, as they were uncertain as to how to support SNWDs.

It needs a lot of planning and communicating with your colleagues and management (Case 2, Hannah, participant).

The following quote signified the importance of building and maintaining good communication and collaboration between educators and clinical facilitators. These findings confirmed the challenges experienced in Sub-Saharan Africa; that there was poor collaboration between the academic and clinical settings (Middleton et al., 2014).

And then the big thing is the support, to make sure that the lecturer and the clinical facilitator are aware of the SNWDs. And in consultation with the student, we need to agree on how to accommodate her (the student) (case 4, Hope, participant).

Participants' views were largely associated with medico-legal hazards in the clinical setting.

You need your hundred percent physical and mental ability where you can provide safe patient care (FG1, participant 6).

Classroom-Related experiences of nurse educators
Educators described their experience of integrating SNWDs as

Table 3
Summary of Findings: Nurse Educators' Understanding of Disability.

Theme: Nurse Educators' Understanding of Disability			
Domains of learning	Subthemes	Codes	Meaning units
Psychomotor skills	Physical limitations	Physical problems Physical anomaly Physical impairment	<i>Physical or mental, people have problems [case 1]</i> <i>Unable to perform a full service to the patient in terms of physically [case 3]</i> <i>"...functioning because of either physical or mental issues in society." [case 2]</i>
	Clinical competencies	Interferes with clinical placement Unable to do dressings Interferes with doing nursing duties	<i>They are nurses, they also must do practicals which will interfere with them being able to fully participate and be allocated just like any other student in the clinical area [case 3]</i> <i>Cannot attend to things like dressings [case 3]</i> <i>She cannot do most of the things like bed bath and pressure care [case 3]</i> <i>Unable to perform her nursing duties, if she is unable to lift a patient off the bed or move a patient or wheel a patient [case 3]</i>
	Functional incapacity	Do not have full function of the body Need assistance Impaired functioning	<i>They do not have their full function of their brain or body [case 4]</i> <i>Need either assistance or something being adapted for him to be able to cope with day-to-day activities [case 1]</i> <i>People have problems functioning [case 1]</i>
Cognitive skills	Psychological impairment	Mental problems in society Need psychological adjustments	<i>Physical or mental, people have problems [case 1]</i> <i>I am sensitive about psychological disability. You support and support while in training but what happens in the workplace? [case 2]</i>
	Intellectual impairment	Cannot learn in an ordinary manner	<i>[it affects] the student's ability to learn in an ordinary manner, you need to make adjustments in order to accommodate the learner either in class or during assessments. [case 5]</i>
		Intellectual impairment Interferes with the student's ability to carry out activities of learning	<i>Unable to perform using his/her intellect [case 5]</i> <i>Physical anomaly that interferes with a student carrying out the activities of learning [case 1]</i>
	Thinking impairment		<i>Inability to think rationally [case 4]</i>
Affective skills	Social limitations [caring for patients, showing empathy]	Need social adjustments	<i>I see disability as physical, or psychological or, you know, emotional [case 5]</i>

Source: Authors' Own Work (2019) adapted from Bloom's Taxonomy of Learning (Bloom, 1965).

"needing extra effort and time" to teach and provide feedback to SNWDs because non-disabled students grasped the content at a much faster pace (Case 4, Hope, female).

Educators' sometimes only came to know that a student had a disability by chance, sometimes when the student was already in the lecture. One educator reported that she only came to know of a student's disability just before her lecture, and she "had to run around looking for a venue on the ground floor to accommodate the student" (case 1, Faith, female). This proved to be a time-consuming process causing delays in both teaching and learning.

Another educator reported that they "had to make do with the situation" when it arose. Participants further reported that it was easier to accommodate SNWDs in the academic environment if they were aware of the students' disabilities in advance, as illustrated below:

If it is identified early enough and proper planning is in place, it makes the course much more manageable for all parties concerned (case 2, Hannah, female).

5. Discussion

5.1. Nurse educators understanding of disability

While educators understanding of disability varied, a common theme which emerged amongst all participants was the need for a common agreed upon definition of disability in the context of nurse training to ensure consistency in supporting SNWDs and providing disability appropriate accommodations. Participants defined disability as "a student nurse having a physical or mental problem or psychological problem", "functional incapacity" and student needing adaptations and assistance with learning" which defines disability in terms of functional

incapacities and limitations. This view is contingent with the medical model of disability supported by authors such as Scullion (2010), who argues that disability is still viewed as a medical phenomenon, measuring illness, deviation or dependence within the health profession, rather than viewing it as a matter of equality. The researcher argues that it is this view that disables students with disabilities for the nursing profession in SA. Although reference to 'physical' impairments and 'anything' that would affect student's ability to conduct learning activities demonstrates a vague or limited understanding that associate's disability with apparent physical impairments; physical or mental impairment was a constant test for disability among the participants.

This corroborates a study in Uganda by Emong (2016) where recruitment of learners with disabilities in selected programs that required students to undertake a practical examination such as the medical and nursing field restricted access to students with disabilities in private higher education institutions. Emphasis should instead be placed on the "abilities" of students meeting the objectives of the nurse training program instead of on the students' disabilities. It is against this background that the researcher argues that nurse educators understanding of disability impacts on their attitudes and practices towards SNWD.

In this study, nurse educators' experiences revealed that severe disabilities that interfered with the cognitive, affective and psychomotor domains of learning may interfere with the successful integration of SNWDs. Moreover; educators had mixed emotions about integrating SNWDs with psychological impairments. It is noteworthy to mention that not all types of students with disabilities can be integrated in nurse training because nursing is a practise based profession (Ryan, 2011). Hence some impairments are exclusionary because no amount of change or accommodation in the external environment can eliminate the

disadvantage associated with the impairment Terzi (2004).

Hence the findings of this study suggest that students with hearing, vision, mobility impairments and missing digits in nurse training may be integrated into nurse training with appropriate support from nurse educators and provision of disability friendly reasonable accommodations. Dupler, Allen, Maheady, Fleming, and Allen (2012) echo similar findings that SNWDs may successfully complete the programme and provide quality patient care. Another study revealed that nurses with a range of disabilities such as depression, polyarthritis, traumatic brain injury, multiple sclerosis, hepatitis C virus, fibromyalgia, and panic disorders were found to be competent, knowledgeable and skilful nurses practicing in a variety of nursing roles (Korzon, 2014). Ryan (2011) confirmed that nurses with psychiatric disabilities were accepted into the nursing profession and were able to work successfully. However, students with complete blindness, bipolar, psychological, paraplegia and students who are have suffered the loss of both arms and/or lower limbs were considered by the participants as not suitable for nurse training. This corroborates a study in Uganda by (Emong & Eron, 2016) where recruitment of students with disabilities in the medical and nursing field was restricted in private HEIs.

5.2. Integration experiences of nurse educators

5.2.1. Clinical Setting-Related experiences of nurse educators

Nurse educators' experienced concern about the "ability" of SNWDs to undertake the practical component of the nurse training programme and provide safe quality care to patients as seen in the following quote; "I don't think it's a problem when we are at school (NEI), the problem is when we take her to the clinical facility." Such fears raised questions about the relationship between disability and clinical practice. Here, it is important to note that such fears not only reinforced outmoded perceptions that SNWDs posed an inherent risk to the public that was distinctly different from that posed by any other student, but also accentuated the call for nurse educators to broaden their understanding of disability beyond the medical model.

Barnes & Mercer (2010) assert that the way people with disabilities are treated emanates from the meaning society gives to people with disabilities. For example, despite these findings that there were no medico legal hazards associated with SNWDs, nurse educators still had "concerns about patient safety in the clinical area". Aaberg (2010) assert that medico-legal hazards could also be caused by non-disabled student nurses. This can be equated to nurse educators' innate knowledge cemented on past practices that nurses are meant to be "able". This suggested that some nurse educators still held stigmatising views towards SNWDs. Educators need a paradigm shift in the way they view disability, from the medical and social model where disability is viewed as socially constructed by barriers in the environment to the critical disability theory which is a combination of both. This article thus concluded that there was no significant relationship between negligent patient care when nursed by SNWDs supported by authors Marks and McCulloh (2016) and Moodley and Mchunu (2018).

Furthermore, nursing is practice based, hence support and disability appropriate accommodation must be extended to the clinical learning environment as well to improve the experiences of SNWDs and prevent misunderstandings. These findings are supported by previous study findings by Tee et al. (2010) that it was customary practice to provide support and reasonable accommodation which was confined to the internal environments of the college or university but once the student goes to the clinical environment, this support is absent or minute.

5.2.2. Classroom-Related experiences of nurse educators

Educators described their experiences of integrating SNWDs as needing extra effort and time to teach and provide feedback to SNWDs. This was similar to the study by Ohajunwa, Mckenzie, and Lorenzo (2015) at the University of Cape Town, where not enough time was given to the preparation for and teaching of disability in the curriculum,

indirectly reflecting the undervaluing of disability in education, and suggesting that SNWDs were a liability. Additionally, educators revealed that they spent more time than normal looking for teaching aids and making last minute venue changes to accommodate SNWDs.

While the academic environment was found to be an important factor in supporting SNWDs, the reality on the ground was lack of disclosure by SNWDs which made it difficult for educators to support and/or prepare reasonable accommodation timeously (Moodley & Mchunu, 2020). This lack of disclosure may have contributed to more time needed to plan and prepare. In this study, sometimes the educator only came to know that the student had a disability was through chance encounter such as when the student was already in the lecture forcing them to make do with the situation as it arose. They further reported that it was easier to prepare for SNWDs if they were aware of the students' disability in advance which is consistent with the findings of Tee et al. (2010) that nurse educator were better able to prepare the learning environment to make it more inclusive if they were informed of the students disability in advance.

6. Conclusion

This article has provided an understanding of the experiences of nurse educators and the meaning they attached to disability. While every effort has been made by private NEIs and the selected university to integrate SNWDs into nurse training, there are still important gaps in the understanding of nurse educators regarding their role. One of the reasons for this is the lack of a definition of disability globally. Hence, the use of an alternate definition appropriate within the context of nurse training is essential (Power of Humanity Council, 2015). Nurse educators' understanding of disability offered the following definition of disability, according to the domains of learning when applying Bloom's Taxonomy (Bloom, 1965):

A student nurse having a 'physical, mental or psychological impairment', with 'functional incapacity' that interferes with a student carrying out activities of learning (intellectual impairment), certain clinical procedures and a lack of empathy. Additionally, SNWDs need adaptations and assistance with learning to function on the same level as all students (definition adopted from Table 2).

Nurse educators' experiences of integrating SNWDs revealed that students with visual, hearing and mobility impairments and missing digits were able to complete the programme successfully. Educators further defined disability as the lack of affective and cognitive skills. Hence, certain types of disabilities affecting the affective and cognitive domains of learning were perceived as not practical for inclusion in nurse training. For example, students who are blind, bipolar, paraplegic, unable to walk unassisted, and who have suffered the loss of both arms. Participants also expressed the importance of noting the nature and severity of the disability which will influence the integration process.

This suggested that participants emphasised the limitations caused by the disability. This view emerged from the medical model of disability supported by authors such as Scullion (2010), emphasising the medical conditions rendering SNWDs incapable of becoming nurses and thus disqualifying them for the nursing profession. Nurse educators should instead focus on barriers in the environment that disable a student and determine best practices to support and reasonably accommodate the student, both clinically and academically, and this emanates from the critical disability theory.

To define exactly the types of SNWDs that should or should not be integrated into nurse training may result in discriminatory practices. The decision on who amongst SNWDs gets selected or excluded is a prerogative of the respective NEIs. Bestowing unfettered power on individual institutions to determine who among the disabled people can or cannot be enrolled into nurse training programmes, is compounded by the limited (medical) understanding of disability and the lack of guidelines for recruitment. These are perhaps the reasons that contributed to so few SNWDs being admitted to these institutions.

The paucity of admission of SNWDs in nurse training may also be the result of the perceived physically demanding nature of nurse training by nurse educators. The belief that nurses are meant to be “able” is dependent on the nurse educators’ innate knowledge, cemented on past practices, to perform the essential functions of nursing. However, Aaberg (2010) contends that there is no place for essential functions in nursing education. Therefore technical standards which are skills that nurse educators recognize as essential for students to perform in nurse training should be identified (Matt et al., 2015).

7. Recommendations

Based on the findings of this study, the researcher makes the following recommendations for NEIs:

NEIs should develop a standardised admission and accommodation policy for the recruitment and training of SNWDs. Even though the development and implementation of such a policy may not guarantee SNWDs a place in the nursing programme, it will be the first step towards correcting the inequities of the past towards SNWDs.

Technical standards which are skills that nurse educators recognize as essential for all students to perform in nurse training should be identified to improve the integration of SNWDs in nurse training.

The clinical skills of students should place emphasis on teaching a student with the aim of “achieving competency” and not on the “prescribed” way the student performs a procedure.

Open communication and collaboration between key stakeholders regarding support and reasonable accommodation for SNWDs is critical to enhance the integration of SNWDs in nurse training.

Continuous professional development is proposed for nurse educators to keep up to date with matters relevant to SNWDs and trends in nursing, support and reasonable accommodations.

8. Limitations of the study

It must be borne in mind that not all students with disabilities disclosed for fear of being labelled as disabled. Hence the results cannot be generalized but serve the purpose of exploring the experiences of nurse educators in training SNWDs who have disclosed their disability and in instances where the nurse educator had the opportunity to support and provide reasonable accommodations. The interview data presented in this paper represented the views of nurse educators from private NEIs and one public HEI only. Thus, it cannot be generalised to all NEIs in KZN.

9. Significance

The findings of this descriptive case study add valuable insight into the experiences of nurse educators training student nurses who have disabilities, to provide recommendations to both student nurses who have disabilities and educators on best practices to enhance the integration process.

Declaration of Competing Interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests:

Selvarani Moodley reports financial support was provided by National Research Foundation.

Acknowledgements

This study was funded by the National Research Foundation, grant number (89325). The researcher thanks the SANTRUST and FUNDISA for academic support provided for the duration of the study and to the participants for sharing their experiences which made this study possible.

References

- Aaberg, V. A. (2010). *Implicit attitudes of nursing faculty towards individuals with disabilities*. Washington State University College of Nursing. Doctoral Thesis.
- Ashcroft, T., Chernomas, W., Davis, P., Dean, R., Seguire, M., Shapiro, C., & Swiderski, L. (2008). Nursing students with disabilities: One faculty's journey. *International Journal of Nursing Education Scholarship*, 5, 1–26. <https://doi.org/10.2202/1548-923X.1424>
- Ashcroft, T. J., & Lutfiyya, Z. M. (2013). Nursing educators' perspectives of students with disabilities: A grounded theory study. *Nurse Education Today*, 33(11), 1316–1321. <https://doi.org/10.1016/j.nedt.2013.02.018>
- Barnes, C., & Mercer, G. (2010). *Exploring disability: A sociological introduction* (2nd ed). Cambridge: Polity Press.
- Betz, C. L., Smith, K. A., & Bui, K. (2012). A survey of California nursing programmes: Admission and accommodation policies for students with disabilities. *Journal of Nursing Education*, 51(12), 676–684. <https://doi.org/10.3928/01484834-20121112-01>
- Bloom, B. (1965). *Blooms taxonomy of learning domains*. [Online]. Available at: <https://www.nbna.org/files/Blooms%20Taxonomy%20of%20Learning.pdf>. [Accessed 18 December 2017].
- Burns, N., & Grove, S. K. (2009). *The practice of nursing research: Appraisal, synthesis and generation of evidence* (6th ed). St Louis, Missouri: Elsevier Saunders.
- Channey, P. (2011). Education, equality and human rights: Exploring the impact of devolution in the UK. *Critical Social Policy*, 31(3), 431. <https://doi.org/10.1177/026108311405013>
- Creswell, J. W. (2014). *Research: Qualitative, quantitative and mixed methods approaches* (2nd ed). Thousand Oaks: Sage.
- De Cesarei, A. (2014). Disclosure of disability by university students: Development of a study protocol. *Open Journal of Social Sciences*, 02(08), 71–76. <https://doi.org/10.4236/jss.2014.28012>
- Drexel University College of Nursing and Health Professions. (nd). *Technical standards for nursing*. [Online]. Available at: <https://drexel.edu/cnhp/academics/departments/Nursing-Undergraduate/Technical-Standards-Nursing/> [Accessed 17 October 2017].
- Dupler, A. E., Allen, C., Maheady, D. C., Fleming, S. E., & Allen, M. (2012). Levelling the playing field for nursing students with disabilities: Implications of the amendments to the Americans with Disabilities Act. *Journal of Nursing Education*, 51(3), 140–144. doi:10.3928/01484834-20120127-05. [Accessed 27 January 2012].
- Emong, P., & Eron, L. (2016). Disability inclusion in higher education in Uganda: Status and strategies. *African Journal of Disability*, 5(1), 193. <https://doi.org/10.4102/ajod.v5i1.193>
- Foundation of Tertiary institutions of the Northern Metropolis (FOTIM). (2011). *Disability in higher education annual FOTIM report*. [Online]. Available at: http://www.students.uct.ac.za/sites/default/files/image_tool/images/431/support/disability/reports/disability_higher_education_project_report_2009-2011.pdf [Accessed 17 May 2017].
- Gow, M. A., Mostert, Y., & Dreyer, L. (2020). The promise of equal education not kept: Specific learning disabilities - the invisible disability. *African Journal of Disability (Online)*, 9, 1–10.
- Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24(2), 105–112.
- Holloway, L., & Wheeler, S. (2010). *Qualitative research in nursing and healthcare* (3rd ed). Oxford, United Kingdom: Blackwell Publishers.
- Hosking, D. L. (2008). *Critical disability theory*. UK: Lancaster University.
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1227–1288. doi:HTTP://10.1177/1049732305276687.
- Howell, C (2006). Disabled students and higher education in South Africa'. In B Watermeyer, L Swartz, T Lorenzo, M Schneider, & M Priestley (Eds.), *Disability and social change: A South African agenda* (pp. 164–178). Cape Town: HSRC Press.
- Korzon, J. (2014). Learning from the experiences of disabled nurses. *Kai Tiaki Nursing New Zealand*, 20(5), 28–30.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry* (p. 75). London: Sage Publications.
- Lombardi, A., Murray, C. A., & Dallas, B. (2013). University faculty attitudes toward disability and inclusive instruction: Comparing two institutions. *Journal of Postsecondary Education and Disability*, 26(3), 221–232.
- Marks, B., & Ailey, S. A. (2014). *White Paper on inclusion of students with disabilities in nursing educational programmes for the California committee on employment of people with disabilities*. Sacramento: CCEPD.
- Marks, B., & McCulloh, K. (2016). Success for students and nurses with disabilities: A call to action for nurse educators. *Nurse Educator Today*, 41(1), 9–12. <https://doi.org/10.1097/NNE.0000000000000212>
- Matt, S. B., Maheady, D., & Fleming, S. E. (2015). Educating nursing students with disabilities: Replacing essential functions with technical standards for programme entry criteria. *Journal of Postsecondary Education and Disability*, 28(4), 461–468.
- Mayat, N, & Amosun, S. L. (2011). Perceptions of academic staff towards accommodating students with disabilities in a civil engineering Undergraduate Program in a university in South Africa. *Journal of Postsecondary Education and Disability*, 24(5), 730–744.
- Middleton, L., Howard, A. A., Dohrn, J., Von Zinkernagel, D., Parham, H. D., & Aranda-Naranjo, B. (2014). The nursing education partnership initiative (NEPI): Innovations in nursing and midwifery education. *Academic Medicine*, 89, S24–S28.
- Moodley, S., & Mchunu, G. (2018). Integration experiences of student and qualified nurses with disabilities who graduated from selected KwaZulu-Natal nursing

- education institutions: An exploratory case study. *Curationis*, 41(1), 9. <https://doi.org/10.4102/curationis.v41i1.1862>
- Moodley, S, & Mchunu, G. (2020). Organisational readiness of nursing education institutions to integrate students who have disabilities into nurse education institutions (NELs) training programmes: A case study of Kwazulu-Natal NELs. *International Journal of Africa Nursing Sciences*, 12. <https://doi.org/10.1016/j.ijans.2020.100193>
- Mutanga, O. (2018). Inclusion of students with disabilities in South African higher education. *International Journal of Disability, Development and Education*, 65(2), 229–242. <https://doi.org/10.1080/1034912X.2017.1368460>
- 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>
- Ndlovu, S. (2019). Access into professional degrees by students with disabilities in South African higher learning: A decolonial perspective. *African Journal of Disability (Online)*, 8, 1–12.
- Ndlovu, S., & Walton, E. (2016). Preparation of students with disabilities to graduate into professions in the South African context of higher learning: Obstacles and opportunities. *African journal of disability*, 5(1), 150. <https://doi.org/10.4102/ajod.v5i1.150>
- Ohajunwa, C., Mckenzie, J., & Lorenzo, T. (2015). Enabling disability inclusive practices within the University of Cape Town curriculum: A case study. *African Journal of Disability*, 4(1). <https://doi.org/10.4102/ajod.v4i1.157>
- Power of Humanity Council. (2015). *Adoption of the strategic framework on disability inclusion by the international Red Cross and Red Crescent Movement*. [Online]. Available at: http://rcrcconference.org/wp-content/uploads/2015/03/CoD15_Res-4-disability-inclusion-FINAL-EN.pdf [Accessed 11 October 2018].
- Republic of South Africa, 1996, Constitution of the Republic of South Africa No. 108 of 1996. viewed 29 November 2017, from <https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/45811/67797/F-1145127647/ZAF45811.pdf>.
- Ryan, J. (2011). Access and participation in higher education of students with disabilities: Access to what? *The Australian Educational Researcher*, 38(1), 73–93. <https://doi.org/10.1007/s13384-010-0002-8>
- SANC, 2015, Provincial distribution of nursing manpower versus the population of the Republic of South Africa as at 31 December 2015, viewed 29 November 2017, from <http://www.sanc.co.za/stats/Stat2015/Year%202015%20Provincial%20Distributi on%20Stats.pdf>.
- Scullion, P. A. (2010). Models of disability: Their influence in nursing and potential role in challenging discrimination. *Journal of Advanced Nursing*, 66(3), 697–707. <https://doi.org/10.1111/j.1365-2648.2009.05211.x>
- Shakespeare, T. (2006). The social model of disability. In L. J. Davies (Ed.), *The disability studies reader* (p. 272). London: Routledge.
- Silverman, D. (2001). *Interpreting qualitative data. Methods for analysing talk, text and interaction* (2nd ed). London: Sage.
- South African Nursing Council. (2021). Registrations and listed qualifications 2020. [Online]. <https://ncsacoms.co.za/wp-content/uploads/2021/04/Stats-2020-2-Registrations-and-Listed-Qualifications.pdf> [Accessed 20 November 2021].
- South African Nursing Council. (2020). Extension of education and training to meet outstanding clinical requirements [Online]. <https://www.sanc.co.za/2020/11/06/extension-of-education-and-training-to-meet-outstanding-clinical-requirements>. [Accessed 20 November 2021].
- Statistics South Africa. (2016). *Community survey 2016 statistical release*. [Online]. Available at: <http://cs2016.statssa.gov.za/wp-content/uploads/2016/07/NT-30-06-2016-RELEASE-for-CS-2016-Statistical-releas-1-July-2016.pdf> [Accessed 29 November 2017].
- Tee, S. R., Owens, K., Plowright, S., Ramnath, P., Rourke, S., James, C., & Bayliss, J. (2010). Being reasonable: Supporting disabled nursing students in practice. *Nurse Education Practice*, 10(4), 216–221. <https://doi.org/10.1016/j.nepr.2009.11.006>
- Tellis, W. M. (1997). Introduction to case study. *The Qualitative Report*, 3(2), 1–14.
- Terzi, L. (2004). The social model of disability: A philosophical critique. *Journal of Applied Physiology*, 21(2). doi:doi.org/101111/.0264-3758.2004.00269.x.
- UNAIDS. (2014). People with disabilities 2014 Gap report. [Online]. Available at: www.unaids.org/en/...unaidspublication/2014/UNAIDS_Gap_report_en.pdf [Accessed 22 December 2017].
- World Health Organisation. (2012). *Report by the secretariat*. [Online]. Available at: http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_12-en.pdf [Accessed 18 December 2017].
- World Health Organisation. (2002). WHO 'towards a common language for functioning, disability and health: ICF - the international classification of functioning, disability and health: Beginner's guide.' [Online]. Available at: <https://www.who.int/classifications/icf/icfbeginnersguide.pdf> [Accessed 17 December 2018].
- Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). CA, Sage: Thousand Oaks.
- Yin, R. K. (2003). *Case Study Research Design and methods* (third ed. Vol. 5). Thousand Oaks, London: SAGE Publications.
- Vickerman, P, & Blundell, M (2010). Hearing the voices of disabled students in higher education. *Disability & Society*, 25(1), 21–32. <https://doi.org/10.1080/09687590903363290>
- Yin, R. (1994). *Case study research: Design and methods* (2nd ed.). Beverly Hills: Sage Publishing.