Removing Ableist Barriers in Nursing Education: Clinical Essential Requirements

Éliminer les barrières capacitistes dans la formation en soins infirmiers : Exigences cliniques fondamentales

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Abstract
The current approach to clinical placement training for nurses excludes students with disabilities. The purpose of this article is to introduce a four-step model for nursing programs to identify clinical essential requirements – specific skills and competencies students must gain during placement. Engaging this four-step model will allow educators to identify how essential requirements can be achieved in a variety of ways, and thus can involve accommodations. It will also allow for the identification of which essential requirements cannot be accommodated and must be demonstrated in a prescribed manner due to impacting the nature or integrity of the task. Analyzing clinical essential requirements using this framework will create a consistent and defensible method to determine the flexibility or inflexibility of clinical tasks. The framework provided requires a collaborative process including key experts, nursing students and nurses with disabilities to comprehensively address the challenges clinical environments pose to inclusiveness.

L'approche actuelle de formation en stage clinique pour les infirmières et infirmiers exclut les étudiantes et étudiants handicapés. Le but de cet article est de présenter un modèle en quatre étapes pour les programmes de soins infirmiers afin de définir les exigences cliniques fondamentales, c.-à-d. les aptitudes et compétences spécifiques que les étudiants doivent acquérir pendant le stage. La mise en œuvre de ce modèle en quatre étapes permettra aux éducateurs d'établir les exigences fondamentales qui peuvent être satisfaites de diverses manières et donc permettre des adaptations. Le modèle permettra également d'identifier les exigences fondamentales qui ne peuvent pas faire l'objet d'accommodements et qui doivent être démontrées d'une manière prescrite en raison de l'impact sur la nature ou l'intégrité de la tâche. L'analyse des exigences cliniques fondamentales à l'aide de ce cadre créera une méthode

cohérente et défendable pour déterminer la flexibilité ou l'inflexibilité des tâches cliniques. Pour aborder de manière globale les défis que les environnements cliniques posent à l'inclusion, le cadre fourni doit être développé via un processus de collaboration comprenant des experts clés, des étudiants en sciences infirmières et des infirmiers et infirmières handicapées.

Keywords
Nursing Students with Disabilities; Clinical Placement; Clinical Essential Requirements; Disability Studies; Disability Studies in Education; Universal Design; Universal Design for Instruction

Introduction

Undergraduate nursing programs have a legal obligation to provide reasonable accommodation for students with disabilities to mitigate some forms of discrimination and provide an equitable chance for success. While some accommodations are provided in the classroom, in nursing clinical placement, accommodations and conversations about accommodations are generally absent (Dupler et al. 2012; Epstein et al. 2020; Levey 2014). In general, in Canadian postsecondary nursing programs, if a nursing student identifies with a disability, in order to get accommodations they are required to show proof of their disability and register with the university student accessibility office. However, classroom accommodations are not directly transferable to nursing clinical placements. As a result, many nursing students who identify with a disability and register with the student accessibility office fear stigmatization and thus decide not to request clinical accommodations or not to register with the student accessibility office at all. This leaves the clinical instructor unsure how or when to accommodate students (Epstein et al. 2020).

The purpose of this paper is to bring insight using disability studies and disability studies in education scholars to challenges faced by nursing programs. In order to change placement practices for students who have successfully accomplished the first stage of a nursing program and produce genuine inclusiveness for all students, and in particular students with disabilities, we will:

a) explore the nursing literature relevant to students with disabilities, accommodation and clinical placement

b) situate our four-step process, clinical essential requirements (CER)[1], within its

theoretical framework (disability studies with an emphasis on perspectives within

disability studies in education) and its conceptual framework (universal design)

c) introduce CER: the critical process nursing programs must undertake to distinguish

what can and cannot be accommodated in clinical placement, encouraging multiple

means of engagement to meet clinical outcomes.

Through this process, nursing programs will be required to examine and challenge their

underlying assumptions about students with disabilities, the current delivery of clinical education

that excludes students with disabilities, and how the outcome of a skill, rather than the precise

manner in which the skill is performed, should be the focus for clinical skill requirements.

Moreover, identifying CER using this proactive and consistent method will create a more

defensible and valid identification of requirements, as well as create a better understanding of the

flexibility or inflexibility of specific clinical tasks.

Reasonable Accommodations vs. Universal Design

In 2019, we conducted a multisite qualitative study that explored the perspectives of nursing

students with disabilities and clinical instructors (CI)[2]. The findings revealed that most CI had a

lack of knowledge of the legal requirements to accommodate students with disabilities, and

limited awareness of technology, adaptive devices and disability disclosure rights. Most CI held

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[1] See Roberts et al. (2014). *Defining a New Culture: Creative Examination of Essential Requirements in Academic Disciplines and Graduate Programs*, (http://www.cags.ca/documents/publications/3rdparty/Discussion%20paper%20Essential%20Requirements%20FINAL%202014-09-22.pdf), which led to the identification of the concept of essential requirements in graduate programs.

[2] In our advertisement call we invited senior CI who had more than 5 years' experience teaching nursing clinical placements. We specifically invited CI who had experience working with nursing students with disabilities in placement. We used multiple data collections techniques including a take-home interactive diary followed by a semi structured interview with nursing students with disabilities (n-14) and CI (n-14).

a medical model view of disability and received little to no preparation and support (Epstein et al. 2020). It is important to note that nursing programs, not the hospital, are legally responsible for providing accommodations for students with disabilities in hospital clinical placement[3] (Marks & McCulloh 2016; Zazove et al. 2016). Further, despite affirmative legal obligations that post-secondary institutions 'reasonably accommodate' students, in clinical placements, accommodations were mostly absent (Epstein et al. 2020). The majority of the CIs in our study believed that accommodations do not apply to clinical and that tasks must be done a certain way, as also reported in Neal-Boylan's (2019) study. This erroneous belief is reinforced because postsecondary accommodation policies are predominantly designed for academic work and do not directly transfer to clinical due to the nature of the accommodations, e.g. modifying an exam environment (La Monica 2016)[4].

Despite a total absence of any evidence of a relationship between patient safety or medical errors and a nurse's disability (Marks & McCulloh 2015; Meloy & Gambescia 2014) most CI in our study labeled nursing students who seemed "slow" or "could not perform the skill" as students with disabilities and assumed they were a threat to patient safety in nursing practice (8/14). Similar findings have been reported in previous studies (Ashcroft & Lutfiyya 2013; Azzopardi et al. 2013; Evans 2014a; King 2018; McPheat 2014; Neal-Boylan & Smith 2016). Thus, attitudinal barriers, rather than physical barriers, are often the main challenge for nursing students with disabilities in clinical placement.

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[3] Nursing students participating in a clinical placement do not fall under the definition of a hospital employee, the clinical site is not statutorily required to provide reasonable accommodations for students with disabilities.
[4] The role of accessibility services is to review medical documentation and psychoeducational testing results and from those, based on the specific disability, offer preset accommodations that are blanket accommodations, narrow in range, and one-size-fits-all (Dolmage 2017; LaMonica 2016; Titchkosky & Michalko 2009). The student may also be left to guess what they need and anticipate a situation they are not yet knowledgeable about (Dolmage 2017; Neal-Boylan & Smith 2016). Using this approach, students are not provided the actual range of accommodations available.

Many current frameworks for guiding inclusion of students with disabilities in education are inadequate. For example, reasonable accommodation is an anti-discrimination paradigm is driven by complaints and thus inherently adversarial, stressful, and conflict-ridden. It is reactive rather than proactive and generally results in individualized solutions rather than systemic remedies (Flaherty & Roussy 2014; Mosoff 2000; National Educational Association of Disabled Students (NEADS) 2018). The human rights framework has also proven inadequate for increasing participation as it focuses on fitting people into established structures through accommodations rather than questioning those structures (Mosoff 2000; Flaherty & Roussy 2014; NEADS 2018; Roberts 2013). Furthermore, this framework relies on students disclosing accommodation needs through medical documentation. Given the risks around disclosure, in particular for the nursing profession where 'competency' is connected to having an able body–many nursing students with disabilities, especially those with invisible disabilities, relinquish their right to be accommodated (McPheat 2014; Neal-Boylan & Smith 2016; NEADS 2018).

Legal Landscape

For students with disabilities, the clinical learning environment is complex. Students must perform certain skills, and while still legally entitled to be reasonably accommodated, the accommodations cannot be seen to 'compromise' clinical requirements. Reasonable accommodation is an individualized response to a student who discloses they require accommodations and therefore, no formula exists, and each case must be looked at individually.[5]

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[5] This has been verbalized by the Supreme Court of Canada (SCC), in *Nova Scotia (Workers' Compensation Board) v Martin*. In this case, the SCC found that accommodations must be individualized in consideration to the individual's disability related-needs, abilities, and circumstances (*Nova Scotia (Workers' Compensation Board) v. Martin; Nova Scotia (Workers' Compensation Board) v. Laseur,* 2003). Drawing from the social model of disability, the SCC stated that "no single accommodation or adaptation can serve the needs of all. Rather, persons with disabilities encounter additional limits when confronted with systems and social situations which assume or require a different set of abilities than the ones they possess" (para. 81).

Post-secondary institutions must provide accommodations to enable students to meet the essential requirements of the course but only if it does not cause 'undue hardship' for the institution. Undue hardship occurs when severe adverse effects outweigh the benefits of providing accommodations. When assessing if an accommodation would create undue hardship, only three elements are considered: "cost[6]; outside sources of funding, if any;[7] and health and safety requirements, if any;[8] (Ontario Human Rights Commission (OHRC) 2016: 49). The evidence "required to prove undue hardship must be objective, real, direct and, in the case of cost, quantifiable" (OHRC 2016: 49). Outside of these three elements, undue hardship cannot be argued based on other considerations such as "business inconvenience, employee morale, [or] third-party preference" (OHRC 2016: 49).

The reasonable accommodation legal framework fails to provide "positive obligations" to ensure accessibility and inclusion (Flaherty & Roussy 2014: 8). The reactiveness and broadness of provincial human rights legislation leads to an "ad hoc enforcement of human rights" where "asserting rights or identifying *Code* breaches" is the student's responsibility (Flaherty & Roussy 2014: 8). Therefore, only students who lodge a formal complaint, which puts them in a compromised and risky position, may have their rights (potentially) enforced.

Despite the profound legal changes that mandate post-secondary institutions not to discriminate, exclude or restrict access for people with disabilities, barriers for students with disabilities to fully participate have not been dismantled. A Canadian court has explained this:

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[6] Quantifiable, based on the operating budget of the institution, not the individual disabilities office; Substantial, such that it would alter the essential nature of the enterprise, or so significant that they would substantially affect its viability (OHRC, 2014, p. 60).

[7] Make use of outside resources in order to meet the duty to accommodate and must first do so before claiming undue hardship (OHRC, 2014, p. 60).

[8] The university would need to demonstrate that its health and safety standard is reasonably necessary and that accommodation cannot be accomplished without incurring undue hardship (OHRC, 2014, p. 61).

> Accommodation does not go to the heart of the equality question, to the goal of transformation, to an examination of the way institutions and relations must be changed in order to make them available, accessible, meaningful and rewarding for the many diverse groups of which our society is composed. Accommodation seems to mean that we do not change procedures or services; we simply "accommodate" those who do not quite fit. We make some concessions to those who are "different," rather than abandoning the idea of "normal" and working for genuine inclusiveness. (*British Columbia (Public Service Employee Relations Commission) v. B.C.G.E.U. 1999:* 41)

The human rights framework, which focuses on fitting people into established structures through accommodations rather than questioning those structures, has proven to be inadequate for improving the participation of people with disabilities (Mosoff 2000; Roberts 2013). This is because legal obligations are based on narrow ideas about dis/ability and access and not on a robust understanding of ableism and sanism. This is one reason why they fail to mitigate these issues.

Despite the progress made through human rights legislation, it remains an anti-discrimination paradigm driven by complaints and is inherently adversarial, stressful, and conflict-ridden. It is reactive rather than preventative, and generally results in individualized solutions rather than systemic remedies "which would ultimately have a more significant and meaningful impact on the lives of people with disabilities" (Mosoff 2000: 274).

Universal Design and Universal Design for Instruction

Rather than a reactive approach that retrofits existing structures and processes with minor modifications, universal design (UD) promotes proactively designing for inclusion, equity, and accessibility in all areas of instruction and assessment (OHRC 2016). Universal design is "the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design" (Centre for Teaching Excellence, 2020).

Universal Design (UD) has seven principles which are utilized to "evaluate existing designs, guide the design process and educate both designers and consumers about the characteristics of more usable products and environments" (Centre for Excellence in Universal Design 2020). The UD principles include equitability, flexibility and simplicity in use, attention to perceptibility of information, and consideration of risks of error, minimizing effort and spatial considerations in design. The guidelines for implementation provide details of how to apply these principles. The universal design for instruction (UDI) applies UD principles to produce an approach to teaching and learning that engages students with and without disabilities and focuses on overlapping multiple and flexible strategies rather than a blanket solution. The UDI principles are the same as the UD principles but have an additional two principles specifically relevant to the instructional environment: to this end, the full list of principles and guidelines can be found in the appendix to this article.

Unlike accommodations, which are mandated by law after a student discloses their disability and provides medical documentation, UD/UDI are proactive choices made in advance by departments and faculty. The UDI framework has been taken up in nursing education literature and increasingly influences inclusive teaching practices in the classroom (Anderson, Davis & McLaughlin 2019; Leve, 2018; Marcyjanik & Zorn 2011). However, literature that focuses on UDI within nursing clinicals is generally limited to listing the principles (Marks & Mcculloh 2016; NEADS 2018) without developing implementable processes through which nursing programs can produce inclusive clinical requirements. A 2014 study by Sprong, Dallas & Upton (2014) demonstrated that number of years teaching and increased faculty training for inclusive teaching increased positive attitudes towards students with disabilities and the use of

UDI strategies.[9] Interestingly, another study involving nurse educator attitudes towards inclusive

teaching strategies found the opposite, more years of teaching resulted in less willingness to use

UDI[10] (Levey 2018). This may be attributable to nursing educators having a low level of

knowledge of UDI as they were trained prior to its development (Levey 2014; Marks &

McCulloh 2016) while being acculturated in a medical model understanding of disability.

A point often overlooked is that diversification of healthcare workers to include those with

disability positively impacts patient outcomes, for example through empathy or a shared

understanding of disability (Ailey et al. 2016; Ailey & Marks 2017; Argenyi 2016; Marcelin et

al. 2019; Marks & McCulloh 2015; McKee et al. 2016; Neal-Boylan 2019). In some cases,

patients may feel more comfortable being cared for by a nurse who offers personal experience

regarding an illness or disability (Ashcroft et al. 2008; Carroll 2004; Evans 2013). Studies have

shown that nurses with disabilities have found safe and effective ways to complete tasks that

they cannot do the traditional way (Korzon 2014; Neal-Boylan 2012; Neal-Boylan 2019; Neal-

Boylan et al. 2012). Further, nurses with mobility limitations can be successful case managers,

telephone triage nurses, and consultants. Studies documenting the exact number of nurses with

disabilities do not exist as many fear termination from their employer upon disclosure.

Furthermore, the College of Nurses of Ontario (2017) does not include "disability" in their yearly

nurses' demographic report. However, the number of students with a disability is increasing in

nursing (Epstein et al. 2019). Support from the employer is key to success for nurses with

disabilities and for this, a change in attitude is required (Maheady 2004; Neal-Boylan 2019).

Nurses who have acquired a disability or chronic illness before or during their time as a nurse

can continue in a nursing position if they are properly accommodated (Maheady 2004). This is

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[9] This research was based on 381 faculty members across a variety of disciplines.
[10] This was an American nationwide study.

an area that deserves further attention as it has the potential to contribute to equitable clinical

training experiences for nursing students with disabilities as well improve nursing practice more

broadly.

Theoretical Framework

Our clinical essential requirements (CER) process is situated within UD and UDI conceptual

frameworks. Universal design is founded upon frameworks within the field of Disability Studies

(DS), which focus on the disabling consequences of social exclusion. Central to DS is that

disability is a social construct, not the inevitable result of impairment and that disabled people's

social disadvantage is the result of the social environment's failure to accommodate and respond

adequately to the diversity of disability (Davis, 2006). A DS theory views disability as a form of

diversity that is a socially, politically, economically, and culturally constructed phenomenon that

excludes people with disabilities. To be successful, development and implementation of the CER

process described here must be connected to perspectives from Disability Studies (DS), with an

emphasis on perspectives within Disability Studies in Education (DSE).

Disability Studies in Education (DSE) is built upon the foundational perspectives of, and is

a subdiscipline of, Disability Studies (DS). Disability Studies in Education embraces a vast range

of methodologies, is trans-disciplinary and provides a space for researchers from diverse

disciplines that are concerned with the oppression and exclusion of people with disabilities

within education (Slee, Corcoran & Best 2019). The common thread that unifies these diverse

disciplines in DSE is "to reclaim disability … to expose the flaws of and damage done through

its many misrepresentations" (Lester & Nusbaum 2018; Linton 1998). At the center of this

research are people with disabilities that challenge how disability has been and currently is

individualized, medicalized, and exacerbated by institutional ableism and sanism in education (Rice 2006: 17). Change through inclusion connected to DS theory is not about incremental improvements but is rather an "ambitious project of educational transformation" (Artiles & Kozeleski 2016: 6) that positions instructors as "transformative figures" (Rice 2006: 7). To become pedagogical agents of transformative change, instructors' internalized ableism and sanism must be identified, deconstructed, and unlearned (Rice 2006) and therefore instructors must be "shaped by, and grounded in" DS (Connor, Valle & Hale 2012: 9). Dominant constructions of disability within health disciplines replicate and exacerbate ableist and sanist understandings of disability as a medical and pathological condition - as an individually rooted deficiency, tragedy, or defect (Beresford, Nettle & Perring 2002; Cooper 2013). This is particularly important in the nursing context because incorporating the connections between past attitudes about disability and current biases into instructor training will help internalized ableism and sanism to be increasingly identified and deconstructed. For example, critically reflecting on the institutionalization of Mad people[11] in asylums, starting from the 16th until its deinstitutionalization in the 21st century in North America, can help instructors critique present day assumptions.

Dolmage (2017), a DS scholar warns that UD conversations must be approached with caution as many institutions utilize its language as merely buzzwords, such as 'equity', 'inclusion', 'accessibility'. The rationale for utilizing UD/UDI to guide the implementation of CER process is provided by DS/DSE; without this theoretical background, UD/UDI masks the uniqueness of different students' experiences and simultaneously surrenders its reflexive

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[11] Mad is the umbrella term for the marginalized groups of people who have been and are, labelled with a psychiatric diagnosis. To use the word Mad to define oneself is political, it challenges sanism, demedicalizes their experiences and frames themselves as a community instead. Reclaiming the term 'Mad" is much like how other marginalized groups have reclaimed words, such as the LGBTQ community and the word "queer."

awareness about historical and current failure of accessible education (Dolmage 2017).

Reflecting on a program's educational practices without including discussions about ableism and sanism within those practices exacerbates the social oppression of students with disabilities and reduces equity and inclusion (Broderick & Lalvani 2017). A UD/UDI framework with a DS, and specifically a DSE perspective will reveal when ableism and sanism creep into the discussions, such as reifying stereotypical views of students with disabilities. For example, conflating psychiatric diagnoses with intelligence or celebrating students with disabilities as 'overcoming' and performing like a 'normal' person.[12] When discussions begin to focus on disability as 'getting in the way' or being 'bothersome,' this points to ableism and sanism rather than genuine inclusiveness. Therefore, even within conversations to create accessible and inclusive education and practices, over-arching ableism and sanism remains alive and well– it must be identified, named and challenged. This can be best achieved with a critical interdisciplinary collaborative process that includes students with disabilities, nurses with disabilities, DS/DSE, and UD/UDI experts. The connection between DS/ DSE, and UD/UDI highlights the importance of contextualizing disability within a sociocultural understanding, rather than a medical model of disability. Following Hamraie (2013), we view UD/UDI as disability justice and a form of activism by people with disabilities rather than for people with disabilities.

Nursing Regulatory Bodies

In Ontario, Canada, the College of Nurses of Ontario (CNO) is the province's regulatory body for nurses. It provides guidance to "prospective nursing students, guidance councilors [*sic*], educational institutions, nursing program admission officers, disability service providers and the

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[12] In Disability Studies this is referred to as being a supercrip.

public about the general demands and performance expectations of nurses in Ontario" (CNO 2012: 1). Postsecondary nursing programs are required to follow the competencies they describe as 'Requisite Skills and Abilities' (RSA).

A key first step in increasing inclusivity would be for regulatory bodies to change language that focuses on how to perform a skill in their description of RSAs, as this language currently excludes students with disabilities. For example, the CNO states that students "can feel a client's pulse" (CNO 2012: 3). Many students with disabilities could be effective nurses without having to dictate the precise manner in which they must perform a task and instead focus on the outcome of the task (Argenyi 2016; McKee et al. 2011). A more inclusive manner of framing this task would be to state that the student must be able to *evaluate* a pulse.

The inaccurate view that accommodations affect patient safety is further exemplified by the following statement in the College of Nurses regulations: "CNO is expected to work with prospective members to determine reasonable accommodation provided that accommodation does not compromise client safety and well-being" (CNO 2012: 3). As previously mentioned, the claim that students with disabilities and nurses with disabilities are a risk to patient safety is unsubstantiated and as such, this statement promotes discrimination and should be reconsidered. In our pilot study, we found that CIs (13/14) reiterated CNO's statement that students would be accommodated only as long as patient safety was not compromised (Epstein et al. 2020). Systemic discrimination existing in official CNO documents and embedded in the attitudes and practices of CI's makes it clear that the nursing profession requires a change in perspective to see how nurses with disabilities positively impact patient care and improve healthcare outcomes through understanding disability.

Essential Requirements

In order to determine which aspects of clinical practice can be accomplished through alternative means while retaining academic integrity, essential requirements need to be established in inclusive and creative ways. Nursing programs that use the framework outlined below will be engaging in a proactive approach while also minimizing requests for individualized accommodations and reducing course retrofitting. Being proactive also effectively recognizes and respects students' legal right to disclose, or not to disclose, accommodation needs. This framework will provide clear and justified parameters to determine if a requested accommodation is possible (Roberts et al. 2014).

What is an Essential Requirement?

An essential requirement is a critical learning outcome. The essential requirements of a program "include (but are not necessarily limited to) the knowledge and skills that **must** be acquired or demonstrated in order for a student to successfully meet the learning objectives of that course or program" (Rose 2009: 10). According to the OHRC (2004):

> a right is not infringed if the person with a disability is incapable of performing or fulfilling the essential duties or requirements … once appropriate accommodation is received, students must still be able to perform the essential requirements … An appropriate accommodation at the post-secondary level would enable a student to successfully meet the essential requirements of the program, with no alteration in standards or outcomes, although the manner in which the student demonstrates mastery, knowledge and skills may be altered. (23-24)

Thus, certain specific clinical tasks, may reasonably and legitimately not be accommodated if the task cannot be performed in another way or through different methods without compromising academic integrity.

Essential requirements are not the same as, and should not be confused with, essential functions. Essential functions pertain to the work requirements of a specific job while essential requirements are skills that nursing students must be able to perform to fulfill educational criteria (Matt, Maheady & Flemming 2015; Neal-Boylan & Miller 2017). For example, an essential function of a home health nurse could be the ability to climb stairs to reach the door of a patient's home; however, climbing stairs is not something all nurses are required to do.

Clinical Essential Requirements

We propose the concept of clinical essential requirements (CER). These are essential requirements as outlined in the previous section but apply specifically to nursing placements. Clinical essential requirements should not determine how the task is accomplished. The ability to auscultate the lungs, for example, should be a CER; however, to accomplish this, a student might utilize a special stethoscope (Neal-Boylan & Miller 2017). Stating that students "must be able to communicate with patients" specifies the outcome of the task rather than "must be able to talk to patients" which specifies *how* the skill is performed. Another example: "gather vitals using a variety of means" is a more inclusive manner of framing this task than "hear a heartbeat through a stethoscope" (Evans 2014b: 11). Many students with disabilities could be effective nurses if the focus was on the outcome of the task rather than dictating the precise manner in which they must perform a task (Argenyi 2016; McKee et al. 2011). This aligns with two of UD/UDI's principles. The principle of flexibility in use as the nurse could feel if a person had a heartbeat rather than hear and also connects with the principle of perceptible information, as a stethoscope design could amplify noises for people who have lost some of their hearing.

The current inflexibility of these standards can be explained at least in part by the expectation that all nursing graduates should be 'undifferentiated graduates,' which means that to enter into any nursing field, they should all have the same skills and abilities (Argenyi 2016; Bagenstos 2016). This expectation is outdated and unrealistic due to the advances in "availability and technological capacity of accommodations and the larger roles of technology and specialization in health professions training" (Argenyi 2016: 1051). We would also argue that 'undifferentiated graduates' is an outdated concept because as nursing practices continue to specialize, the belief that students must succeed across every rotation, an ideal embraced by many nursing schools, is less relevant. For example, within hospitals there is a code system organized – every nurse has a different role. When nurses are hired in the hospital, there are teams assigned and trained for different areas of expertise, e.g. a chest compressions or CPR team. A student who wants to train in this specialization requires the upper body strength to administer chest compressions and pump a heart, but this specific strength may not be necessary for all nursing roles. Nursing students should be actively involved in selecting their placements, so a student who does not have the upper body strength to perform chest compressions would therefore not choose this placement. This aligns with UD/UDI's first principle, equitable use, as it makes the curriculum design appealing to all users in its avoidance of segregating or stigmatizing students who cannot perform all the tasks that may be required to pass clinical placement when they may not have to do these tasks once employed. The concept of 'undifferentiated graduates' effectively excludes an entire group of people from the nursing profession, when in reality many students with disabilities could successfully train in a specialization based on their strengths, as nursing students without disabilities do (Argenyi 2016; Bagenstos 2016; Korzon 2014).

Identifying Clinical Essential Requirements

Roberts (2013) suggests asking the following questions to help identify which requirements are essential, and to "help refine the rationale for its inclusion. [These include] 1) What is being tested? 2) What is the nature of the task? 3) Does it have to be done in only one way? 4) If so, why?" (p. 52). For accommodation purposes, the last question is imperative to answer in order to distinguish if the task can or cannot be modified.

Following Roberts (2013), we employ a four-step legal test that has been utilized mainly in employment settings[13] and apply it to clinical requirements to determine 'bona fide clinical requirements':

> 1) Was the requirement established in an honest and good faith belief in its necessity? (i.e., not arbitrary, sincerely considered important, etc.)
> 2) Is the requirement rationally connected to the task [objective of clinical skill]?
> 3) How is it demonstrated that the requirement is reasonably necessary for completion of the task? What is the evidence for the necessity of doing the requirement in a particular fashion?
> 4) Are elements of placement requirements socially constructed in a particular manner that exclude students with disabilities from participating "based on assumptions about the group or requirement?"[14] (Roberts et al. 2014: 5).

This final question highlights that disability is constructed by society rather than being located in the individual. Therefore, if with an accommodation an individual can accomplish the

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[13] In *British Columbia v British Columbia Government Service Employees'* Union (1999), the SCC developed a new test for reasonable accommodation that consisted of a three-question test concerning employment and accommodation to help define if whether an occupational requirement was justified and defensible as a BFOR. Using this three-step test, the employer must prove that the requirement:
1) was adopted for a purpose that is rationally connected to job performance
2) was adopted in an honest and good faith belief that the standard is necessary for the fulfillment of that legitimate purpose
3) is reasonably necessary to accomplish that legitimate purpose - this requires the employer to demonstrate that it is impossible to accommodate the employee without the employer suffering undue hardship. (Alberta Human Rights Commission 2009).

[14] This question derives from Granovsky v. Canada (Minister of Employment and Immigration) [2000] S.C.J. No. 29.

requirement, the social construction of the environment or task must be considered rather than focusing on individual characteristics. Defining tasks in this manner builds an inclusive society (Roberts 2013).

This four-step model will reveal whether accommodations can be denied and on what grounds. To deny an accommodation that is based on CER can only occur after a program has rigorously analyzed their clinical requirements. Through this process, CER that cannot be accommodated due to impacting the nature or integrity of the task will be revealed. This four-test process will bring nursing clinical requirements closer to a UD/UDI approach through encouraging applying the seven principles of UD and additional two principals of UDI. Two things are imperative to note: standards are not lowered using a UDI approach, and UDI creates a new curriculum rather than merely modifying an existing one.

Initially, this change will be costly and time-consuming: requiring research, planning, design, and development for the clinical placement (CAST, 2007). Additional technology and assistive devices can also increase the cost, as can training faculty and CI in the use of technology, assistive devices, and teaching and communication strategies (CAST 2007). Finally, there are obviously costs associated with re-educating nursing faculty and CI from a medical to a social model of disability so they can become agents of change. On the other hand, time and effort is saved by instructors once a curriculum is designed using UD/UDI, as they then work from an established baseline that scaffolds UD principles (Hackman & Rauscher 2004). Another way UDI frameworks mitigate costs is through its principle of having a community of learners whereby there is interaction and promoted communication among students and faculty. We extend this to nursing faculty and CI, nursing program administration, accessibility and

institutional human rights offices, UD/UDI, DS/DSE experts, relevant national organizations, in

conjunction with key experts – nursing students with disabilities and nurses with disabilities.

Interdisciplinary Collaboration: Key to CER Implementation

Effective designing and implementation of CER outlined in this article requires comprehensive

knowledge of the discipline and of the limitations that the clinical placement create for students

with disabilities. Therefore, nursing faculty and CI, nursing program administrators, accessibility

and institutional human rights offices, UD/UDI, DS/DSE experts, relevant national

organizations,[15] in conjunction with key experts – nursing students with disabilities and nurses

with disabilities, must collaborate to address the challenges of identifying CER. The inclusion of

these key experts cannot be overstated, as people with disabilities have historically (and are

presently) denied the ability to articulate their needs due to the culture of ableism and sanism.

Thus, the approach should make sure to include the two additional principles for universal design

for instruction (UDI) framework, which promotes interaction and communication among

students and between students and the instructor ("A Community of Learners") and promotes a

welcoming and inclusive learning environment ("Instructional Climate") (Centre for Excellence

in Universal Design 2020). Proactive nursing departments could open up a dialogue with other

health disciplines in their university that have placement requirements, and/or start a provincial

or national roundtable for the nursing discipline. Collaborating has a multitude of benefits and

opportunities, such as mitigating costs of research, resources, event hosting, and training. It can

also help to intensify social inclusion efforts and generate new ideas. Removing barriers for

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[15] National organizations, such as the Canadian Nurses Student Association, should also be involved in this collaboration as they previously called for the creation of clinical accommodation process including education and training surrounding disability and accessibility (CNSA 2015).

students with disabilities to succeed in nursing school will also help the nursing community develop resources so nurses who acquire disabilities during their career can remain in the practice. Developing resources that will help older nurses relates to the principle of low physical effort whereby the design would allow the task to be completed with a minimum of fatigue. It also relates to the principle of equitable use insofar as the design is useful to a diversity of people and their abilities, and of the flexibility in use principle, where the design would accommodate a variety of individual preferences and abilities.

Conclusion

Nursing placement is one of the most challenging learning environments for which to determine accommodations, and at present they are largely absent. The nursing literature identifies a need for a learning process that is inclusive for students with disabilities in clinical, which this article begins to fill. Adopting the collaborative 4-stage process described here to identify CER will allow nursing students with disabilities to learn skill performance in a way that fits their disability needs. Unquestioned biases internalized by many nursing faculty and CI lead to tasks being taught only one way, identifying CER for placement in a consistent way will help deconstruct these biases. Although this article focuses on clinical settings, viewing disability through a DS/DSE lens as a sociocultural phenomenon needs to be implemented throughout nursing departments. This requires supportive nursing faculty and CI; however, developing positive views of nursing students with disabilities **requires** a broad, systemic, collaborative and coordinated approach led by nursing programs, nationally and internationally, in conjunction with institutional human rights and accessibility service professionals, relevant national organizations, nursing program administration, UD/UDI and DS/DSE experts and most

importantly with key experts – nurses and nursing students with disabilities. Ideally, nursing

regulatory bodies would also participate. Implementation of CER must be a proactive and

reflective process with an over-arching commitment to inclusion and equity.

Appendix

Principles	Universal Design Guidelines	Universal Design for Instruction Guidelines
Equitable Use	The design is useful and marketable to people with diverse abilities. **Guidelines:** 1a. Provide the same means of use for all users: identical whenever possible; equivalent when not. 1b. Avoid segregating or stigmatizing any users. 1c. Provisions for privacy, security, and safety should be equally available to all users. 1d. Make the design appealing to all users.	Instruction is designed to be useful to and accessible by people of diverse abilities.
Flexibility in Use	The design accommodates a wide range of individual preferences and abilities. **Guidelines:** 2a. Provide choice in methods of use. 2b. Accommodate right- or left-handed access and use. 2c. Facilitate the user's accuracy and precision. 2d. Provide adaptability to the user's pace.	Methods of instruction and resources used offer students variety, flexibility, and choice such that different options/modalities are provided for engagement and comprehension.
Simple and Intuitive	Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level. **Guidelines:** 3a. Eliminate unnecessary complexity. 3b. Be consistent with user expectations and intuition. 3c. Accommodate a wide range of literacy and language skills. 3d. Arrange information consistent with its importance. 3e. Provide effective prompting and feedback during and after task completion.	Instruction is straightforward, eliminating unnecessary complexity.
Perceptible Information	The design communicates necessary information effectively to the user, regardless	Information is communicated effectively to the student regardless of ambient

	of ambient conditions or the user's sensory abilities. **Guidelines:** 4a. Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information. 4b. Provide adequate contrast between essential information and its surroundings. 4c. Maximize "legibility" of essential information. 4d. Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions). 4e. Provide compatibility with a variety of techniques or devices used by people with sensory limitations.	conditions or the student's sensory abilities.
Tolerance for Error	The design minimizes hazards and the adverse consequences of accidental or unintended actions. **Guidelines:** 5a. Arrange elements to minimize hazards and errors: most used elements, most accessible; hazardous elements eliminated, isolated, or shielded. 5b. Provide warnings of hazards and errors. 5c. Provide fail safe features. 5d. Discourage unconscious action in tasks that require vigilance.	Instruction anticipates variation in individual student learning pace and prerequisite skill.
Low Physical Effort	The design can be used efficiently and comfortably and with a minimum of fatigue. **Guidelines:** 6a. Allow user to maintain a neutral body position. 6b. Use reasonable operating forces. 6c. Minimize repetitive actions. 6d. Minimize sustained physical effort.	Instruction is designed to eliminate nonessential physical effort to allow maximum attention to learning.
Size and Space for	Appropriate size and space is provided for approach, reach, manipulation, and use	Instruction is designed regardless of a student's size,

Approach and Use	regardless of user's body size, posture, or mobility. **Guidelines:** 7a. Provide a clear line of sight to important elements for any seated or standing user. 7b. Make reach to all components comfortable for any seated or standing user. 7c. Accommodate variations in hand and grip size. 7d. Provide adequate space for the use of assistive devices or personal assistance.	posture, mobility, and communication needs.
Community of Learners		Interaction and communication among students and between students and faculty is promoted.
Instructional Climate		Interactional climate is welcoming and inclusive, and high expectations are promoted for all students

(Centre for Excellence in Universal Design 2020; Centre for Teaching and Learning 2021).

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