Exploring Pedagogy and Practice: Meaningful Physical Education (MPE) in Elementary Pre-Service Teacher Education

Purpose

In this paper, we share how three physical education teacher educators (PETE), working in different universities in Ireland, adopted a Meaningful Physical Education (MPE) approach (Beni, Fletcher & Ní Chróinín, 2017) for one 12-week semester. Guided by the principles of collaborative self-study (Roberts & Ressler 2016) and informed by research on communities of practice (e.g. Patton & Parker 2017), the paper examines our exploration of the MPE approach with pre-service teachers (PST). Building on previous work focused on learning about meaningful PE (LAMPE) (Ní Chróinín *et al.* 2017), we sought to simultaneously apply MPE-appropriate methodologies and principles through the contexts of our differing individual modules over one semester. Our central research question was: *how does our engagement with the principles of MPE impact our pedagogical approaches?*

Theoretical Framework

The community of practice (CoP) concept describes the learning that can take place within a situation where there is a shared interest within a group or community (Lave & Wenger 1991). For teacher educators, involvement in a CoP can increase collaboration and reduce a sense of professional isolation (Patton & Parker 2017). Engagement in a CoP can help to embed and sustain pedagogical innovation in practice (Goodyear & Casey, 2015). It is suggested that researchers engaging in self-study "are committed to their ongoing professional learning and explore their assumptions, beliefs and actions as they are enacted in practice" (Casey *et al.* 2018, p.56). In this case, it serves as an exemplar for becoming and learning as a teacher educator, with the potential to make significant impact on the preparation of future teachers (Loughran, 2014).

MPE is emerging as a pedagogical approach for quality physical education (Ní Chróinín, Fletcher & O'Sullivan, 2015, 2017). One of the objectives of our teacher education programmes is to ensure that elementary, generalist PSTs learn how to facilitate meaningful school-based physical education. This can be achieved by examining their own meaningful experiences and exploring the literature referencing MPE, its features and pedagogical principles.

Fletcher *et al.* (2018) have identified five pedagogical principles of the MPE approach:

1.	Meaningful participation should be explicitly prioritised in planning, teaching and assessing PETE experiences.

2.	Pedagogies that support meaningful participation should be modelled by teacher educators and made a source of inquiry for PSTs.

3.	PSTs should be supported to engage with meaningful participation as a learner and physical activity participant, and as a teacher of peers and children.

4.	Learning activities should be framed using Beni *et al*.'s (2017) and Kretchmar's (2006) features of MPE: social interaction, 'just right' challenge, motor learning, fun, personally relevant learning, and delight.

5.	PSTs should be supported to reflect on the meaningfulness of physical education experiences.

To address how we utilised the MPE approach in our teaching towards improving our practice, we 'purposefully conceptualised, thoughtfully implemented, and meaningfully employed' (Loughran, 2014, p. 10) self-study as our methodology to support our own learning.

Methods

We used collaborative self-study within a national community of practice (CoP) (Patton & Parker, 2017; Ritter *et al*., 2018) to enable us to explore and implement pedagogies of MPE in different contexts. Our approach builds on the work of Goodyear & Casey (2015, p.201) that advocates "for inter-professional collaboration with researcher(s) who cross the boundary of their institutions…to facilitate change and the use of pedagogical models". Self-study is an increasingly popular approach used to explore learning experiences in teaching (e.g. Samaras 2011) and teacher education (e.g. Fletcher 2016) contexts. Moreover, collaborative self-study has been proposed as a useful methodology through which to examine teacher educators' learning through reflection and critical friendship (O Dwyer *et al*. 2019). In this study, we followed LaBoskey's (2004) suggestions for self-study research design: our research was self-initiated and self-focused; we sought to improve our practice; the research was interactive; data were generated from multiple, qualitative sources; and validation of the research is based on trustworthiness.

Context

Mary, Robert and Tom (psuedonyms) are experienced teacher educators in different universities in Ireland. We each work within initial teacher education programmes and teach PE to undergraduate generalist pre-service teachers. In Robert and Mary's institutions, some of our students are undertaking additional elective PE modules. Mary and Robert have already participated in a larger, international self-study project focused on MPE, and our engagement in this larger study prompted us to build on this experience in the present study. Tom had become interested in the MPE approach through attendance at various conferences and engagement with the literature and was invited to join in this collaborative self-study. Each educator was delivering different PE content ranging from Outdoor and Adventure activities to Games and Adapted PE.

Data Sources & Analysis

Fortnightly reflections were completed online using an agreed reflective template. Each reflection asked the PETEs to respond to prompts such as:

- "What worked well with MPE in and before class?"
- "What challenges did you face implementing MPE and how did you overcome them?"
- "What worked and what didn't to create supportive and collaborative PST learning environments".

We agreed to act as critical friends for each other, to read and comment on each other's reflections (Schuck & Russell 2005). Feedback was provided within a day or two of the reflection being posted to a shared electronic folder. This feedback informed our short-term planning for teaching, as it prompted us to think more deeply about our practice, individually and collectively. The reflection and comments supported and directed the planning for the subsequent sessions. Skype conversations occurred three times; prior to, during and at the end of the teaching period. We concluded our teaching with an individual meta-reflection. These reflections (n=17) and the commentary from the critical friends were a data source for this project, along with the transcribed Skype conversations (n=3).

The data were individually analysed by each of us separately using thematic analysis (Braun & Clarke 2013). Data were initially read by each of us, and several initial codes were independently generated by identifying recurring interesting ideas emerging from the dataset. These codes were compared by the three researchers during this interactive phase of data analysis. They were refined in group meetings until agreement was reached and themes developed to represent the concepts occurring through the data. The codes were inductively analysed, guided by the prompts provided in the templates which referred to MPE and CoPs. The data were further analysed deductively seeking alternative themes which may not have matched the inductive themes. This hybrid balance between inductive and deductive coding follows the process of thematic analysis outlined by Fereday & Muir-Cochrane (2006). This approach using multiple qualitative data sources and perspectives ensured triangulation and increased the trustworthiness of the data analysis. Two themes, the tension between content and pedagogy, and the value of the CoP to the teacher educators, were identified through the analysis.

Results

The dialogue and reflections within the CoP using the S-STEP approach led to significant personal and professional learning for the three participants. As our intention to embed MPE across the three modules was the primary objective of the study, the key findings were concerned with the recognition of the need to adjust our teaching approaches as the semester progressed, and how a CoP was valuable to us in supporting our learning.

Subject Knowledge versus Pedagogical Content Knowledge

Shulman (1987) first developed the term Pedagogical Content Knowledge (PCK) to connect the 'what' to teach with the 'how' to teach in PE. Research by Tsangaridou (2002, p.31) has illustrated the "value of understanding pre-service classroom teachers' ways of coming to learn what, why and how to teach PE", while Ayvazo & Ward (2011) also recognised that a strong understanding of the content being taught was an essential component of the teacher expertise.

Using the MPE approach in the modules presented each of us with challenges in this regard. The recognition of significant pressure to deliver prescribed course content was clearly evidenced throughout the data. In response to Tom's struggle with time for discussion in

class in his second reflection, Mary's comment indicates that this was a common concern: *"I'm finding the discussion so worthwhile and necessary and if we want students to do it with children, we should surely model it ourselves, but I am struggling with losing content and worry what will they do if they don't have content" (Mary, TR2).* While this was a recurring theme throughout the semester, the researchers agreed that discussion or 'checking in' time with our PSTs should be prioritised following engagement with module tasks and activities even if this meant having to lose curriculum content. The focus on the MPE approach was found to be an effective framework to identify the features of a quality PE experience, and we all agreed on the necessity of student reflection to help us experience the pedagogy in a real sense.

Value of the Community of Practice

The second finding supports Patton & Parker's (2017) work on teacher educators' participation in CoPs. Engagement with critical friends provided effective support and challenged the PETE throughout this project. The affirmation of another professional was clearly recognised as supporting the impetus towards initially understanding and then moving towards improving one's own professional practice. Robert recognized the value of collaboration thus:

> *Engaging in collaborative self-study is very motivating for me. I like the idea that I'm not working in isolation, and I can share my thoughts and reflections with other teacher educators. I'd like to think that my experiences can help other to deepen their understanding of MPE too (Robert).*

Mary responded to Robert's views on collaboration in his meta-reflection agreeing that the experience was a catalyst for change as suggested by Casey et al (2018): *"The motivation of others and the interdependence of the group ensured that we addressed our practice"* (Mary).

The dilemma around the management of time spent on content and pedagogy was a central concern to all. In this regard, the support of the collaboration in the COP was crucial in affirming the direction to prioritise pedagogical change, as confirmed by Tom:

I feel the midpoint discussion has also focused on the content dilemma/ balancing act with course delivery and student time to reflect on pedagogy and meaning. I took the decision to ensure checking in time in the coming sessions on foot of this (Tom).

The findings illustrate how the pedagogical principles of the MPE approach provided an overall guiding framework that influenced pedagogical decision-making including specific decisions and actions of teaching within individual learning activities as well as within module content, design, and organisation. The MPE approach is valuable in supporting PST learning and illustrates to PSTs the value of their operating from a coherent set of principles focused on meaningful experiences. This process helps to inform decision-making about their teacher actions and children's learning. The value of a community of practice in the case of this research "emphasizes the contribution of relationship, caring, and mutual support within the group while at the same time focusing on the professional development of individuals within their own discipline" (Brody & Hadar, 2015, p. 247). Significantly, it provided us with opportunities to share and discussion ideas that contributed to our own professional learning (Goodyear, Parker & Casey, 2019).

Significance of the Study

This research contributes to the growing body of research on MPE. Specifically, our findings build on the work of Fletcher *et al.* (2018, p.87) where they "demonstrated an explicit prioritisation of meaningful experiences in their decision-making processes". Developing pedagogies of meaning that support PSTs to foster meaningful experiences for young people may improve PE for the children they will teach in the future. Martin & Dismuke (2015, p. 5) suggest that collaboration enables "individuals to work across boundaries of their own knowledge, skills, and dispositions in dealing with the complexities and challenges of teaching". Our research as we focused on the implementation of a specific pedagogical innovation supports this view. The data generated from our study evidences our professional development as individual PETEs, and enabled us to identify priorities and challenges in better facilitating quality pre-service education in the future.

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