

'It's how PE should be!': Classroom teachers' experiences of implementing Meaningful Physical Education

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Abstract

Meaningful Physical Education (PE) is a pedagogical approach to PE instruction designed with the aim of helping teachers explicitly prioritise meaningful experiences for students. The purpose of the current study was to conduct a small-scale implementation of a preliminary version of Meaningful PE with a sample of five primary classroom teachers in Ireland to receive their feedback on the approach and their experiences of implementing it in their classrooms. Qualitative data were collected across an eight-week implementation period. An actor-oriented analysis was used to focus specifically on teachers' decisions concerning both what and how to implement the approach, as well as the reasons why they implemented Meaningful PE the way they did. Results show teachers were generally supportive of Meaningful PE as they attempted to implement several components of the approach in their classrooms. Teachers' implementation was highly related to their positive interpretations of the approach, in relation to both their perceptions of beneficial student outcomes and in drawing connections between the approach and prior experiences of and beliefs about teaching. This study adds further support to prior small-scale studies where implementation of Meaningful PE has been assessed and provides insight into how the approach might be introduced to and implemented more broadly by teachers in the future.

Keywords

Pedagogy, elementary, primary, innovation, actor-oriented

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Introduction

Due to its focus on the prioritisation of personal significance of movement experiences, the promotion of meaningfulness in Physical Education (PE) has the potential to strengthen pedagogy and encourage a lifelong pursuit of physical activity (Kretchmar, 2006). This perspective comes at a time when many students cite current versions of PE as lacking relevance to their lived experiences (Ladwig et al., 2018). An experience that is 'meaningful' may be described as that which holds personal significance or value to the participant (Kretchmar, 2007; Metheny, 1968). Beni et al.'s (2017) review of literature has shown that, while there has been a significant body of research in PE to understand *what* students do and do not find meaningful in PE, less has been done to understand *how* PE teachers might promote these types of experiences for students (Beni et al., 2017). Questions about how to specifically design tasks, lessons, units of work, and assessment tools that prioritise the meaningfulness of students' experiences in PE have been asked consistently throughout the last several decades, while at the same time, the development of coherent approaches, models, or frameworks has remained somewhat elusive.

Since the time of this review, some authors have responded to calls in the literature for exploration of pedagogies for meaning. For instance, both O'Connor (2019) and Ní Chróinín et al. (2020) highlight the potential value of reflective activities in helping students navigate the meaning-making process. Importantly, while these studies outline approaches that allow access to students' meaning-making about their learning, this is distinct from pedagogies designed with the explicit prioritisation of meaningfulness in mind. In addition, Walseth et al. (2018) have found support for the use of the activist approach to help promote meaningfulness for students through their involvement in curriculum-making processes. Indeed, several pedagogical models - for example, Sport Education (Tsangaridou and Lefteratos, 2013) and games-centred approaches (Fry et al., 2010) – have been shown to foster meaningful experiences for some students in PE, along with teaching approaches informed by social constructivist (e.g. Azzarito and Ennis, 2003) and participatory (Enright and O'Sullivan, 2010) frameworks. However, in these models and approaches, meaningfulness tends to be positioned as a convenient outcome or by-product rather than explicit priority (Beni et al., 2017). Additionally, in teacher education, Fletcher et al. (2021) have focused on pre-service teachers' experiences of learning about Meaningful PE. While all of these studies have the potential to offer insight into the meaningfulness of PE experiences, what is missing in current approaches and/or models is a coherent set of guidelines to help teachers make sense of how children tend to experience meaningfulness in PE, and to select tasks, approaches, and/or models – either new or existing – based on their ability to provide the types of experiences that students find meaningful and where meaningfulness is positioned as the main priority of both the intervention and the teacher's decision-making.

So what do students find meaningful in PE? In a major review of literature, Beni et al. (2017) found evidence of several provisional features of meaningful experiences. We describe these features as provisional because we believe they provide a starting rather than end point for discussions with children about the qualitative nature of their experiences in PE. These features include: social interaction, fun, challenge, motor competence, personally relevant learning, and delight. For example, students in Dyson's (1995) study explained that positive social interactions, fun, feeling appropriately challenged, and the development of motor competence were factors that enhanced the meaningfulness of their PE experiences. Beni et al. (2018, 2019) and Ní Chróinín et al. (2018) studied how two beginning elementary PE specialists used the features as an explicit guide for their pedagogical decision-making processes. Children in those classes often described

an experience as meaningful (using descriptors such as fun, challenging, etc.) when the teachers used strategies that supported children's autonomy, reflection, and goal-setting. These central pedagogical principles often supported teachers' decisions to use several existing models, such as Teaching Games for Understanding, to facilitate the meaningfulness children experienced and the ways teachers could prioritise meaningful experiences. Elsewhere, O'Connor (2019) and Ha et al. (2003) also describe the ways reflective and autonomy-supportive approaches have supported children in accessing meaningful experiences in PE. It is these central aspects of autonomy-supportive strategies (student-centred pedagogies that prioritise student voice and choice), reflective processes, and goal-setting that may form a strong platform to enable meaningful experiences, and which can inform the development of an outline of a coherent approach that prioritises meaningful PE experiences. The purpose of the current study was to test a preliminary version of Meaningful PE – a pedagogical approach to PE instruction designed to explicitly prioritise meaningful experiences – with a small group of teachers to receive their feedback on the approach itself and their experiences of learning to implement it in their classrooms.

Meaningful PE

Meaningful PE is designed to help students value their experiences in PE and understand the ways that participation enhances the quality of their lives. Thus, the approach is geared toward helping teachers make decisions that *explicitly* prioritise meaningful experiences for and with students in PE. Because of the highly subjective (Metheny, 1968) or transactional (Garrison, 2001; Quennerstedt et al., 2011) nature of meaningfulness, Meaningful PE is designed to be flexible, meaning that teachers are able to adapt the approach and how it is implemented in their classrooms to suit the interests and needs of individual learners and the context in which it is being employed. We recognise that this holds important implications for the notion of 'fidelity' or 'integrity' of implementation of the approach. It is our suggestion that teachers implement all or most of the key principles of the approach, though this may be done to varying extents or in different ways in different lessons and/or contexts. For instance, while we argue for the importance of regular reflection, this may vary between verbal and written reflection and in terms of its depth.

The approach is centred around six features of meaningful experiences (Beni et al., 2017; Kretchmar, 2006):

- Social interaction: promoting positive relationships and providing opportunities for students to work together in groups, partners, and alone at times;
- Fun: promoting immediate enjoyment in lessons;
- Challenge: aiming for an optimal level of challenge for each student through offering modifications and providing choice;
- Motor competence: ensuring students are learning and developing both skills needed to participate in activities and a perception of competence in their ability to do so;
- Personally relevant learning: helping students understand what they are learning, why it matters, and how it relates to broader aspects of their lives; and
- Delight: As explained in Beni et al. (2017), delight is a difficult concept for both children
 and adults to understand and explain. For this reason, and given the short duration of the
 current study, teachers were not introduced to the concept of delight. Readers are referred to
 Kretchmar (2005) for a detailed discussion of delight.

Teachers can use the features as a starting point for developing a shared language for meaningfulness, which can help both teachers and students better understand and become aware of what makes an experience meaningful. This allows students to reflect upon the meaningfulness or meaninglessness of their experiences and be a part of the discussion on how to improve the quality of those experiences. Teachers can then begin to filter their pedagogical decision-making processes based on students' responses, while also making these decisions explicit to students. To reiterate the flexibility of the approach, teachers might aim to plan for a variety of experiences that enable learners to access all of the features of meaningfulness (e.g. social interaction, fun, challenge, etc.) across time, while others might emphasise one or two features (e.g. challenge, personal relevance) to be focused on and explored in depth.

In addition to using the features to filter pedagogical decision-making and promote a shared language, Meaningful PE is centred around the use of autonomy-supportive strategies within a student-centred approach ('student voice and choice') and engaging students in opportunities for short-term and long-term goal-setting through written and oral reflection. When autonomy and reflection on prior experiences are considered as central organising concepts of Meaningful PE, there is a close alignment with several major principles of social constructivist theories of learning. Through social constructivism, it is proposed that learners construct knowledge through interrogating their prior experiences and the ways these experiences have been shaped by interaction with peers, their teachers, objects, apparatus, and the social environment (Vygotsky, 1978). Importantly, we see the features presented here as qualitative aspects of meaningful learning experiences while the pedagogies act as potential facilitators of those experiences. For a more detailed theoretical consideration of Meaningful PE, readers are referred to Fletcher et al. (2021).

Because our understanding of pedagogies that support meaningful experiences has been based on the experiences of two individual teachers in very different contexts (Beni et al., 2018, 2019; Ní Chróinín et al., 2018), the purpose of the current study was to expand its implementation and test a preliminary version of Meaningful PE with a small group of teachers to receive their feedback on both the approach and their experiences of learning to implement it in their classrooms. The aim was to use findings from this study to further refine the approach. The following research question was used to guide the study: what are classroom teachers' experiences of Meaningful PE and of implementing it in their classrooms?

Theoretical framework: an actor-oriented perspective of implementation

For analysing teachers' implementation of innovations, Penuel et al. (2014) highlight the potential value of both *integrity* and *actor-oriented* perspectives. Integrity perspectives are aimed at understanding the degree to which teachers' implementation of an innovation is coherent with its goals and principles (Penuel et al., 2014). Implementation is thus viewed as a relatively linear process with little room for teachers to deviate from the ideas that have been recommended by the innovation designer (Century and Cassata, 2016). An integrity perspective carries assumptions and principles consistent with fidelity, which is a term often used to analyse teachers' implementation of pedagogical models in PE (Hastie and Casey, 2014). Integrity perspectives are deemed particularly valuable when analysing approaches or models that have already been developed, validated, and tested; in other words, approaches or models that are established rather than new (Century and Cassata, 2016).

A second type of implementation research is focused less on whether the innovation was implemented as intended by its designers and more on describing *how* the innovation was implemented, the extent of the implementation, and *why* teachers made their decisions about implementation (Century and Cassata, 2016). An actor-oriented perspective shifts the focus to teachers' *interpretations* of the characteristics of an innovation and the consequences of those interpretations for implementation. Thus, an actor-oriented approach to implementation research is aimed at understanding the insider's perspective – taking an interpretive rather than judgemental stance (Penuel et al., 2014). This type of analysis 'begins with a premise that implementing new materials presents a situation that requires teachers to draw connections between previously encountered curricular goals and structures and the goals of new curriculum' (or innovations) (Penuel et al., 2014: 752). Given that Meaningful PE has yet to be tested extensively and is based on a premise of flexible implementation, we take an actor-oriented perspective to analysing teachers' implementation of Meaningful PE to help us further refine the approach for future dissemination and implementation with other teachers.

Actor-oriented analysis was originally conceptualised as a tool for studying students' transfer of learning in mathematics (Lobato, 2003), placing a strong emphasis on the learner's prior activities and experiences, and their influence on novel situations (Lobato, 2012). From this perspective, what qualifies as 'transfer' of learning is not predetermined; rather, the goal is to understand the learner's perspective and process of drawing connections and similarities between current and past experiences (Lobato, 2003). Actor-oriented analyses have since been applied to the study of teachers' implementation of curricular innovations in science (Penuel et al., 2014) and reading (Troyer, 2017). While integrity-based approaches involve comparing implementation of an innovation to a set of standards or benchmarks, actor-oriented analyses consider the pedagogical frames of reference within which implementation occurs. The aim is to draw connections between the decisions teachers make about implementation and how these decisions are reflective of what they view as salient features of the innovation and are influenced by both prior experience and local context (Penuel et al., 2014). An actor-oriented analysis is focused specifically on teachers' decisions concerning both what and how to implement and/or adapt as well as the reasons why they implement innovations the way they do (Penuel et al., 2014). These responses can then be used by developers of innovations to make refinements and adjustments based on the teachers' experiences of implementation through identification of the challenges, successes, and contextual factors deemed important to the specific innovation. We concur with Penuel et al. (2014: 756) that 'keep[ing] teachers' beliefs, prior experiences and classroom realities at the fore' through an actor-oriented analysis, 'provides a means for identifying the how and why of implementation challenges that design teams must address'.

Methodology

This research was conducted using a qualitative approach through a social constructivist lens. Specifically, we view knowledge construction as a social process grounded in active inquiry and exploration, with participants (in this case, teachers) making sense of knowledge through reconciling present and future experiences with those from the past and in interaction with the social environment (Vygotsky, 1978). Given the subjective nature of meaningfulness and the student-centred philosophy underpinning the approach itself, we took the perspective that the individual and subjective experiences of participating teachers were worth understanding and sharing. We

agree with Alfrey et al. (2017: 109) that it is 'inappropriate to expect teachers to listen and respond to student voice when they themselves often feel muted'. In particular, we are interested in listening to teachers to help us think about how to refine Meaningful PE and understand the most helpful ways to introduce it to other teachers in the future.

Context and participants

This study was conducted with five classroom teachers at five primary schools in Ireland. Teachers were invited to participate through an online advertisement shared through Twitter and email by the Irish Primary Physical Education Association (IPPEA). Each participant was responsible for teaching PE to their own class. None of the participants had an educational background or specialism in PE, though they all had a particular interest in the subject. Four of the five teachers were involved in coaching school sport teams and/or participating in competitive sport themselves. Thus, the participants represented a particular type of generalist teacher, with an interest in sport, experience of coaching, and an active involvement in wider primary PE networks in Ireland through following the IPPEA Twitter account. The following is a list of the participants, the grades they teach, and the number of students in each of their classes:

- Sophie fifth class 24 students
- Hannah fourth class 33 students
- Liam fifth class 28 students
- Eva fifth class 23 students
- Cara fourth/fifth class 1 21 students

In the interest of protecting participants' anonymity, pseudonyms have been used in place of teachers' names. This research was approved by Mary Immaculate College Research Ethics Committee.

Research design

Teacher participants were given access to an online learning platform with several videos and print resources (e.g. blog posts, scholarly papers, visuals for use in the classroom) designed to help them learn about preliminary ideas of Meaningful PE and how to implement it in their classrooms. They were asked to visit this site and complete all of the learning activities before implementation would begin in their classrooms, at their discretion following Easter holidays. They were also given the opportunity to ask questions before and during the implementation period. Teachers were asked to teach their regular PE lessons using Meaningful PE over eight weeks. This consisted of one, one-hour PE lesson each week. Teachers chose the content of their lessons and were supported in using the approach for whatever content they had planned to teach. Following each lesson, teachers completed written reflections on their experiences of Meaningful PE.

Data collection and analysis

Three qualitative data sources were used. First, each teacher was provided with a teaching 'diary' template outlining a short, written reflection prompt that they were asked to complete at the conclusion of each lesson taught across the eight-week unit and an additional culminating written reflection to be completed at the end of the unit. The reflective prompts asked teachers to consider,

for example, pedagogies from the approach that worked well, those which did not, and how they might adapt their approach for the next lesson. Each weekly reflection template contained six questions; teachers generally responded with one or two sentences for each.

Second, during the implementation period, a member of the research team conducted two non-participant observations in each teacher's classroom, observing for key elements of Meaningful PE and how they were/were not being implemented in the lesson. Observations were conducted using a template asking the observer to detail the activity, what could be seen/heard in the classroom, and connection to the features of Meaningful PE in each of the warm-up, development, and cool-down sections of the lesson. The template also included a section for other comments/actions from both the students and the teacher. The purpose of the observations was to confirm/disconfirm teachers' perspectives from other data sources.

Third, each teacher participated in a one-on-one semi-structured interview after the eight-week implementation period. Questions centred around, for example, their experiences of implementing the approach, specific features/elements that did/did not work well, and recommendations to other teachers who might use the approach in the future. Interviews varied in length and lasted between 18 and 42 minutes.

Data were analysed using Braun and Clarke's (2006) step-by-step approach. Interview data were transcribed, and all data sources were read and reread for familiarisation. Initial descriptive codes (Miles et al., 2014) were generated and grouped into preliminary themes by the first author and shared with the second and third authors for feedback. For example, data related to a specific aspect of the approach were coded accordingly (e.g. 'challenge', 'goal-setting'); teachers' descriptions of the implementation process included several codes (e.g. 'barriers', 'positive change'). Data were coded three times by the first author. The resulting themes were shared with the second and third authors and are presented in the section that follows. Data analysis was conducted inductively; however, the actor-oriented perspective has been applied afterward to help us structure and make sense of the *What?*, *How?*, and *Why?* of teachers' implementation decisions.

Results

Teachers' implementation of Meaningful PE: a focus on What? and How?

In this section, we highlight the *What?* and *How?* of teachers' implementation of Meaningful PE by focusing on teachers' use of the pedagogical principles that were recommended for use in their classrooms to support students' experiences. Importantly, the data we share here were collected post-implementation. Consequently, any suggestions of 'change' in teachers' perspectives and/or practice are a reflection of their own perceptions of change. Since we were not familiar with the teachers' practice beforehand, it is not our intention to speak to the quantity or quality of change in their practice but rather to share their experiences and perspectives of the process.

Implementing features of Meaningful PE. At the outset of the study, we positioned Meaningful PE as an approach that was designed to have a flexible implementation; that is, we wanted teachers to implement it in their classrooms in a way that made sense for them and suited the needs of their students. One of the primary ways teachers did this was by placing emphasis on different features of meaningfulness at different times. For some teachers, this meant one feature was consistently prioritised above others. For instance, Sophie nearly always reflected on the feature of challenge in her journaling; observations of her teaching confirmed that this was a prioritisation. Reflecting on

this in her interview, she suggested 'I would have never said before: "You decide what challenge you want to set." So they loved that. And they applied themselves more to the game then...because they set their own challenge.' Similarly, Hannah chose to emphasise social interaction because she was concerned about the social dynamics in her classroom due to a group of students who were previously two separate classes having recently been combined into one:

I think this project helped them define their roles in the group, and to find their friends and to realise that we've got to get on with each other in the class You have to [emphasise social interaction] with a big class! (Interview)

For some teachers, applying the approach to suit the needs of their students meant that different features were highlighted in different lessons as the need arose. Liam suggested: 'I don't think I set out to prioritise one over another, but [fun and motor competence] were the two at the forefront' (Interview). For others who intended to prioritise one feature, they quickly realised that the features functioned symbiotically. Hannah shared: 'It all evolved, and one led to another. You'd think, "I'll focus on one today in isolation," but in actual fact they all merged into one' (Interview). Similarly, Eva suggested: 'The other features of Meaningful PE feed into each other; if you focus on social interaction, you're going to have more fun' (Interview).

In spite of recognising a connection between the features, there was also acknowledgement that some were more difficult to work toward than others. For instance, while Hannah found great value in promoting personally relevant learning, she suggested: 'I think that takes further development; over time they'll start making the connections themselves, incidentally, and they won't even realise it' (Interview). Eva found that offering students a 'just right' level of challenge was a difficult task: 'The differentiation is difficult within the lessons. I gave them choice . . . and trying to tweak it to suit everyone, but you do have different skill levels and frustration if someone was constantly finding it difficult' (Interview). Thus, while this variable prioritisation of the features of meaningful experiences may have been an intentional decision to highlight one over another in some cases, and thus reflects a flexible implementation, at times these decisions also seemed to be guided by what felt comfortable or doable to teachers. This is perhaps unsurprising given the short duration of the study.

Facilitation of a shared language. Sharing the features of Meaningful PE in student-friendly language allowed students and teachers to discuss the meaningfulness or meaninglessness of those experiences more explicitly. Hannah suggested, 'I'd say those words every day to them, and then they'd say, "This is fun. This is meaningful." Those words were floating around their heads the whole time' (Interview). Similarly, Liam felt that the best way to start was to display the features 'so the kids can look at them when you're explaining things' (Interview). Liam used this language with students in the gym, asking them to rate the meaningfulness of their experience on a number line and explain their choice using the features. Students were able to articulate, for example, that the activity was less meaningful because it was not challenging enough given their previous experience with the activity (Liam, Observation 2). While some teachers used and saw the benefits of this shared language, others felt they should have made better use of the language of the features. For example, Eva reflected, 'You have to keep bringing it back to the features and MPE framework . . . I should have referred more to that to give them the language and ideas' (Interview). Thus, while all of the teachers reported having used the features to guide their practice to some

extent, some of them were, at times, less confident in their ability to make those decisions explicit to students in order to facilitate a shared language.

Providing autonomy support. Teachers quickly came to the conclusion that autonomy was very important to their students. Liam highlighted that: '[Students] enjoyed that there was thought being put into the lessons and that they could give feedback to me, and all their voices were being heard. The sense that their opinion was valued was important to them' (Interview). However, teachers also felt that learning to implement more autonomy-supportive strategies in their pedagogical approach was not a simple task. For instance, Eva reflected that 'giving more choice within the lesson' was an aspect she needed to 'get used to' (Diary, Wk6). Similarly, Cara felt that giving students more say within lessons was daunting but ultimately profitable:

The children are directing the lessons more. It feels a little less 'controlled' . . . as children give input and relate what works best for them. This, however, has created more energetic and regulated classes as all children seem happy to be involved. (Diary, Wk2)

In spite of students enjoying increased autonomy, learning to work within this type of environment proved to be an adjustment for students as well as teachers. Eva commented:

I don't think they are used to autonomy in lessons...so I think they found that difficult because the teacher is always there to tell them what to do next, and they don't have that creative aspect anymore because they don't have to use it. (Interview)

Similarly, Hannah felt that students initially struggled with opportunities to exercise autonomy '[needing] a lot of guidance' (Diary, Wk1). Over time, she worked with students to help them 'take ownership for their own learning' (Interview).

While apprehensions and challenges were common early in the study, teachers seemed to become more comfortable implementing autonomy-supportive strategies for students once they had some 'boundaries' in place. For instance, speaking of offering students free time to work on something themselves, Liam commented:

Once you make the boundaries clear, I think it's brilliant.... They could have chosen anything but in general I saw them bouncing the ball, trying to hand pass, or toe tap.... There's an element of thinking for themselves and taking responsibility. (Interview)

Similarly, Cara, who initially struggled with releasing control to students, was able to identify several benefits for students as she allowed them to play a more significant role in the decision-making process:

I think as teachers we only feel we have control over the lesson if we've planned it ourselves, whereas when I stepped back and gave the kids more control over planning, it became obvious that they were more involved in the whole lesson.... Every child was participating and doing their best. I was just delighted that we did it, and it's something I'll continue for every PE lesson. (Interview)

While implementing autonomy-supportive strategies proved to be more difficult than prioritising and articulating a language using the features, teacher participants thought it was valuable to work through the apprehension and attempt to prioritise student voice and choice to a greater

extent. We do not interpret these results to mean that greater autonomy support was necessary in every aspect of every lesson, but rather in relation to teachers' previous practice. In other words, they were interested in offering more autonomy support in their programmes in general than they had previously.

Reflection. For many participants, the incorporation of student reflection activities (particularly written reflections) was new. For instance, Sophie reflected that she was initially apprehensive as she had 'not used reflections as part of PE lessons before' (Diary, Wk1). Because this process was new for teachers, some found its implementation required an intentional 'focus' (Eva, Diary, Wk4), and, at times, the process proved to be quite challenging. Cara felt that, even though she was explicit with students about learning outcomes and the types of goals they might set, 'some of that was lost on them, and I'm not sure why' (Interview). Similarly, Liam felt that written reflections were helpful for the first few weeks; however, they quickly lost their novelty and became monotonous and time consuming. Some of this he attributed to a) using a reflection template that was the same for every class and b) timetable issues; with PE as the final class of the day, students' reflections were left to the next morning. In spite of these challenges, Liam felt that for him 'it definitely was helpful' but that the process needed modifying, perhaps relying more heavily on shorter written or strictly verbal reflections.

While several teachers faced challenges, those who were willing to work past them found benefits of student reflection. For instance, Sophie suggested she would carry the use of a PE diary into the new school year because she felt it enhanced student motivation, gave opportunities for all students to share their opinions, and allowed students to be consciously aware of what they were learning (Interview). This challenged her previous conceptions related to PE. While she saw value in student reflection in other subjects, she noted: 'With PE, it's just different; they've never done anything like that before...this reflection time is great' (Interview). Similarly, Liam felt that reflection allowed students to 'become independent', 'make up their own minds', and '[be] honest in their own opinions' (Interview). While Eva initially struggled with getting students to write in journals, the process got easier as time went on and eventually '[made] it easier for the teacher to assess...and [made] the students mindful that PE isn't just about playing games or the end product...it's the process of getting there as well' (Interview).

Teacher participants were often surprised by students' written reflections. For example, Liam saw that some students were struggling with a 'lack of confidence and low self-esteem' (Liam, Diary, Wk6), while Sophie was surprised to discover how many students enjoyed the challenge of experiencing something new (Diary, Wk1). In relation to the implementation process, teachers were able to use reflections to prioritise student voice by understanding students' perspectives of various aspects of each lesson and using that feedback to adjust how they were implementing the approach going forward. This allowed teachers to 'provide so much more focus to the PE lesson' (Sophie, Diary, Wk2) and ultimately influenced their pedagogical decision-making. In particular, several teachers commented on the ways they were able to offer greater autonomy support to students. In response to students' first set of journal entries, Cara was struck by 'how well the children respond to contributing to the lesson and how they become enthused and motivated by this' (Dairy, Wk1). Similarly, Sophie noticed from reflections that students were particularly keen on setting their own level of challenge. She allowed this to influence her pedagogical decisionmaking by looking to incorporate more challenge by choice in the future. Student reflections also offered Eva an informal assessment of student outcomes, being able to look across several weeks and measure 'how far [students] have come' (Diary, Wk8).

Goal-setting. Teachers described goal-setting as being highly related to reflection. For some, setting goals in PE was entirely novel and led them to question whether they had ever clearly articulated learning intentions for students. For example, Sophie shared:

I never set [goals] before. We'd just go out, but never think, 'What are we actually learning about?' And it gave them a focus as well: 'Am I actually doing the dodging skill properly?' So I liked that, setting the goal at the start and then reflecting on it; they did well in that. (Interview)

Similarly, Hannah found that students were unprepared for the task of setting and achieving goals for themselves in PE:

It's a skill that needs to be explicitly taught first.... So we came up with our own class goals, and that led into a whole class lesson before even going outside on what is a goal, how do you set a goal, why do you want to set it? It was a huge amount of personal development for them as well. (Interview)

She felt the time spent on learning to set goals was worthwhile because students could see what they wanted to get out of their lessons and was a skill that could easily be applied beyond PE.

It was clear that teachers attempted to implement most or all of the pedagogies of Meaningful PE advocated for through the approach, albeit to varying extents and not without challenges. Teachers' decisions concerning *What?* and *How?* to implement seemed to be influenced by their perceptions of both their own and their students' abilities and comfort levels. For some teachers who stepped out and tried something new, their prior conceptions were challenged. Thus, teachers' implementation of Meaningful PE heavily influenced and was influenced by their interpretations of the approach and how they perceived it might fit (or not) with their teaching and students' learning.

Teachers' interpretations of Meaningful PE: a focus on Why?

Teachers' perceptions of Meaningful PE were strongly related to the reasons *why* they implemented *what* they did and *how* they did it. Teachers were generally supportive of the approach, after having used it in their classrooms. For instance, when asked to reflect on the eight-week experience, Hannah wrote, 'I quite liked the entire framework and used it as a guide throughout the lessons' (Diary, Final Reflection). Eva was supportive of the ways Meaningful PE promoted more meaningful experiences for students:

I'm definitely going to bring it into next year now. One of the children said, 'I know that our journal is finished now, but can we please keep doing PE like that?' That's a testament to it now; even though the programme is over, they don't want the lessons to change. (Interview)

Similarly, Cara was overwhelmingly supportive of the approach, suggesting in her interview that she would 'highly recommend' it to other teachers:

I see nothing but positive effects, and it feeds into the classroom, creating a more positive atmosphere all-round.... I can see that being used outside of PE class as well. It's having a beneficial effect on everything.... Definitely something I'll continue with throughout.

Some participants were pleased with the way the approach seemed to apply to a variety of movement forms within their PE programmes. For instance, Sophie suggested, 'With this

programme you can use it across the board in all the strands. It's something you can apply everywhere' (Interview). Similarly, Hannah suggested, 'The framework itself, the language is really good, and it doesn't matter what content you do during PE; it's how you implement it in the framework' (Interview). Hannah felt the approach had application in other subject areas as well, suggesting, 'You could take it with different subjects.... It's a great methodology that you can apply across the board with your teaching' (Interview). Indeed, several teachers spoke positively and intended to continue using it to guide their PE instruction in the future.

Several teachers also shared that they came to the project with some apprehensions about implementing Meaningful PE, particularly in terms of some of the pedagogical principles that were recommended. Sophie shared:

I never used self-assessment in PE before, so I was interested to see if [the students would] take up on that. I thought the reflection diaries would take up a lot of time at the end of PE class...so a few concerns at the start. (Interview)

Sophie's concerns were linked to both her previous experiences (not having used self-assessment in PE before) and her perceptions of how her students might respond. However, when asked how these concerns played out, she suggested that everything turned out fine, with the reflection diaries providing a nice break when students were tired and allowing them to reflect upon what they had learned that day. Similarly, Hannah initially felt somewhat overwhelmed by the process of learning to implement the approach. However, she too was pleasantly surprised upon implementing it in her classroom: 'It took a while to read through [the resources], but when I got it clear in my head, I was like, "Awww, this will be really good!" And then I decided to really emphasise the framework with the kids' (Interview).

Thus, while teachers' initial perceptions left some of them with concerns about whether it would be a fit for them and their students, several of these concerns were alleviated through the implementation process. In general, teachers' positive interpretations of the approach were linked to two primary factors: a) perceptions of positive student outcomes as a result of using the approach and b) links to teachers' prior experiences and beliefs about teaching.

Perceptions of positive student outcomes. One of the primary reasons teachers cited why they were supportive of Meaningful PE was their perception of its positive impact upon a variety of student outcomes. This is not to suggest that we (or the teacher participants) measured student outcomes in relation to the approach but that the teachers perceived several benefits for students based upon their observations and interactions. In some cases, this was related to student engagement and enjoyment of their lessons. Hannah suggested the students were 'very positive' about her implementation: 'They really liked it! Every week it was "Are we doing PE today?" (Interview) In addition, some teachers felt student learning was enhanced when using the approach. For instance, Sophie identified a 'stand-out' moment for her: 'When I heard the children who are not sporty using the proper terms and skills; that for me was great. And the friendships that were built, how they worked together as groups, outside of their normal friend groups' (Interview). Thus, the learning that occurred was not limited to the physical domain.

Both Eva and Cara suggested that Meaningful PE helped students be more aware and inclusive of their peers. For instance, Eva felt that it was particularly beneficial for students who often excelled in PE to become aware of the need to include others:

I found that this framework was so beneficial to the less able students. It gave them the opportunity to be a part of the game and made the more able more conscious of the people around them and to be more inclusive.... That was lovely to see. It was one of those eureka moments to see that the lessons were working. (Eva, Interview)

Similarly, Cara felt that differences in students' physical abilities that were highlighted through her previous approach to PE instruction were minimised through the implementation of Meaningful PE:

The kids who excel and the kids who don't play sports, you didn't see the difference half as much when you were doing the Meaningful PE, as opposed to your regular.... They're all involved and giving it everything - it's a complete whole class endeavour. (Interview)

One of the primary positive student outcomes teachers cited was a perception that the approach helped provide focus to both their own teaching and their students' learning. Sophie shared that she had never previously considered providing students with learning goals or intentions in PE. Providing students with goal-setting opportunities before each lesson and diaries for reflection helped in that it 'gave [students] a focus' (Sophie, Interview). Similarly, Liam suggested that one of the helpful aspects of implementing the approach was that it 'ensured I always shared [the] learning intention [and] made me think more about different aspects of the lesson' (Diary, Final reflection). While he felt that there was a great deal of overlap between Meaningful PE and the way he normally taught PE, he found it helped students 'focus more on what we were doing and their goals and how they're learning' (Interview). In addition, he expressed, 'It helped focus me on the learning that I'm trying to plan and reflect more on how I can improve it' (Interview). In this way, using the approach helped teachers be more intentional in their teaching and their prioritisation on meaningfulness. This then filtered down into more focused student learning, which became a primary reason for some teachers' implementation of aspects of the approach.

Links to prior experiences and beliefs about teaching. Unsurprisingly, we found that teachers in this study interpreted and situated Meaningful PE in relation to what they already knew and believed about teaching, identifying ways various components aligned (or not) with their teaching philosophy. For example, Hannah suggested, 'When I do PE I like to focus on a skill, not just a game. I like to see that they're learning something. That'd be my philosophy in teaching, and the framework was a good way to do that' (Interview). Hannah was able to identify ways in which parts of the approach aligned with what she already believed about PE instruction.

For some participants, interpreting the approach through their experiences and beliefs meant relying fairly heavily on available resources early in the study. Over time, some came to integrate the philosophy of the approach with their own ideas: 'As the weeks went on I had my own ideas and I ran with them rather than going back to the website for help. So, I wasn't using it on a daily basis' (Liam, Interview). Similarly, Eva felt it was important to 'be aware' of the framework and 'just allow it to inform your practice' (Interview). She explained:

I was just taking what I had and improving it or putting new things into it. Those things were: stopping the game, bringing them in, giving them ten minutes to make their own games based on the skills we were doing, making it a more skills-based lesson.

Eva was drawing on the ideas of providing students with reflection time and autonomy support through involving them in designing elements of the lesson and bringing an intentional focus on the development of their motor competence. In a sense, this represents the incorporation of several individual elements of Meaningful PE into Eva's existing practice as opposed to a more coherent implementation.

For some teachers, implementation involved simply bringing elements of the approach into their existing practice; however, Cara articulated a more noticeable divide between her prior teaching practice and her perception of the approach. After having used it in her classroom, she came to perceive the approach as the standard for 'how PE should be', in contrast to her previous pedagogical practice. She noted, 'Maybe that's how the PE programme is already expected to be taught, but I don't recall ever giving so much ownership to the kids' (Interview). Similarly, for Eva, learning to use the approach required 'trying to shift [her] mindset' from the way she had taught PE in the past (Diary, Wk2).

When teachers perceived the approach as requiring changes in their teaching practice, they tended to experience some apprehension. In her interview, Cara suggested:

The first class was the toughest class because I felt the kids had more control than I had. But when I saw the effect that had on participation, and how they were mature enough to resolve the issues of the class, and how they could improve or reflect – when I saw that in progress, that made up my mind. I was going to continue with it regardless.

Similarly, Eva maintained feelings of apprehension until week eight when she finally saw the fruits of her labour. Her advice to other teachers learning to use the approach was: 'Trust the framework, because it's not going to be something you see overnight; it happens over time.' Although learning to reconcile this novel approach to PE instruction with prior experiences and beliefs about teaching and learning was a process that required an investment of teachers' time and effort, it was often viewed as a worthwhile endeavour.

Liam offered a contrasting perspective from other teachers, suggesting that Meaningful PE offered little that was different from his regular PE pedagogy. Consequently, in reconciling his prior and present experiences of teaching this way, his implementation of the approach did not '[alter his] usual PE lessons drastically' (Interview). Liam perceived that several of the students could not 'differentiate' this experience from their prior experiences in PE and seemed to find it 'monotonous' (Interview). In conclusion, Liam seemed unsure of his interpretation of the approach: 'That's not a result of the framework . . . I didn't achieve what I would have liked them to achieve, but there are always other variables' (Interview).

In spite of feeling this way, Liam was able to identify ways his implementation did alter his practice to an extent, particularly as he used his knowledge as a classroom teacher to translate 'good' pedagogical practice from the classroom to the gymnasium:

I [share learning goals] in every other class, but seeing it written down for them and them talking about it is really helpful because they're thinking 'Okay, this is what we're trying to achieve, and this is how we're going to achieve it over the next few weeks'. (Interview)

Importantly, the links teachers drew between their current pedagogical practice and their interpretations of the approach hold implications for connections between the *What?*, *How?*, and *Why?* of the implementation process. Teachers who interpreted the approach as being different

from their current teaching practice *and* beneficial for student learning and other positive outcomes were more likely to attempt or persevere with implementing the approach more completely and to report intentions to continue to use the approach in the future.

Conclusion and future directions

An actor-oriented analysis of teachers' decision-making has provided insight into the What?, How?, and Why? of teachers' implementation of Meaningful PE and can help developers of this approach and other new pedagogical innovations make refinements based on teachers' and their students' experiences. Studying teachers' implementation of Meaningful PE has provided insight into their decision-making concerning what elements of the approach they would incorporate into their practice and how (Century and Cassata, 2016). Our analysis of teachers' implementation decisions led us to believe there was an attempt by each teacher to implement something from the approach and by some to implement most things. However, teachers' implementation was highly related to their individual interpretations of the approach in relation to a) their perceptions concerning positive student outcomes (similar to teachers in Goodyear and Casey, 2015) and b) their own teaching and experiences of beliefs about teaching (similar to teachers in Penuel et al., 2014). These factors became the driving force behind why they decided to implement the approach as they did, and whether or not they expressed intentions to continue to use the approach in the future. Each teacher interpreted the framework in slightly different ways and seemed to take up and implement ideas that played to their strengths and preferences. In this way, none of the teachers seemed to push themselves drastically beyond their comfort zones or engage in any radical shifts but rather looked to 'tweak' their existing practice to align more closely with Meaningful PE.

An actor-oriented analysis (Penuel et al., 2014) has led us to draw the following conclusions about teachers' implementation of Meaningful PE. First, similar to Beni et al. (2018) and Ní Chróinín et al. (2018), we highlight the value of teachers beginning by engaging with their own philosophy of teaching in relation to the approach to identify areas of alignment/misalignment. As teachers identify these areas, we highlight the potential value in beginning with what is relatively comfortable, or 'close' in proximity to teachers' current vision (Ní Chróinín et al., 2019), though not to the extent of sacrificing students' needs and interests. We are interested in understanding how we might better support teachers who experience discomfort in the implementation process or who have moved beyond the 'honeymoon' period of innovation (Goodyear and Casey, 2015), and are also conscious that Meaningful PE may not be for everyone. We also see value in making use of teaching tools and resources that might support the development of a shared language, such as those offered by O'Connor (2019). Teachers in the current study who made use of such resources found them valuable, while those who did not wished they had.

Teachers required support in providing autonomy-supportive environments for students. We suggest this could be done in a step-wise manner by initially providing students with options – for example, being able to choose one type of task over another or making choices about group selection (Mandigo et al., 2008). As teachers and students become more comfortable, they may progress to more complex choices and involvement in decision-making processes. Similarly, we highlight the need for teachers to offer support to students in goal-setting activities. The need for teacher and student support in these contexts highlights the importance of an investment of time in the implementation process.

In addition, an actor-oriented analysis allowed us to outline the way teachers' dynamic interpretations, which seemed to become more positive over time, were highly influenced by their

perceptions of positive student outcomes. In this way, for teachers in the current study the implementation process was not the *result of* but a *means* to the development of a positive interpretation of Meaningful PE. We suggest this holds important implications for the design of professional learning initiatives in future implementations of Meaningful PE, in that providing opportunities for teachers to *see* and perceive positive outcomes for students is a key consideration (Guskey, 2002).

In some ways, it could be argued that the use of Meaningful PE may have simply been helpful in that it promoted what might be considered 'good pedagogy' in PE; for instance, allowing for reflection or promoting autonomy. We acknowledge the possibility that engaging teachers in reflection about their practice, as opposed to the implementation of the approach itself, may have been the key to any potential changes in their perceptions and/or teaching practice (Parker and Patton, 2016). While we believe that Meaningful PE has more to offer than simply 'good' pedagogy (e.g. the facilitation of a shared language with an explicit focus on meaningfulness) and is likely to be most effective when used coherently, we also contend that if the approach *can* help teachers implement good pedagogy that they were not previously utilising, we consider that a valuable contribution in and of itself.

We highlight the short duration of the current study as a possible limitation. While teachers were very supportive of the approach, we are conscious that their praise and enthusiasm may have been somewhat exaggerated as a result of the narrow timeline. Further, we recognise that literature on teachers' professional learning more broadly suggests that lasting change in teachers' practice requires sustained support over time (e.g. Goodyear and Casey, 2015; Parker and Patton, 2016). Importantly, the purpose of the current study was to serve as a small-scale implementation of Meaningful PE, in its early phases of development. As a way forward, we highlight the need to study the implementation of the approach over a longer period of time (Century and Cassata, 2016). In addition, the current study involved only classroom teachers with limited background in PE pedagogy. We suggest the need to continue to test implementation of Meaningful PE with more diverse groups of teachers. It is our hope that the approach may be of value to teachers of PE from a wide variety of backgrounds who are interested in explicitly prioritising meaningfulness for students.

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Note

1. Ages 9–10 and 10–11, respectively.

References

Alfrey L, O'Connor J and Jeanes R (2017) Teachers as policy actors: Co-creating and enacting critical inquiry in secondary health and physical education. *Physical Education and Sport Pedagogy* 22(2): 107–120.

- Azzarito L and Ennis CD (2003) A sense of connection: Toward social constructivist physical education. Sport, Education and Society 8: 179–197.
- Beni S, Fletcher T and Ní Chróinín D (2017) Meaningful experiences in physical education and youth sport: A review of the literature. *Quest* 69(3): 291–312.
- Beni S, Fletcher T and Ní Chróinín D (2018) Using features of meaningful experiences to guide primary physical education practice. *European Physical Education Review* 25: 599–615.
- Beni S, Ní Chróinín D and Fletcher T (2019) A focus on the how of meaningful physical education in primary schools. *Sport, Education and Society* 24(6): 624–637.
- Braun V and Clarke V (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology* 3(2): 77–101.
- Century J and Cassata A (2016) Implementation research: Finding common ground on what, how, why, where, and who. *Review of Research in Education* 40(1): 169–215.
- Dyson BP (1995) Students' voices in two alternative elementary physical education programs. *Journal of Teaching in Physical Education* 14: 394–407.
- Enright E and O'Sullivan M (2010) 'Can I do it in my pyjamas?' Negotiating a physical education curriculum with teenage girls. *European Physical Education Review* 16: 203–222.
- Fletcher T, Ní Chróinín D, Gleddie D, et al. (eds) (2021) Meaningful Physical Education: An Approach for Teaching and Learning. Abingdon: Routledge.
- Fry JM, Tan CWK, McNeill M, et al. (2010) Children's perspectives on conceptual games teaching: A value-adding experience. *Physical Education and Sport Pedagogy* 15: 139–158.
- Garrison J (2001) An introduction to Dewey's theory of functional 'trans-action': An alternative paradigm for activity theory. *Mind, Culture and Activity* 8(4): 275–296.
- Goodyear VA and Casey A (2015) Innovation with change: Developing a community of practice to help teachers move beyond the 'honeymoon' of pedagogical renovation. *Physical Education and Sport Peda*gogy 20(2): 186–203.
- Guskey TR (2002) Professional development and teacher change. Teachers and Teaching 8(3): 381-391.
- Ha AS, Johns DP and Shiu EW (2003) Students' perspective in the design and implementation of the physical education curriculum. *Physical Educator* 60: 194–207.
- Hastie PA and Casey A (2014) Fidelity in models-based practice research in sport pedagogy: A guide for future investigations. *Journal of Teaching in Physical Education* 33(3): 422–431.
- Kretchmar RS (2005) Teaching games for understanding and the delights of human activity. In: Griffin LL and Butler JI (Eds.), *Teaching Games for Understanding, Theory, Research and Practice* (pp. 119–212). Champaign, IL: Human Kinetics.
- Kretchmar RS (2006) Ten more reasons for quality physical education. *Journal of Physical Education, Recreation and Dance* 77(9): 6–9.
- Kretchmar RS (2007) What to do with meaning? A research conundrum for the 21st century. *Quest* 59: 373–383.
- Ladwig MA, Vazou S and Ekkekakis P (2018) 'My best memory is when I was done with it': PE memories are associated with adult sedentary behavior. Translational Journal of the American College of Sports Medicine 3(16): 119–129.
- Lobato J (2003) How design experiments can inform a rethinking of transfer and vice versa. *Educational Researcher* 32(1): 17–20.
- Lobato J (2012) The actor-oriented transfer perspective and its contributions to educational research and practice. *Educational Psychologist* 47(3): 232–247.
- Mandigo J, Holt N, Anderson A, et al. (2008) Children's motivational experiences following autonomysupportive games lessons. *European Physical Education Review* 14(3): 407–425.
- Metheny E (1968) Movement and Meaning. New York: McGraw-Hill.
- Miles MB, Huberman AM and Saldaña J (2014) *Qualitative Data Analysis: A Methods Sourcebook*. Los Angeles: SAGE Publications.

Ní Chróinín D, Beni S, Fletcher T, et al. (2019) Using meaningful experiences as a vision for physical education teaching and teacher education practice. *Physical Education and Sport Pedagogy* 24(6): 598–614.

- Ní Chróinín D, Coulter M and Parker M (2020) "We took pictures": Children's meaning-making in physical education. *Journal of Teaching in Physical Education* 39: 216–226.
- Ní Chróinín D, Fletcher T and Griffin CA (2018) Exploring pedagogies that promote meaningful participation in primary physical education. *Physical Education Matters* 13(2): 70–73.
- O'Connor J (2019) Exploring a pedagogy for meaning-making in physical education. *European Physical Education Review* 25(4): 1093–1109.
- Parker M and Patton K (2016) What research tells us about effective continuing professional development for physical education teachers. In: Ennis CD (ed) Routledge Handbook of Physical Education Pedagogies. Abingdon: Routledge, 447–460.
- Penuel WR, Phillips RS and Harris CJ (2014) Analysing teachers' curriculum implementation from integrity and actor-oriented perspectives. *Journal of Curriculum Studies* 46(6): 751–777.
- Quennerstedt M, Ohman J and Ohman M (2011) Investigating learning in physical education A transactional approach. *Sport, Education and Society* 16(2): 159–177.
- Troyer M (2017) Teacher implementation of an adolescent reading intervention. *Teaching and Teacher Education* 65: 21–33.
- Tsangaridou N and Lefteratos C (2013) Elementary students' views and experiences on sport education in Cyprus. *Advances in Physical Education* 3: 28–35.
- Vygotsky LS (1978) Mind in Society: The Development of Higher Psychological Processes. Cambridge: Harvard University Press.
- Walseth K, Engebretsen B and Elvebakk L (2018) Meaningful experiences in PE for all students: An activist research approach. *Physical Education and Sport Pedagogy* 23(3): 235–249.

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