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Teacher Candidates' Critical Reflections on Inclusive Physical Education: Deconstructing and Rebuilding New Paradigms

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Abstract

This paper discusses the impact of an intentionally designed inclusive physical education teacher education (PETE) course at two Canadian universities that challenged preservice teachers (PSTs) to critically reflect on their experiences of inclusion. Data were gathered through videotaped interviews and focus groups at the conclusion of coursework. Results indicated that PSTs entered their PETE courses with limited experience learning or working with students living with disability (SLWD). The lens through which they viewed physical education (PE) was from the perspective of an able-bodied athlete. PSTs described growth in their perceptions of inclusion, and broadened their approaches to inclusive PE pedagogy. Findings suggest that through an intentionally designed inclusive PETE curriculum, notions of SLWD in PE can be disrupted, and PSTs can acquire the knowledge and skills to provide an inclusive PE classroom.

Keywords: pre-service teacher education; inclusive physical education; disability physical education teacher education

Résumé

Cet article traite de l'impact d'un cours en formation initiale des enseignants d'éducation physique (EP) intentionnellement conçu sur l'inclusion dans deux facultés d'éducation d'universités canadiennes. Ce cours a mis les enseignants en formation au défi d'avoir une réflexion critique sur leurs expériences d'inclusion, de vivre des activités et de faire des lectures pour questionner ce concept. Les données ont été recueillies au moyen d'entrevues enregistrées sur vidéo et de groupes de discussion pendant les cours de méthodologie et à la fin des cours. L'analyse thématique inductive à l'aide de la vidéo a fourni de la profondeur aux données, en ajoutant aux mots parlés des indices non verbaux (Wang et Lein, 2013). Les résultats révèlent que les enseignants en formation ont commencé leurs cours de méthodologie avec une expérience limitée d'apprentissage ou de travail avec des étudiants handicapés, voyaient l'EP du point de vue d'un athlète, ont exprimé leur surprise en s'engageant et en apprenant des stratégies inclusives, ont déclaré avoir vu un large éventail de pratiques inclusives au cours de leur stage, ont décrit la croissance de leurs perceptions de l'inclusion et élargi leurs approches de la pédagogie inclusive de l'EP. Les résultats de cette étude suggèrent que, grâce à un cours intentionnellement conçu sur le thème de l'inclusivité, les notions d'étudiants handicapés en EP peuvent être remises en question, et les enseignants en formation peuvent acquérir les connaissances et les compétences nécessaires pour fournir un cours d'EP inclusive.

Mots-clés: éducation physique inclusive; handicap; formation des enseignants d'éducation physique.

Introduction

Notions of ability and disability in physical education (PE) have long been dominated by the narrative of normativity. These perspectives focus on able-bodied individuals, with limited consideration of adaptations for individuals living with disabilities. In addition, physical educators are most often able-bodied individuals, who are competent movers with a high degree of physical literacy and a broad range of experiences in sports and physical activity. It is important to acknowledge "what abilities are recognized, valued, nurtured and accepted, while others are rejected by whom, where and why in schools?" (Evans, 2006, p. 177). Students with disabilities often suffer exclusion from PE or are under-served in attempts to provide integrated PE classes (Haegle, 2019). Penney et al. (2018) reported that the development of inclusive practices must consider the interconnectedness of curriculum, pedagogy, and assessment. Conversely, they suggest that ongoing concerns with the teaching practices of physical educators can contribute to a lack of inclusion. This research advocates for an inclusive approach to PE, a social justice initiative that adapts curriculum, instruction, and assessment to meet students' individual needs in meeting both the specific and broader goals of PE. Equally significant is an intentional approach that allows students living with disability (SLWD) to recognize themselves in PE (Spencer-Cavaliere & Watkinson, 2010). This study hopes to influence PETE practices and to demonstrate the need to disrupt PSTs' notions of inclusive PE (Penney et al., 2018).

As the "paradigm of normativity" (Fitzgerald, 2005, p. 54) dominates instruction and assessment in PE, the literature supports moving away from practices that label and compare deficiencies to the norm. The researchers support moving from the medical perspective of disability and transitioning to the social model that "supports the view that disability is socially constructed and that it is society that disables peoples with impairments" (Fitzgerald, 2005, p. 44). Makopoulo et al. (2022) acknowledged that this shift in attitude and pedagogy will be challenging and compounded by inconsistent messaging "about what inclusion is, for whom it is relevant, and how it can be evidenced in practice, is potentially confusing and at times even contradictory" (p. 248). Penney et al. (2018) also suggested that although there has been a historical failure in inclusive practices in schools for a myriad of reasons, the focus now should be on developing physical educators with sound knowledge and understanding of inclusive PE. Penney et al. (2018) further contended that inclusive practices in PE must consider "how inclusion is being thought about in PE and what is envisaged, experienced and accepted as inclusive practice" (p. 1062).

The researchers believe the way forward requires a social justice model in the Universal Design for Learning (UDL) tradition. UDL asserts that instructional strategies are intentionally designed inclusive of all students (Lee & Griffin, 2021). The Center for Applied Special Technology (CAST) suggests guidelines for planning and instruction include multiple means of representation, action and expression, and engagement providing success for all students (CAST, 2011). In addition, instruction should align with the United Nations Convention on the Rights of Persons with Disabilities (2006), a declaration signed by 182 countries. This declaration was designed on the foundation of the social model of disability, which advocates for the rights of individuals living with disabilities (UNESCO, 2015).

Breaking through this normative framework for PE teacher educators is challenging (Penney et al., 2018). Inclusive practices go beyond the physical structures or additions to a facility. It includes ideals of "spatial social inclusion, relational social inclusion, functional social

inclusion and social inclusion" (Bailey, 2005, p. 76). Teachers, administrators, and policy-makers need to acknowledge that "inclusion is not a prescriptive set of expectations, but moreover it rests upon creativity, flexibility and responsiveness to the meeting of the needs of individual pupils" (Vickerman & Coates, 2009, p. 150). By challenging ourselves and our PSTs, the researchers learned quickly that individuals "learn more by being together than being apart" (Plue, 2015). The researchers understand that the inclusion of authentic voices of individuals living with all types of different abilities can facilitate perspective shifts in PSTs and help them deconstruct limited views of disability resting only in the realm of the physical. The researchers intentionally used activities to model how educators might integrate a variety of disabilities, including learning disabilities, individuals on the autism spectrum, and those with cognitive challenges. The researchers, as physical educators, intuitively understand that inclusive practices must be responsive to the individuals in our classes. However, policies and procedures for "special education" or "adapted PE (APE)" have not been uniformly applied, and this would include making attitudinal adjustments for the inclusion of all students (Penney et al., 2018; Spencer-Cavaliere & Watkinson, 2010). As one administrator of programs for people living with disability stated "sometimes a facility is inclusive, but it has to be attitudinally accessible as well" (Plue, 2015). PETE programs need to acknowledge that there are significant benefits to the social and emotional development of children living with disabilities, when they can participate fully in PE classes that are designed with effective adaptations for full inclusion. Further, PETE programs must advocate that "teachers and schools, value equally the accomplishments, attitudes and wellbeing of every young person while providing a curriculum that is relevant and meaningful" (Penney et al., 2018, p. 1064). So, the researchers challenged PSTs and themselves to break the barrier and learn what a fully inclusive definition of PE could mean and how physical educators might reshape the future of PETE in ways that are accessible and inclusive.

Literature Review

The researchers, who also teach in Faculties of Education, have found that PETE students are typically physically gifted and possess skills and competencies that are above average. Professional experience gleaned from over 30 years in education provided the researchers a unique lens through which to examine the connection between the literature and professional practice (Merriam, 2005). PSTs most often arrive from backgrounds rich in movement, sport, dance, outdoor education, or physical pursuits and have excelled in normative notions of PE programs (Wilkinson, 2017). Bailey (2005) added, "the personal qualities and teaching styles of PE teachers can be significant factors in the development of pupils' perceptions of the subject" (p. 85). The same can be true of individuals becoming physical educators; it is imperative that teacher educators find ways to facilitate experiential learning wherein the PSTs can empathize with the lived experiences and voices of SLWD (Koh, 2021). Unfortunately, physical educators often teach SLWDs with a deficit of experience or understanding (Jovanovic et al., 2014; Kozub et al., 1999) or have received diverse and conflicting messaging of PE-specific inclusive pedagogies (Makopoulu et al., 2022). As a result, Faculties of Education need to:

> establish a clear context as to what inclusive PE for children with special needs means in practice. Consequently, what trainee and newly qualified PE teachers need is sound pedagogical guidance and practices which are embedded across the whole training curriculum. (Vickerman & Coates, 2009, p. 138)

Koh (2021) concurred, finding that PETE programs do not routinely offer APE teaching or training opportunities during the teaching practicum. Related to this work, Koh concluded that the lack of focused APE experiences resulted in a lack of confidence in PSTs' abilities to deliver inclusive PE.

Unfortunately, some PSTs may recognize that full inclusion is a desirable policy, they have a discouraging insight that implementation may not be a realistic target in daily practice. As a result, there is "a need for the profession to establish a clear and consistent approach to inclusive PE through initial teacher training" (Smith, 2004, p. 52). Several authors (Jovanovic et al., 2014; Koh, 2021, 2018; Penney et al., 2018; Taliaferro et al., 2015) concurred that the impact of PST training is necessary to disrupt old notions of privileged physical literacy and a pre-service course or program that uses a social justice approach to inclusion is required. Kozub et al. (2015) described modeling inclusive paradigms in pre-service teacher education, stating, "adapted PE is related to how physical educators view learners with unique motor and/or interest needs, and how teacher education programs can provide pre-service physical educators with the necessary training to facilitate acceptance of learner diversity" (p. 350). The researchers argue that the pre-service training years are vital times to prioritize learning about pedagogical strategies that work for all PE learners (Koh, 2021; Makopoulou, 2022). In addition, PSTs may need to be made aware of the barriers that SLWD face in attempting to participate in sport. These barriers can range from a lack of opportunity, inaccessible facilities, and a lack of understanding on the part of PSTs on how to engage SLWD in sport and available programs/resources (DePauw & Gavron 2005, as cited in Kluppis, 2018).

There are several international declarations that mete out policies and standards of equity for SLWD (UNESCO, 2015, 2017; WHO, 2010, 2011). Clearly, "access to quality PE is a human right, and that this right is inalienable and not subject to change or exclusion based on disability" (UNESCO, 2015, p. 6). To bridge the gap between policy and pedagogy at the grassroots level, pre-service teacher education courses can be critical learning experiences for PSTs (Penney et al., 2018). Ultimately, inclusive PE is a complex and multifaceted issue. Schools and teachers struggle with resources, facilities, knowledge, and tools to fully implement it effectively. This is because:

> inclusion involves a process of systemic reform embodying changes and modifications in content, teaching methods, approaches, structures and strategies in education to overcome barriers with a vision serving to provide all students of the relevant age range with an equitable and participatory learning experience and environment that best corresponds to their requirements. (United Nations, 2016, p. 4)

In order to make significant changes in attitudes and systems, PSTs need to be intentionally engaged in experiential learning, with critical reflection on literature, real world experiences, and past conceptions of ability and disability (Haegele, 2019; Penney et al., 2018).

It is essential the PETE programs include meaningful reflective practice as an element of teacher preparation, and provide PSTs with opportunities to develop a lifelong practice of reflection and ongoing learning in their professional careers. Griffin (2003) referred to this as reflecting on "critical incidents." She stated that "the powerful influence of prior educational experiences and a varying capacity to think reflectively and critically present potential barriers that preservice teachers face in implementing the knowledge and skills learned in their teacher education programs" (Griffin, 2003, p. 207). PETE instructors must embed in their coursework opportunities for PSTs to reflect on APE experiences actively. Becoming a critically reflective practitioner takes practice, like any other pedagogical skill, and it is imperative that teacher

educators provide PSTs with opportunities to engage in meaningful dialogue and reflective conversation with others. Larrivee (2000) stated that "developing as a critically reflective teacher encompasses both the capacity for critical inquiry and self-reflection. Critical inquiry involves the conscious consideration of the moral and ethical implications and consequences of classroom practices on students" (p. 294). Current best practices in PE pedagogy require teachers to be critically reflective, aware of their students in real-time, and able to reflect in action and adjust as needed. This framework is ideal for PSTs learning about PE for SLWD. Marcos et al. (2009) contended that as they reflect, "the teacher better understands and extends his/her professional activity, and that reflecting on teaching problems will lead to new insights for practice" (p. 192). The benefit to the educator is that through an interrogation of their beliefs and practices, they "enrich, systematize and construct professional knowledge" (Marcos et al., 2009, p. 192).

Methodology

The nature and goals of this research suggested a qualitative approach set within case study methodology. Case study is defined as "a bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information and reports a case description and case-based themes" (Creswell, 2007, p. 73). The researchers felt that the phenomenological nature of our research questions suited qualitative case study, as the authors were looking at a discrete population (PSTs) and their specific insights and reflections about inclusive PE. Thus, it was appropriate to define the parameters of the case as PSTs experiencing their pre-service training. This research, set within two universities, allowed the authors to align with Creswell's (2012) approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem. The researchers sought an in-depth, meaningful understanding of PSTs' perspectives about inclusive practices in PE, by using interviews and focus groups to capture their reflections and insights from within a real-world context (Yin, 2012). Through the data collection methods and classroom interventions, the researchers created a "participatory, collaborative project, a project that joins the researcher with the researched in an on-going moral dialogue" (Denzin & Lincoln, 2011, p. ix). This research used case study methodology to use qualitative research to explore a problem and develop a detailed deep understanding of the central phenomenon studied (Creswell, 2012).

Methods

Participants

Students in the second year of a Bachelor of Education program at two Canadian Universities participated in the research. All participants were full-time PSTs taking a mandatory course (36-hour, 3-credit) in PE methods. One university was a technological university based in Ontario, Canada, in the Greater Toronto Area. The other university site was in Nova Scotia, Canada, in a rural setting. Thirteen PSTs participated in the focus groups. Nine participants were in two separate focus groups from Nova Scotia and one group of four from Ontario. Upon completion of the course and following an experiential three-hour visit to the Abilities Centre in Whitby, Ontario, 23 PSTs from the Ontario campus participated in video interviews. The Abilities Centre is acknowledged internationally as a community hub and inclusion incubator, offering a wide array of fully accessible activities, learning programs, and spaces. This experience was unavailable to PSTs at the Nova Scotia campus, who did not participate in the individual video

interviews. While these are different programs, the philosophical underpinnings shaping both programs were similar in nature, with a focus on play, inclusion, and fundamental movement skills.

Description of PE Methods Course Content

In response to the literature and through researcher discussions, the PETE curriculum and instruction courses underwent revision to develop the inclusive practices of the PSTs. Amongst the changes described and discussed in this paper, the following three elements are representative of the intentional design for inclusion:

- *Reflecting on past lived experiences of inclusive PE as students.* Intentionally reflecting in class, PSTs worked in small groups to describe in writing their own lived experiences. A gallery walkabout followed, where PSTs further interrogated their experience with inclusive PE. They used a jigsaw strategy to share across groups and then directed to identify common themes from their own lived experiences. In small groups, PSTs then used a T-chart (looks like/sounds like) to unpack the experiences of their peers. This was done to illustrate how their future students might have different perceptions of PE than they did as students. Finally, each group became an "expert" on one article from the literature. The group identified key themes within the article and shared their findings related to their lived experiences of inclusive PE. Finally, PSTs completed an online discussion post as an exit ticket.
- *Disrupting previous concepts of ability and disability through playing adaptive and para-sports* (such as bocce, wheelchair basketball, seated volleyball, goalball, and more). Regarding the alternative or non-traditional sports, PSTs were asked prior to each activity if they had ever tried it, what challenges they were anticipating, and what biases or stereotypes they might perceive (e.g., yoga and dance are for girls). They then posted a discussion comment about each of the alternative activity days, stating their own and colleagues' reactions and how they might implement in their own classes, including barriers and facilitators (e.g., local facilities, cost, permission, risk management). They were also asked to write a short paragraph about how they would advocate for these activities to their future principals, providing literature to support the inclusion of these activities.
- *Review of literature*. The PSTs had opportunities to read literature on best practices, engage in dialogue with individuals living with disabilities, and reconceptualize what fully inclusive PE pedagogy means.

Interviews and Focus Groups

The main source of data collection was the participants' reflections after completion of the methods course. Their insights and views on inclusion and accessibility were collected through interviews and focus groups in two phases. First, through interviews of 23 participants captured on videography using prompting questions, and second, through three focus groups. Three focus groups were recorded online, with nine PST participants (nine in two groups from Nova Scotia and four in another group from Ontario).

Phase 1: Videography of Interviews

Twenty-three participants from the Ontario campus completed the video interviews. First, the researchers collaboratively developed the video interview/focus group questions (which were shaped by the research questions) through a series of three online meetings. Questions included

elements intended to elicit PST perceptions of inclusion before they took the PETE course, moments of insight during the course, and final reflections upon completion of the course. In this way, the researchers were able to track reflective growth and changes in attitudes of PSTs as a result of their experiences in the course. For example, "What were your experiences as a student in PE around adapted or special education in PE," "How did you witness the inclusion of individuals with disabilities in PE on your placement," and "What insights have you gleaned about full inclusion from your experiences in this aspect of your teacher education" (see Appendix A for full list of questions.) These interviews were administered by the researchers, and recorded by university audio-visual technicians. Subsequent data were collected by creating videos of PSTs reflecting on their major insights during the course. These were conducted after the completion of the course and after their first practicum experiences.

Phase 2: Two Online Focus Groups

Nine participants from Nova Scotia campus, four participants from Ontario campus. In this phase, research assistants trained by the researchers conducted the three focus groups. The researchers aimed to analyse how students' initial perceptions of inclusion had changed or evolved due to the activities, readings, and experiences in the course. The focus groups produced 10 hours of video material for analysis. The PSTs in the focus groups were asked to reflect upon their learning experiences with inclusive pedagogy during their time as a student in PE, PETE courses, and practicum experiences (see Appendix A for full list of questions).

Data Analysis

Data were collected with Research Ethics Board approval, data were not connected in any way to students' academic standing, and students had permission to exit the interviews or focus groups at any time without prejudice. The data collected from the PSTs were inductively analyzed for themes surrounding inclusion and accessibility. No member checking was done as part of the process; participants did not review their own videos or comments, as the researchers wanted to capture authentic reflections and avoid a situation where PSTs thought they might change their answer to please the instructors/researchers.

Inductive thematic analysis for the coding and analysis of relevant themes to emerge from the data during analysis, rather than entering analysis with predetermined categories (Saldaña, 2013). This process allowed the researchers to use their experience and expertise as physical educators to identify and pull themes from the data as it was analyzed. This method required reading and coding the data and aggregating frequently repeating codes into major themes (Creswell, 2014). Inductive thematic analysis was selected to best capture the depth present in video content. Inductive thematic analysis is suited for the discovery of unexpected themes in the data when both audio and visual elements are analyzed together (Saldaña, 2013). Analyzing videos with NVivo "the interaction of the participant with the environment, capturing of nonverbal cues" (Wang & Lien, 2013, p. 2933). Video analysis added complexity and depth to the data beyond just textual analysis (Saldaña, 2013). The audio-visual analysis demonstrated what the participant was saying and how they said it. Insights and themes were drawn from the language used in the interview and visual cues such as the study participants' body language, tone, facial expressions, and emotions. The themes arriving from the data were interrogated individually by the researchers and discussed collectively. The researchers met weekly (virtually) for one month to work through the video data. In general, there were no disagreements as to larger themes, which included participants' insights related to lack of inclusivity, athletic positioning, the benefits of inclusive

practices, practicum experiences, and challenges of developing inclusive pedagogy. The initial individual analysis prior to meeting provided some validity through triangulation of data. Each researcher described why they had emphasized certain aspects of the videos.

Results and Discussion

Data analysis revealed five themes (lack of inclusivity, athletic positioning, benefits of inclusive practices, practicum experiences, and developing an inclusive pedagogy) supporting our understanding of PE PSTs' experiences with inclusion and the influence of an intentionally designed inclusive PETE curriculum. The researchers attempted to explain participants' views and experiences within the literature. The researchers have included with each theme a representative sampling of comments in table form to limit our biases in presenting and interpreting the data. To provide anonymity to all study participants, they are represented in the data numerically (e.g., P1, P2). An overview of the themes follows, supported by examples of specific comments from PSTs linked to the literature.

- *Lack of inclusivity.* PSTs reported that as students, they rarely saw SLWD in PE. When SLWD were in their classes, generally, inclusive opportunities were not offered.
- *Athletic positioning*. PSTs described themselves as athletic, without disability, and enjoying a competitive and sport-focused PE program as a student.
- *Benefits of inclusive practices*. PSTs were surprised to engage in a curriculum in their PETE program that focused on inclusion and instructional strategies that served the needs of all students.
- *Practicum experiences.* PSTs reported seeing a wide range of inclusive practices during their practicum. Many PSTs described an absence of inclusion, while others observed physical educators providing a range of inclusive practices for their students.
- *Developing an inclusive pedagogy.* PSTs described growth in their understanding of inclusion and inclusive practices in supporting SLWD following their PETE experience. PSTs described, often with excitement and passion, their new understanding of inclusive practices and their commitment to providing a fully inclusive PE experience for their students.

Lack of Inclusivity

PSTs described their lived experiences in PE as a student from the position of someone living without disability, the physically literate dominant athlete in the class. As reported by Bailey (2005), when first enrolling in PETE, our PSTs embodied attitudes and perceptions that were heavily focused on sport, skill, and fitness, with the expectation of carrying what was successful for them into their teaching practice. Conversely, those who reported poor experiences in PE as students indicated higher levels of fear or anxiety about becoming a physical educator. PSTs universally described their PE experience as one that served the needs of the teacher rather than the students in the class. They felt they were not represented and did not have a voice in the activities chosen, class organization, and teaching methods of their teacher. This lack of responsiveness to students' needs and a general lack of creativity in instructional strategies limited the inclusion experienced by PSTs, likely influencing their developing teaching practice (Bailey, 2005; Jovanović et al., 2014; Taliaferro et al., 2015). PSTs consistently described what might be termed as "old-school" PE. They described these courses as favouring the athletes in the class with a focus on sport, skill, and fitness. As noted in this study, the literature expresses a concern that

within this apprenticeship of observation as a PE student, PSTs become acculturated into less-than-ideal inclusive practices (Ko &, 2013; Lawson, 1983; Lortie, 1975; Richards et al., 2013).

Table 1
Initial Experience of Inclusion as a PE Student

Participant	PST Comments
1	Loved it as I was athletic, but I felt bad for my friends who weren't sporty. Great experience as an athlete.
13	Core group of self-proclaimed athletes who dominated and the teacher would sometimes join in to try and share the ball.
7	Did not hear about inclusion in elementary, secondary seemed better, but nothing said about it – don't remember. Never really heard the word inclusion until university.
8	Lots of bullying of non-athletes in an all-boys school.
3	Played traditional sports – did not cater to individuals who had an interest in other sports. In elementary we played dodgeball every day. Did not cater to individuals that had an interest in other sports.

Athletic Positioning and Benefits of Inclusive Practices

PSTs, in describing their learning expectations coming into PETE, widely anticipated the "paradigm of normativity" described by Fitzgerald (2005). As predominantly athletic, competent movers, PSTs' learning expectations matched their sport experience (Evans, 2006). Past experiences based on their own levels of physical literacy and competency laid a foundation for what their preconceived notions of the PETE course might entail. PSTs' expectations of their PETE course accurately represent the work of Aaslund et al. (2019), who found static representations of successful PE students anchored in fitness testing, skill attainment, and an incoming positive attitude towards PE, individuals who had poor experiences with PE approached the course with trepidation, anxiety, and fear. The majority of PSTs were surprised at the play-based, inclusive pedagogical philosophy of the course. PSTs described their experiences in the following representative samples of their critical reflections offered through course activities, focus groups, and interviews.

Table 2
Expectations of PETE Course

Participant	PST Comments
4	Anxiety, worry, thinking I had to be athletic to do well in the course. Did not expect the focus on FMS, active for life, and how to inspire those that may not want to be there.
5	Anxiety at first, especially with dance – learned it is how you approach the content, you can get there with them and divert that anxiety and move forward.
8	Eye opener that we had to deal with all types of students. Really different between expectations and reality.
6	Separation between our abilities in sport and what I have seen in reality.
5	I thought the focus was going to be more on the curriculum and how to teach a specific sport. I enjoyed the shift to EDI and how we are going to meet the students' needs.
6	Learned a lot, confidence is not there yet, but developing.

Practicum Experiences

PSTs witnessed a range of inclusive practices in their teaching practicum. The discussion of their practicum experience was rich, deep, and revealing. Some PSTs reported a school-wide systemic approach to ensuring inclusion and equity for all students, of the nature hoped for in UNESCO's (2017) *Guide for Ensuring Inclusion and Equity in Education.* In other settings, PSTs experienced a complete disregard for any range of inclusion for SLWD. In addition, several PSTs commented that the subject of PE was marginalized in the school, resulting in the isolation of the PE teacher, less collegiality, and limited opportunities for dialogue and critical reflection concerning inclusive pedagogies (Spicer & Robinson, 2021). Marcos et al. (2009), amongst others, articulated the importance of reflection in teachers' continued growth, often most impactful as a professional dialogue with colleagues. PSTs observed that students were often labelled as "special needs" or "adapted PE," and the students living with disability were rarely included in the full PE program. Further, some PSTs reflected that the gymnasium facility itself was not fully accessible and dominated by individuals with high levels of physical literacy, thus not being seen as a "safe place" for non-athletic students. One PST commented that he could not even talk about it; he was embarrassed by the complete disregard for inclusive practices. Comments on PSTs' experiences in their practicum included references to systemic challenges to inclusion.

Table 3
Observations of Placement and Inclusion

Participant	PST Comments
8	PE teacher isolated, however, inclusivity was good, based on relationships she had established over years of teaching the same students.
7	Every Thursday the special needs kids come in the gym and grade 12 students supervise, modify and adapt games.
8	Doing the best they can with what they have got.
3	There is an elementary student, a boy transitioning to a girl, she wears girls' clothing to school. She wanted to play on the girls' team in PE and the AT said no, you are on the boys' team. It is a barrier; it really brings down the vibe in PE.
2	At my high school placement, the whole department is following a sport focused structure. For example, once the volleyball nets go up, they are up for all classes for a whole unit. Everyone in the department has to do the same thing.
6	Hope for the future because I see it in the school I am currently placed. High school has many different programs to support students – community-living, although exceptional students don't have their own class time, they come to the regular PE class. Social aspect is important, although there are challenges.
6	Classroom teachers don't offer support – these students lack confidence.
3	AT is attempting to use inclusive language, especially with a grade 9 girls' class with a boy in transition. My AT for example when taking the students around on the first day described the girls' change room as ours. I had some fear that students could not or would not adopt inclusive language, but they could and they did.

Developing an Inclusive Pedagogy

The reflections of PSTs in this study align with the findings of Vickerman and Coates (2009) and Penney et al. (2018). Inclusion for SLWD goes beyond facility design and must include intentionally designed inclusive policies, practices, and pedagogies. While it may be true that teachers are not prepared to work with SLWD, these PSTs gained insights into the reality of programming and teaching for inclusion. Through modeling inclusive practices, PETE instructors allowed PSTs to experience and learn instructional strategies designed to support the diversity of learners (Koh, 2021; Kozub et al., 2015). Intentional disruption of past ideas of inclusion resulted in some discomfort, by relief and a sense that everyone had a place when classes were designed for inclusion (Penney et al., 2018). PSTs discussed how their affective response to PE shaped how they might approach the design of their classes as teachers. Several participants realized how potent these messages are. Years later, their sense of self as embodied individuals had been shaped

by experiences in PE and movement. A sampling of participants' comments follows, demonstrating growth in their developing inclusive pedagogies.

Table 4
Pedagogical Insights on Inclusive Design for PE

Participant	PST Comments
9	Levelling the playing field.
10	Everyone can have success, everyone has a place, everyone can play a disability sport.
21	Lived experiences of different movement patterns.
33	Adjusting to students' learning styles to meet their needs, meet them where they are at. Make them feel part of the class, everything they do and have to say matters.
11	There are physical, mental, and cognitive aspects of PE, not just looking at physical disability.
8	Teaching life skills through sport rather than just sport.
27	Not just the facility is accessible it is attitudinally accessible, including integration of employees with disabilities leading the PETE students in programs.
36	Place the student in control, don't rely on your perception – ask the student and they will tell you what they are capable of. Students may have a goal; it is our job to help them achieve it.
7	Barriers for students can be in poor planning, plan for everyone. I think there needs to be ways to show representation for students who are struggling, show them they are not alone.
30	A barrier for a student can be individual, they exclude themselves rather than include because they don't feel they are good enough to do something, my job as a teacher is to create a safe environment so they can succeed.

As supported by Bailey (2005), PSTs revealed a shift in their understanding of SLWD, extending their understanding of disability beyond the physical space to the social. They developed the understanding that it is their job as educators to adjust their pedagogies to support SLWD. PSTs indicated that they saw possibilities for inclusive pedagogies in PE. Kozub et al. (2015), as supported by Bailey (2005) and Penney et al. (2015), suggested that with opportunities to develop inclusive approaches in PETE, physical educators can disrupt the "normative paradigm." Griffin (2003) and Penney et al. (2018) have suggested that reflecting on these critical incidents within PETE programs designed to disrupt previous notions of ability and disability is necessary and can advance understanding and teaching practice. As Koh (2021) demonstrated, intentionally engaging

PSTs in their PETE programs in APE experiences and opportunities can influence their attitude and confidence to provide an inclusive classroom for their students, as is demonstrated in this representative sample of participants' comments.

Table 5
PSTs' Changes and Growth in Views on Inclusion

Participant	PST Comments
30	That everyone can play disabled sports. Everyone has a place.
2	Provide opportunities for those people for whom there is no opportunity, not just a physical disability.
7	Before, my view of inclusion was juvenile, now I see it is much more than what I thought.
29	Not relying on your perception but asking the student what works. Importance of student voice and control.
33	Impact of full inclusion on overall health of society "that's the dream right."
27	You learn how to relate to people by being together, not being separated.
15	Barrier is bullying whether it is disability or student feels less comfortable, teacher's job to create a safe environment.
4	It wasn't disability, it was ability – perfect name for it, in these sports these people with disabilities have so much capability.

Conclusion

The researchers, who are also PE teacher educators, frame their philosophical approach to inclusion based on the UNESCO (2015; 2021) principle that quality PE is a human right. The researchers argue that an essential component of teacher preparation to deliver quality PE as an inalienable human right, is an intentional exposure to activities and individuals that span a broad continuum of abilities and disabilities. This process becomes critical to fully prepare new teachers for the diverse populations in their future classes.

While awareness is essential, it is only one of several key components to bringing inclusive PE into professional practice. PETE programs need to incorporate reflective practices throughout the pre-service years, allowing PSTs to articulate, discuss, and develop competencies in intentional reflection on professional practice. The critical reflections of PSTs captured in video interviews and focus group discussions in this research indicated that awareness of, and exposure to, fully inclusive PE could impact future physical educators' teaching practices. In alignment with Fitzgerald (2005), these reflections also honour the principles of voice, and choice, in PE. Listening to participants' articulations of the types of movements that will bring joy while challenging improvements in physical literacy is critical. By honouring PSTs' voices and

providing a safe space for full engagement regardless of ability level, the researchers modeled for new teachers how they can honour the voices of their future students and create fully inclusive PE classes.

While there may be systemic or organizational challenges to implementing fully inclusive PE (Penney et al., 2018; Vickerman & Coates, 2009), the researchers believe that PSTs can be better prepared to design accessible and inclusive classes by unpacking past experiences and reshaping what inclusive PE can become. In many cases, the PSTs' observations of what was happening in the "real world" classes of their placements indicated that due to multiple factors (attitudinal, facility, resources, lack of advocacy, etc.), fully inclusive PE was not occurring. When provided with the opportunity to interrogate these observations in the context of their lived experiences in their PETE methods course, the data revealed growth in their understanding of inclusive practices in PE.

In the process of learning to become a teacher, there is a necessary deconstruction of previously held notions of inclusive PE, and in this research, a purposeful disruption of past frameworks and ideals was created for PSTs. The researchers did this by integrating alternative movement experiences, participating in activities across the spectrum of abilities, reading, reflecting, and providing safe places to dialogue and learn from one another. PSTs' evolving pedagogical frameworks are often shaped by past experiences, either positive or negative, as participants in PE. PETE programs often inherently attract individuals with high levels of physical literacy, or conversely, in primary or elementary programs, PSTs with high levels of anxiety towards PE. By reframing our pedagogy, the researchers can encourage the integration of participants of all abilities, moving forward with the perspective that individuals learn better by being together rather than apart.

Future PE teachers must address "issues of ability, how it is recognized, conceptualized, socially configured, nurtured and embodied through the practices of PE, as with those of sport and health" (Evans, 2006, p. 169). Programs with a social justice focus emphasize inclusive activities that acknowledge intersecting identities, including, but not limited to, physical size, shape, gender orientation, race, appearance, and ability. Inclusive PE programs take into account these differences, while focusing on fundamental movement skills and physical literacy. Macrae (2003) stated, "our bodies and our politics are not neutral territory; the complexities of are inscribed within us. What we choose to ignore, we choose to let exist" (p. 2). The design of the learning experiences for PSTs in PE requires educators to integrate multiple factors: practicum observation, literature review, dialogue, reflection, intentional disruption of past experiences, and an explicit redefinition of inclusive PE.

Ultimately, inclusive PE fulfills the promise that PE is for everybody, every gender, racialized identity, and ability. Movement is medicine; movement is healing; movement is a way to build fully inclusive school communities. By encouraging PSTs to be critically reflective, examine previous conceptual frameworks, and integrate various adapted and inclusive physical activities, physical educators can reshape ideologies about inclusive PE and ensure that future PE classes will be engaging for all students.

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Appendix A

Focus Group and Video Interview Questions

1. Describe your initial experience as an elementary or secondary student in PHE. What was the model of inclusion and diversity? What were the barriers to implementation? How did this impact your initial views of fully inclusive PE?
2. Discuss your first expectations of the PETE course you were required to take to become a certified teacher. Was there any anxiety? What were your biases for or against PE? How did these expectations change as you progressed through the course? What features of the course allowed you to deconstruct previously held views on PHE and to reconstruct a more play based inclusive classroom environment for your future students?
3. What did you observe in your practicum placements? Was inclusive PHE demonstrated? If not, what school or attitudinal barriers existed to prevent the development of full inclusion? If yes, what factors facilitated the implementation of fully inclusive PHE? How did the students in your classes respond to fully inclusive PE pedagogy?
4. How has your view of inclusion in PHE changed? Specifically, what features of your PETE course enabled you to let go of previously held notions of "PE" and to recreate the kind of inclusive PHE that will reach ALL students?
5. Was your placement school culture supportive of innovation and change? Did you see champions of change, what roles did they take to support inclusive PE pedagogy?
6. When reflecting on your overall B.Ed. learning experiences, did you observe fully inclusive pedagogy across subjects?
7. Do you believe that external organizations (e.g., PHE Canada, OPHEA, TAPHE, CIRA) support fully inclusive PE pedagogy? Have you accessed these organizations, if so, which resources are most useful/supportive for designing inclusive PE lessons?
8. What were some of your AHA moments, and learnings throughout the course about how you might approach "new" models of fully inclusive PHE? How has your confidence and competence changed? How do you measure your own success in delivering inclusive PE pedagogy?