



## Me, osteogenesis imperfecta, and my classmates in physical education lessons: a case study of embodied pedagogy in action

Andrew C. Sparkes, Daniel Martos & Anthony J. Maher

To cite this article: Andrew C. Sparkes, Daniel Martos & Anthony J. Maher (2017): Me, osteogenesis imperfecta, and my classmates in physical education lessons: a case study of embodied pedagogy in action, Sport, Education and Society, DOI: [10.1080/13573322.2017.1392939](https://doi.org/10.1080/13573322.2017.1392939)

To link to this article: <http://dx.doi.org/10.1080/13573322.2017.1392939>



Published online: 26 Oct 2017.



Submit your article to this journal [↗](#)



View related articles [↗](#)



View Crossmark data [↗](#)



# Me, osteogenesis imperfecta, and my classmates in physical education lessons: a case study of embodied pedagogy in action

Andrew C. Sparkes<sup>a</sup>, Daniel Martos<sup>b</sup> and Anthony J. Maher <sup>c</sup>

<sup>a</sup>Institute for Sport, Physical Activity and Leisure, Leeds Beckett University, Leeds, UK; <sup>b</sup>Department of Teaching Musical, Visual and Corporeal Expression, University of Valencia, Valencia, Spain; <sup>c</sup>Department of Sport and Physical Activity, Edge Hill University, Ormskirk, UK

## ABSTRACT

Pupils with disabilities have been found to experience a narrower physical education curriculum and participate less frequently than pupils without disabilities. A lack of knowledge, skills, relevant experiences and confidence amongst physical education (PE) teachers has been said to contribute to these differential educational experiences. This article adds to the paucity of research that analyses the PE experiences of pupils with disabilities while, at the same time, evaluating embodied pedagogy as a tool for better preparing PE teachers for their role as inclusive educators. Specifically, the article aims to: (1) explore the PE experiences of a university student named Violeta who lives with the condition of Osteogenesis Imperfecta (OI); (2) analyse the views of a group of prospective teachers who participated in a PE lesson (Experience 1) which included Violeta; and (3) examine the perceptions of a group of prospective teachers who participated in a simulated attempt at embodied pedagogy (Experience 2). Data were gathered using field notes, observations and interviews with Violeta and the prospective teachers who participated in Experience 1 and Experience 2. The findings suggest that in both Experience 1 and 2, the prospective teachers developed a greater awareness of OI and a more positive attitude towards inclusive PE. That said, the nature of the student learning experience and their ability to empathetically imagine themselves in, and through, the bodies of others that were different from themselves varied significantly in Experience 1 and 2. Such a contrast, especially in relation to notions of alterity, related to the presence or absence of the other as a corporeal entity involved in the lessons. Neither Experience 1 or 2 was found to be 'better' than the other, they simply provided different contexts, resources and opportunities for learning to take place. We discuss some implications of these differences for those wishing to engage in embodied forms of pedagogy as a way of helping prospective teachers to have the knowledge, skills and experience to develop a more inclusive culture in school PE.

## ARTICLE HISTORY

Received 6 April 2017  
Accepted 12 October 2017

## KEYWORDS

Disability; embodied pedagogy; osteogenesis imperfecta; inclusive physical education; special educational needs; teacher education

## Introduction

In physical education (PE) in particular, there is a growing body of research suggesting that pupils with disabilities participate less frequently and in a narrower range of activities when compared to their age-peers. Competitive sports and team games are activities that can be particularly exclusive to pupils with disabilities. In some schools, according to Fitzgerald (2005, p. 55), pupils with disabilities

claim to 'undertake different activities and participate in different places'. For Maher (2017, p. 6), segregated learning such as this is problematic because it means that pupils with disabilities 'are not receiving the same learning experiences as their age-peers and casts the pupil as the "problem" rather than the way the learning activity is organised, structured, resourced and taught'. It could also, he suggests, result in the legitimisation of differential learning experiences and pupils with disabilities being assigned outsider status. This issue is not unique to curricular PE. Research by Haycock and Smith (2011) indicates that, when compared to their age-peers, pupils with disabilities are typically provided with a limited range of activities during extracurricular PE. In some instances, they were often taught separately from other pupils in clubs and teams that were developed specifically for them in an attempt to meet their needs and abilities. A reported reason for such differential learning experiences is that many PE teachers do not have the knowledge, skills, experience or confidence to develop or deliver inclusive lessons because inclusive pedagogies were not a part of their teacher training. This led Vickerman (2007, p. 393) to call for teacher educators to be:

much more proactive in their training and guidance of PE teachers to ensure they [PE teacher] fully appreciate how to set suitable learning challenges, respond to pupils' diverse needs and differentiate assessment expectations in order to provide programmes which prepare teachers sufficiently to include children with SEN.

The training teachers receive is key to the development of inclusive pedagogies that, for Maher (2016), considers the needs and capabilities of *all pupils*, and allows all pupils to be challenged so they can develop physically, cognitively, affectively and socially. However, according to Coates and Vickerman (2008), mainstream school PE teachers perceive the provision of much teacher training to be inaccessible, ephemeral, superficial and inconsistently delivered. Much of the formal training that PE teachers do receive is said to relate mainly to general classroom-based inclusion issues, which are not always relevant in a PE context. It has also been argued by Barber (2017) and Maher (2016) that teacher educators must develop, amongst their students, positive attitudes towards inclusion and disability to ensure that there is an ideological commitment to the inclusion of pupils with disabilities. While teachers accept that the promotion of inclusivity is their own responsibility, they often call for more and better training (Díaz del Cueto, 2009). Little is said, however, about what specifically this training should include.

Various forms of critical pedagogy, motivated by a desire to develop a socially just world by encouraging critical thinking, challenging how knowledge is constructed and used, and promoting practices that have the potential to transform oppressive institutions and social relationships (Kincheloe, 2004), might be seen as an ideal antidote to be included in all physical education teacher education (PETE) programmes to enable those involved to become more inclusive practitioners. While we are in general agreement with such a view we are aware, as Breunig (2005, p. 110) points out, that critical pedagogy still exists 'more as a theory of pedagogy rather than a practical specification, informing educators about the principles that should govern their work, but saying little about how they might actually do it'. According to Erevelles (2000), this is particularly so with regard to children with disabilities. The same might be said for the associated notion of embodied pedagogy, conceptualised by Nguyen and Larson (2015, p. 332) as 'learning that joins body and mind in a physical and mental act of knowledge construction. This union entails thoughtful awareness of body, space, and social context'.

Speaking of embodied pedagogy, Nguyen and Larson (2015) point out that curricular implementation requires ascertaining subtle differences in ways of knowing and instructional method. They note that higher education courses fall into one of three categories based on the physical and spatial attributes of content. One of these categories is where the subject matter has an inherent physicality and possesses an innate physicality through a focus on the body. Related to this, Nguyen and Larsen outline three conceptual elements of embodied pedagogy. These are as follows: 'bodily and spatial awareness of sensation and movement, unification of mind/body in learning, and the body's role as sociocultural context' (p. 337). Significantly, they highlight health and PE courses as 'ready-made' venues to introduce and address bodily awareness and other conceptual elements of

embodied pedagogy. This said, Nguyen and Larson recognise that examples of embodied pedagogy in action are scarce.

Against the backdrop described above, in this article we seek to answer the call made by Bredahl (2013) to add to the paucity of research that analyses the PE experiences of persons with disabilities and to consider the implications of this for PETE and the development of inclusive pedagogical practice. To do so, we focus on a student named Violeta, who lives with Osteogenesis Imperfecta (OI) or brittle bone disease. This is a complicated, variable and rare disorder whose major feature is a fragile skeleton. OI exhibits wide variation in appearance and severity and is a life-long disorder. Given the nature of this disorder, Violeta constitutes what Stake (2005) describes as an intrinsic case study from which naturalistic generalisations can be developed for pedagogical purposes regarding the challenges of including non-normative 'frail' bodies in the corporeal practices of PE.

We explore Violeta's experiences of being involved in practical PE sessions that formed part of a module on *Physical Education, Fine Arts and Music Teaching for Students with Special Educational Needs* that she elected to study as part of her primary school teaching degree at a Spanish university. Alongside this, we examine the actions, thoughts and observations of the lecturer who, informed by the notion of an embodied pedagogy, facilitated the active involvement of Violeta in the PE component of this module (Experience 1) and who later, in the delivery of the PE sessions, implemented a curriculum intervention using a body suit that simulated OI. The purpose of this was to raise the experiential awareness of students regarding the inclusion of people with so-called invisible disabilities (Experience 2). We also access the perceptions of the students who, as prospective teachers, participated with Violeta in the PE sessions and those who participated in the simulation sessions. Having considered these differing experiences and vantage points we close by offering some reflections on what we can learn from them in terms of developing more inclusive forms of PE in school and university settings.

The data used in this article to explore Experience 1 were generated by observations and field notes made by Daniel Martos when he delivered the PE sessions. Daniel also conducted a life history interview with Violeta about childhood memories and her experiences of PE, as well as a focus group discussion with four of Violeta's classmates regarding their thoughts and experiences in relation to her inclusion in the sessions. The data used to explore Experience 2 similarly drew on observations and field notes made by Daniel along with group discussions held with students before and after the curriculum interventions that simulated OI in the PE sessions. In making sense of such data, Daniel operated as an analytical bricoleur (Denzin & Lincoln, 2011). For example, a thematic analysis as described by Braun, Clarke, and Weate (2016, p. 192) was used with the interview data as well as with the field notes and observations made by Daniel that were also reflexively analysed in relation to his immersed experiences of teaching the PE sessions.

Thematic analysis, according to Braun et al. (2016), offers a method of identifying patterns, or themes, in a set of data, and for describing and interpreting the meaning and importance of those. They suggest that this approach offers the researcher analytical tools to make sense of the data without having to be tied to or constrained within any particular theoretical framework. As such, it can, therefore, 'be applied flexibly across the spectrum of ontological and epistemological assumptions'. This said, it should be noted that the philosophical assumptions informing our study were those of a relativist ontology coupled with a subjectivist and constructionist epistemology. For qualitative researchers working with such assumptions, Sparkes and Smith (2014, p. 12) argue that multifaceted, constructed realities exist and the process of inquiry is a matter of interpreting the interpretations of others. For them, the aim of such research, and ours in relation to our analysis of how students experience a form of embodied pedagogy in two different settings, 'is to focus on the way in which people construct their meanings of a given phenomenon, seeking to expand the understanding of the phenomenon through the individual case'.

Given his dual role as teacher and researcher in organising and delivering the PE sessions, Daniel was aware of the need to explain these to the students and to make it clear that their involvement

was voluntary, would not impact on their grade for the module, and that they would remain anonymous in any writing that emerged from the project. Throughout the process he aspired to engage in the culturally responsive relational reflexive ethics described by Lahman, Geist, Rodriguez, Graglia, and DeRoche (2011). This position includes valuing the connectedness between the researcher and the participants and requires that the former be sensitive to the interactions between self, others and situations, to notice the reactions to a research situation and then adapt in a responsive, ethical, and moral way that recognises power imbalances and cultural differences. With these points in mind we now invite the reader into Experience 1.

## Experience 1

As the teacher responsible for delivering the PE sessions in the module *Physical Education, Fine Arts and Music Teaching for Students with Special Educational Needs*, Daniel attended the introductory lecture. At the end, Violeta introduced herself to him and requested that she be excused participation from the PE sessions. During the conversation that followed, Violeta gave her 'brittle bones' as the rationale for her request to be excused. At this point, given his commitment to developing inclusive forms of PE, Daniel asked if she would like to be included. Violeta was initially unsure and a little skeptical as she had never been included in any PE lessons during her time in secondary school. Having had time to think about this question, Violeta consequently contacted Daniel and told him she would be interested in exploring the possibilities of being included in the PE sessions. To initiate this exploration, Daniel suggested that he conduct a life history interview with Violeta so that he could learn more about her as a person, her experiences in school, and how OI had impacted on these experiences, so that together they could create a supportive environment for her inclusion in his PE sessions. From the start of this inclusive research process, therefore, Violeta was an active agent in shaping the curriculum that she would hopefully participate in.

During the life history interview, a number of key themes emerged. For example, Violeta explained that up until the age of six, she experienced a 'normal' active childhood in her rural Spanish village where 'happiness was all around my home.' However, one day she fell off her bike and broke some bones that, in turn, led to the diagnosis of OI. As Violeta states:

The doctor condemned me when he said to my mother "Your daughter has a congenital illness called Brittle Bone Disease, and her bones are like breadsticks. From now on, her life is going to change a lot and she will have to take precautions to avoid bone fractures".

From this point on, Violeta learned to adopt a cautious and often fearful relationship between her body and the surrounding environment due to living with this 'special' condition. As she puts it:

I am obliged to be careful. Sometimes I think that the best way forward would be to put a sign on my head saying "Caution! Frail!" But you have to understand that many of the limitations in my life are logical and routine: avoid crowded places, don't leave stuff on the floor in case I fall over it, be aware of people and things bumping in to me.

This had clear implications for her involvement in PE at school. Violeta explains:

The problem has always been PE. Each course I had to explain my problem to the new teacher, waiting for his response and try to hide the illness from my classmates. I was exempt to do the practical lessons and despite this, never anybody asked me. I had never to explain my illness to my classmates. I guess this became normal: 'Violeta doesn't participate in PE.' I've never participated in PE since I was six years old.

During school PE lessons Violeta was simply excused and expected to complete a written assignment. This is a common practice in Spain where students with disabilities tend to be excluded and assigned passive roles (Ríos, 2009). Drawing on such experiences of exclusion, and wishing to lead a life as fully as possible despite a number of self- and socially-imposed limitations, Violeta chooses to adopt a normalising strategy that involves not letting anybody know about her OI unless it is essential to do so. In this respect, Violeta reasons:

The normal thing to do is not to say anything to anyone, because announcing that I suffer from OI makes them suddenly think of me as if all of a sudden I was in a wheelchair. I didn't want people to discover my illness. To hide my situation has been an obsession for me. If people know about it, they begin to feel sorry for me. 'What a pity' they would say. While nobody knows my illness I am a normal person, just like you.

As such, Violeta uses the invisibility of OI in everyday situations to control impression management and avoid unwanted attention or the 'sympathy' that is so often associated with the stigmatising, ableist stare, described by Garland Thomson (2005), that involves the social enactment of exclusion from an imagined community of the so-called fully human. Violeta states: 'I am one of those people who prefer not to be looked at by others. I don't like drawing other people's attention to myself'. Accordingly, none of the students on her university courses knew that she lived with OI.

Throughout this life history interview, Daniel positioned himself as an interested learner. He admitted to Violeta that he understood little about OI and how it shaped the experiences of those living with this condition, and that he was seeking her advice about how to adapt his PE sessions so that she could be included in a worthwhile and meaningful way. This lack of awareness regarding OI would, he believed, be mirrored by Violeta's fellow students. Accordingly, as a first move towards her inclusion, it was agreed that Violeta and not Daniel should make the students aware of what OI was, how it has impacted her life, and what might need to be considered in terms of creating a PE environment that she felt safe and able to participate in. This first move was also informed by Daniel's awareness of the problem of dependency implicit in the act of speaking for and about another, as discussed by Shuman (2015). She notes how, in the Disability Rights Movement, 'speaking on one's own behalf, telling one's own story, is a form of redress, a correction to a power imbalance' (p. 47). Shuman also acknowledges that telling one's story in order to deliberately disclose an experience otherwise kept secret can have significant consequences for disrupting dominant narratives and ways of thinking about specific phenomenon.

At the start of the PE sessions, Daniel first explained how the students would be introduced to a range of adapted sports, such as goalball, boccia, and football for people with visual impairments. He then introduced Violeta to the group who proceeded to tell them her story along with the implications of OI for her hopes and fears of being involved in the coming sessions with them. In the discussion that followed, Daniel and Violeta explained how they felt selected physical activities in the sessions might be adapted to include her. For example, in the game of tag, rather than tagging the opponents by touching the body with their hands, the tagger had to touch the body with a balloon held in their hand. This adaption reduced the amount of force that could be exerted in making contact, thereby reducing the risk of bone fracture for a person with OI. Importantly, throughout the PE sessions, Violeta gave feedback to Daniel about how she was experiencing the activities she chose to participate in and how she felt about any adaptations that were made. She had enjoyed the balloon adaption made to the game of tag and joined in fully. In contrast, she disliked another game that potentially involved physical contact at speed because a teammate was designated as her 'body guard' to 'protect' her from collisions with opponents. Significantly, Violeta disliked having her bodyguard follow her around throughout the game as it was a clear signifier of difference in this setting.

In terms of their reactions to Violeta in the adapted games she joined in with, Daniel's field notes reveal that despite her explanation of her OI, the other students were initially unsure of how to interact with Violeta. The students paid a great deal of attention to their movements, and treated her with undue caution as if her body was hyper-fragile and easily damaged. This was problematic for Violeta as she did not want to be defined as the centre of attention in an activity due to her OI. Daniel was also anxious as it was the first time that he had adapted games and physical activities for someone with OI and he recalls feeling worried during the first PE session in case Violeta should get hurt. Because of this, Daniel unwittingly paid too much attention to Violeta. Again, she did not want this. Such a situation is not, however, surprising given that Violeta was finding the limits of her body in a novel situation as were the other students.

Significantly, after this overtly over-cautious phase, the students visibly relaxed with Violeta as, without any verbal instructions, they learned how to relate the intensity and power of their movements to hers in space and time. In this instance, the characteristics of embodied pedagogy that, according to Nguyen and Larson (2015), involve a thoughtful awareness of bodies, sensations, and movement in social space, became evident in action. Likewise, Daniel also learned to calm his anxieties and to place his trust in the students and Violeta to accommodate the needs of each other in their movements. In this more relaxed atmosphere, Violeta and her OI were not the primary focus of attention, and the quality of her involvement and her enjoyment were greatly increased.

Against the backdrop described above, it is interesting to note the views of four students who formed part of a focus group that was conducted at the end of the PE aspect of the special needs module. First, it is important to recognise that before Violeta told them about herself and OI, none of them knew she had this condition. Each, however, understood that Violeta had the right to control such knowledge given the stigma that often goes with being labelled 'disabled'. Equally, each admitted that prior to this they had no knowledge of OI and how it shaped the life experiences of those with the condition. Subsequently, the students sought information about OI on the internet. In some ways, this may be regarded as a good thing, but there is a danger here in that 'people with OI' become defined as a homogenised group. The actuality of Violeta's presence in their PE sessions and the need to adapt activities and their own behaviours specifically to her individual needs, offered an interesting antidote to this danger because it made the students aware that 'people with OI', like all people, have a range of needs and capabilities which is not always obvious when we attempt to place them in general categories of convenience.

The four students in the focus group expressed the view that they, and all their fellow students, learned a great deal about the nature of group dynamics and embodied learning through working with Violeta in the PE sessions. All were in favour of what they classed as an 'inclusive innovation' in relation to Spanish education, and they contrasted it with the traditional passive role given to people with disabilities in PE lessons. As one of them stated regarding her recent placement in a school: 'there weren't any adaptations at the school, so students with disabilities were unaware of what was going on. That's not inclusive'. Another student pointed out:

It's always been the case, people with disabilities sit out and don't participate in PE. I've seen how children with disabilities are set apart from their peers. So, I was impressed to see that things could be done to include pupils with disabilities like OI in PE.

Such comments support the views of Avramadis and Norwich (2002) that exposure to examples of inclusive practices involving people with disabilities can have a positive effect on teacher attitudes towards inclusive practices. This has led Maher (2017) to call for all trainee and serving PE teachers to gain more experiences supporting pupils with disabilities, ideally in a special school context, in order to increase their knowledge, skills and confidence *vis-à-vis* inclusive education provision.

## Experience 2

During the following academic year, Daniel again taught the PE sessions in the module *Physical Education, Fine Arts and Music Teaching for Students with Special Educational Needs*. By now, however, Violeta had completed her studies and left the university. In light of the positive experiences and attitudes of the previous year's students regarding the possibilities for the inclusion of non-normative bodies in PE, Daniel was left wondering how he might offer similar experiences to his new intake of 25 students. Specifically, Daniel wanted, this time without Violeta's presence, to raise his students' awareness of: (1) OI as an 'invisible' condition; (2) what this might mean for those living with this condition and their fellow students involved in PE settings as participants and/or teachers; and (3) to provide the students with strategies for including people with OI in PE lessons. Accordingly, he

decided to initiate a curriculum simulation of OI that was in keeping with his notion of an embodied pedagogy. This was accomplished as follows.

Having introduced the PE sessions to his students, Daniel proceeded to provide them with a number of simulations that included playing basketball in a wheelchair, and wearing glasses specifically designed to replicate various forms of visual impairment during a variety of ball games. In an attempt to demonstrate the invisible and internal nature of OI, one of the students was invited to wear a T-shirt that has a number of 'rosquilletas' – a type of Spanish breadstick that is easy to break – attached on its inside. The student wearing the T-shirt was asked not to break the rosquilletas whilst playing a game of basketball, and the other students were asked to do the same. Midway through the game another student, in order to create an awareness of exterior fragility, was invited to wear a T-shirt with the rosquilletas attached on the outside. Again, the instructions given to this student and the others were to play the game without breaking the rosquilletas. At the end of the PE session, Daniel sat the students down and provided a context for his use of the rosquilletas in the basketball game. He began by reading a story that he had composed based on the key themes that had emerged in his life history interview with Violeta, which she had read and given Daniel permission to use. The story was entitled: *My bones are like breadsticks*. It began with the sentence 'I was born frail ... very frail. My bones – as the doctor said to my Mum – are like breadsticks'. Having read the story and explained how his use of rosquilletas on the inside and the outside of T-shirts was intended to simulate the condition of OI, Daniel asked a number of questions to encourage discussion. These included the following: How much were you aware of OI before this session? What do you think of Violeta's story? What are the implications of her story and others living with OI for inclusion in the PE curriculum? The students were informed that their participation in this discussion was voluntary, their responses would not impact upon their grades for the course, and that they would remain anonymous in any analysis and reporting of their views.

As with the previous year's students, those in the simulated OI session had little awareness of this condition, nor had they knowingly met anybody living with it. They found the story about Violeta useful in better understanding OI. They also agreed that the simulated activity in the basketball game, which used the rosquilletas, raised their awareness of OI and how it might feel for a person living with this condition to be involved in PE, and how knowing that the person had OI shaped their behaviours towards him/her in the game situation. Importantly, all the students agreed that once they were made aware of what OI actually was as a condition, and were introduced to modified games like 'balloon tag' as described earlier, that people with OI and others with 'invisible' impairments could, and should, be included in PE lessons in schools if they so wished. Beyond this favourable feedback, there are a number of problematic issues relating to the simulated activity used as a form of embodied pedagogy that require further discussion.

The first issue relates to the individual interactions with Violeta as an en fleshed being living with OI in Experience 1, when compared to those of students without disabilities wearing rosquilletas to simulate OI in Experience 2. In the latter, Daniel observed that the students were much more vigorous and forceful in their movements and actions towards those wearing the rosquilletas that were, indeed, sometimes broken. While apologising to the rosquilleta-wearer when this happened, the apology lacked a sense of seriousness and sincerity as an actual physical injury to a 'real' body had not occurred. If Violeta had actually received such forceful contact during Experience 1, it is likely that she would have been injured. That is, there would be a direct and significant consequence associated with an action. In contrast, in Experience 2, the only consequences to an action would be a broken rosquilleta rather than a broken bone in the living body of another. Such a reaction problematises the attempt by Daniel to simulate OI as part of an embodied pedagogy in relation to the distance between perceived and real consequences for those involved regarding their actions when a 'real' rather than an 'imagined' person with an invisible disability is included in their PE sessions. In view of this, it would appear that the union described by Nguyen and Larson (2015) that involves a thoughtful awareness of body, space, and social context was more difficult to achieve in Experience 2 than in Experience 1.



In Experience 1, the students in the class were supportive of Violeta's strategy of concealing her OI to others unless it was essential for her to reveal she had this condition. In contrast, the majority of those involved in Experience 2 were less accepting of this strategy and felt that Violeta should self-disclose. The following comments are indicative of the views expressed:

I think that sometimes you have to take risks and trust the good in people in this world, who will endeavour to integrate her despite her disability.

In my opinion, Violeta should tell others about her disability, because by doing this the others will treat her more normally which would make her inclusion easier. I don't think Violeta is doing the right thing, because normality requires trustworthy relationships, appreciation and respect for peers, and both oneself and others should be given the opportunity to benefit from it.

Violeta is doing the right thing from her own perspective, but it is not right because she does not know the extent to which others in society are aware of this illness.

In their expectations that Violeta should self-disclose her disability regardless of context, these students in Experience 2 show similarities to the student teachers interviewed by Pérez-Samaniego, Fuentes-Miguel, Pereira-García, and Devís-Devís (2016) about the impression management strategies used by transgender people in educational settings. Such a critical reaction during Experience 2 suggests that, in terms of the conceptual elements of an embodied pedagogy outlined by Nguyen and Larson (2015), the students' awareness of the body's role as sociocultural context remains problematic. This, along with the absence of actual consequences for actions in relation to an invisible disability as signalled earlier, also raises issues about the ability of students and staff, particularly in simulated conditions, to imagine and empathise with those who inhabit and live through bodies different from their own. According to Smith (2008, p. 145), this is not surprising given that there are barriers and challenges to imagining oneself 'in the other's shoes'. For him, two such constraints are to be located in the body, and in the idea of otherness.

Regarding the former, Smith (2008, p. 146) points out that the physical matter of the body is a precondition for imagining others' lives and can as such be viewed as a source of, a location for, and a means by which imagination is shaped and constrained. Accordingly, he suggests that no matter how far the imagination reaches, our fleshy physicality, as a source of, location for, and means through which imagination and pain partly operate, limits what and how we can imagine. We cannot, therefore, transcend our flesh and bones to entirely imaginatively put ourselves in another's embodied place and experience precisely what they do. Thus, Smith argues,

our capacities for imaginative projection depend in very concrete ways on features of our specific embodiment. These may constrain our abilities to imagine other persons, whether, for instance, in the mode of imagining oneself "in the other's shoes" or imagining being another (p. 146).

In relation to otherness as a barrier to imagining others' lives, Smith (2008, p. 147) draws on the work of Levinas (1981) to argue the following:

Imagining putting ourselves in the place of another person is problematic because the other is other: absolutely and completely other to me. So for example, just as the other is fundamentally not me, fundamentally irreducible to me, so too are his or her feelings of being and having a disabled body ... That is, the disabled person is other to me.

For Smith (2008), therefore, any attempt to grasp the other's suffering or lived experiences, to place oneself in his or her shoes or to imagine our selves being another person is problematic and elusive. Importantly, he points to the dangers of seeking to make the other's experience comprehensible only through one's own. This, Levinas (1998) suggests, is unethical as it attempts to reduce, even efface, the alterity of the other's suffering in ways that infringe and even violate the other. For Levinas, the way out of this predicament is to encounter the other as other rather than on our own terms, and to respect the difference of the other as other and be responsible for them as other.

Against the backdrop described above, it would appear that the dynamics of imagination and empathy operated very differently in Experience 1, where Violeta was physically present, when compared to Experience 2, from which she was absent and represented by a short story and a simulated activity involving rosquilletas as brittle bones. Specifically, the barriers and challenges to the students empathetically imagining themselves in the body of another's, different to their own, such as Violeta's, seemed to be greater in the absence of her as the other body in action. Without such corporeal presence, the dangers of seeking to make the other's experience comprehensible only through one's own appears to be amplified, and the ability to respect the difference of the other as other and be responsible for them is diminished. As Frank (2004) notes, seeing the face, or in our case seeing Violeta's, and interacting with her body in movement during the PE sessions, requires respect for alterity and helps us to recognise that there are aspects of her being as a person living with OI that we cannot even imagine or access regardless of how much we might wish to do so.

Moreover, as the comments from the students provided earlier indicate, in Violeta's absence, any attempt at empathetic imagination can shift towards a form of symbolic violence. For Frank (2004:115), this kind of violence takes place when the *I* tells the other 'that they should not be who they are, or that they fail to understand who they ought to be'. This suggestion is supported by the findings of Pérez-Samaniego et al. (2016) who used a fictional story with student teachers to explore the experiences of transgender people in PE and sport. This has implications for those who seek to develop an embodied pedagogy that involves simulated activities intended to introduce prospective teachers to non-normative forms of corporeal existence and experience with a view to generating positive attitudes towards inclusive PE.

## Discussion and concluding thoughts

In this article, we have drawn on the life history of Violeta, who lives with the invisible condition of OI, to explore her experiences in PE lessons during her schooling. Building on this, we moved to describe an attempt by one of the authors at engaging with an embodied form of pedagogy that drew on Violeta's experiences as a means to actively include her in PE sessions during a university course for student teachers. Her inclusion in these sessions, along with the use of adapted physical activities as part of what we called Experience 1, also provided an opportunity for the students to engage with Violeta in ways that hopefully fostered empathetic imaginings of what it is like to live with OI and how people with this condition might be included in PE lessons. By way of comparison, we also offered a description of Experience 2. Here, Violeta was not physically present but her story and a simulated activity were used with a view to achieving the same aims as in Experience 1.

Importantly, our findings indicate that in both Experience 1 and 2, the students involved developed a more positive perspective regarding the inclusion of people with OI and other invisible conditions into school PE lessons. This said, the nature of the student learning experience and their ability to empathetically imagine themselves in and through the bodies of others different to themselves, varied significantly in Experience 1 and 2. We have tentatively suggested, drawing on the work of Frank (2004), Pérez-Samaniego et al. (2016), and Smith (2008), that such a contrast, especially in relation to notions of alterity, relates to the presence or absence of the other as a corporeal entity involved in the action.

We do not wish to imply that for embodied forms of pedagogy to be successful in raising students' awareness of non-normative bodies and their inclusion in PE lessons, that a person with, for example, a visible or invisible disability should be present in all teaching sessions. For sure, there are advantages if this is the case as evidenced in Experience 1. As de Laat, Freriksen, and Vervloed (2013) note, when students without disabilities interact with students with disabilities the attitudes and understanding of the former toward the latter are greatly improved. As indicated, the students in Experience 2 did gain a greater awareness of OI and developed a more positive attitude towards inclusive PE. The story told and the simulated activity in this instance provided a useful and powerful source of understanding and creating dialogue about the students' belief and values. Neither

Experience 1 or 2, therefore, is 'better' than the other, they simply provide different contexts, resources and opportunities for learning to take place. In both, without an appropriate critical and supportive pedagogical environment there is no guarantee that the empathetic imagination will be stimulated regarding others, or a desire for inclusive practice activated.

Our study indicates that attempting to engage with embodied forms of pedagogy is no easy task and comes with a variety of challenges. One of these, we have suggested, revolves around the problem of creating contexts that enhance the possibility of imaginatively and empathetically putting oneself in the other's place. For the most part, Smith (2008) suggests, this challenge is often underestimated, glossed over or overlooked all together. As a result, he feels there is the danger of creating and perpetuating an over-optimistic and romantic conception of the role of imagining others' lives. We could not agree more, and hope that our article provides a more realistic view of this and other associated challenges so that those wishing to engage in an embodied pedagogy in their work settings might do so with their 'eyes wide open'. As Pérez-Samaniego et al. (2016) point out, it would be unrealistic and naïve, not to mention arrogant and dangerous, to consider that one single experience could provoke radical changes that may affect the core beliefs of student teachers. Like them, however, we believe that such experiences can contribute to change in a small way, and that these can be amplified by multiple experiences in other curricular settings over time. Just how we might proceed in the future is likely to be informed by the accumulation of other case studies involving teacher educators attempting to put embodied pedagogy into action. This may help us to better understand additional ways in which this form of pedagogy can contribute to ensuring that prospective teachers have the knowledge, skills, experience and ideological commitment to develop a more inclusive culture in school PE.

## Disclosure statement

No potential conflict of interest was reported by the authors.

## ORCID

Anthony J. Maher  <http://orcid.org/0000-0002-1628-0962>

## References

- Avramadis, E., & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: A review of the literature. *European Journal of Special Needs Education, 17*(2), 129–147.
- Barber, W. (2017). Inclusive and accessible physical education: Rethinking ability and disability in pre-service teacher education. *Sport, Education and Society* [online first].
- Braun, V., Clarke, V., & Weate, P. (2016). Using thematic analysis in sport and exercise research. In B. Smith, & A. Sparkes (Eds.), *Routledge handbook of qualitative research in sport and exercise* (pp. 191–205). London: Routledge.
- Bredahl, A. (2013). Sitting and watching the others being active: The experienced difficulties in PE when having a disability. *Adapted Physical Activity Quarterly, 30*(1), 40–58.
- Breunig, M. (2005). Turning experiential education and critical pedagogy theory into praxis. *Journal of Experimental Education, 28*(2), 106–122.
- Coates, J., & Vickerman, P. (2008). Let the children have their say: Children with special educational needs and their experiences of physical education – a review. *Support for Learning, 23*(4), 168–175.
- de Laat, S., Freriksen, E., & Vervloed, M. (2013). Attitudes of children and adolescents toward persons who are deaf, blind, paralyzed or intellectually disabled. *Research in Developmental Disabilities, 34*(2), 855–863.
- Denzin, N., & Lincoln, Y. (2011). Introduction: The discipline and practice of qualitative research. In N. Denzin, & Y. Lincoln (Eds.), *The sage handbook of qualitative research* (pp. 1–19). London: Sage.
- Díaz del Cueto, M. (2009). Percepción de competencia del profesorado de educación física e inclusión. *Revista Internacional de Medicina y Ciencias de la Actividad Física y el Deporte, 9*(35), 322–348.
- Erevelles, N. (2000). Educating unruly bodies: Critical pedagogy, disability studies, and the politics of schooling. *Educational Theory, 50*(1), 25–47.
- Fitzgerald, H. (2005). Still feeling like a spare piece of luggage? Embodied experiences of (dis)ability in physical education and school sport. *Physical Education & Sport Pedagogy, 10*(1), 41–59.

- Frank, A. (2004). *The renewal of generosity: Illness, medicine, and how to live*. Chicago, IL: University of Chicago Press.
- Garland-Thomson, R. (2005). Staring at the other. *Disability Studies Quarterly*, 25(4), 1–8.
- Haycock, D., & Smith, A. (2011). Still 'more of the same for the more-able?' including young disabled people and pupils with special educational needs in extra-curricular physical education. *Sport, Education and Society*, 16(4), 507–526.
- Kincheloe, J. (2004). *Critical pedagogy*. New York: Peter Lang.
- Lahman, M., Geist, M., Rodriguez, K., Graglia, P., & DeRoche, K. (2011). Culturally responsive relational reflexive ethics in research: The three rs. *Quality and Quantity*, 45, 1397–1414.
- Levinas, E. (1981). *Otherwise than being, or, beyond essence*. (A. Lingis, Trans.). Pittsburgh, PA: Duquesne University Press.
- Levinas, E. (1998). *Entre nous: Thinking-of-the-other*. (M. Smith & B. Harshav, Trans.). London: Continuum.
- Maher, A. J. (2016). "disable them all": SENCO and LSA conceptualisations of inclusion in physical education. *Sport, Education and Society* [online first].
- Maher, A. J. (2017). "we've got a few who don't go to PE": learning support assistant and special educational needs coordinator views on inclusion in physical education in England. *European Physical Education Review*, 23(2), 257–270.
- Nguyen, D., & Larson, J. (2015). Don't forget about the body: Exploring the curricular possibilities of embodied pedagogy. *Innovative Higher Education*, 40, 331–344.
- Pérez-Samaniego, V., Fuentes-Miguel, J., Pereira-García, S., & Devís-Devís, J. (2016). Abjection and alterity in the imagining of transgender in physical education and sport: A pedagogical approach in higher education. *Sport, Education and Society*, 21(7), 985–1002.
- Ríos, M. (2009). La inclusión en el área de educación física en España. Análisis de las barreras para la participación y aprendizaje. *Ágora Para la EF y el Deporte*, 9, 83–114.
- Shuman, A. (2015). Story ownership and entitlement. In A. De Fina, & A. Georgakopoulou (Eds.), *The handbook of narrative analysis* (pp. 38–56). Oxford: Wiley.
- Smith, B. (2008). Imagining being disabled through playing sport: The body and alterity as limits to imagining others' lives. *Sport, Ethics and Philosophy*, 2(2), 142–157.
- Sparkes, A., & Smith, B. (2014). *Qualitative research methods in sport, exercise and health: From process to product*. London: Routledge.
- Stake, R. (2005). Qualitative case studies. In N. Denzin, & Y. Lincoln (Eds.), *Handbook of qualitative research* (pp. 443–466). London: Sage.
- Vickerman, P. (2007). Training physical education teachers to include children with special educational needs: Perspectives from physical education teacher training providers. *European Physical Education Review*, 18(3), 285–402.