



What is important? How one early childhood teacher prioritised meaningful experiences for children in physical education

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ABSTRACT: Attention to the meaningfulness of children’s physical education experiences can promote rich, life-enhancing engagement with movement. While there has been recent interest in prioritising meaningfulness in physical education, this is not matched by vivid descriptions or empirical evidence of how to teach for meaningfulness, particularly in early childhood settings. Adopting a single exploratory qualitative case study design, the purpose of this research was to share how one teacher (Zack) prioritised meaningfulness in one unit of physical education with children aged 3-4 years. Data sources included lesson plans (n = 6), teacher reflections (n = 8), teacher narrative (n = 1), teacher artifacts (including Tweets and photographs (n = 95)) and student interviews (n = 4). Inductive analysis (Thomas, 2006) lead to the identification of pedagogies that were used to prioritise meaningfulness, several of which are representative of Zack’s pedagogical approach. Specifically, stories provided a pedagogical frame for children to move with purpose. Zack scaffolded activities upon the stories to help children make choices and decisions about their participation and provided them with a language to reflect on those experiences. These findings exemplify what a pedagogy of meaningfulness might include in early childhood settings and provides important direction for future implementation.

Keywords: *young child, meaning, pedagogies, story-telling, narrative-based approaches*

Introduction

Physical activity occupies an increasingly peripheral role in the lives of many young people as they grow; children are less involved in youth sport and less likely to engage in physically active play (Côté & Hancock, 2016; World Health Organisation, 2019). This raises questions about how childhood experiences can lay pathways for continued engagement (Adank et al., 2021). A primary goal of physical education (PE) is to instill in young people a lifelong commitment to physical activity; however, current forms of PE are not achieving this aim. For many adults, PE conjures more bad memories than good, lacking relevance, being overly competitive or sport-orientated, and failing to provide resonance with their daily lives (Ladwig et al., 2018). It is essential that school-based PE lives up to its promise as a key site where all young people can learn through and about physical activity. The promotion of personal meaningfulness for children in PE may be one way to influence their continued participation beyond school (Strömmer et al., 2021). Attention to the meaningfulness of children's PE experiences can promote rich, life-enhancing engagements with movement that are intrinsically motivating in ways that contribute to quality of life (Kretchmar, 2008). A focus on meaningfulness serves as one transformative and radical shift to address the main problems in contemporary PE (Ennis, 2017) by offering a way for children to establish a personal relationship with movement that is sustained across time.

Meaningful physical education

Meaningfulness is a personal and subjective construct. Meaningfulness is understood to have a tripartite structure, including a) *purpose*: the desire to achieve purpose and goals of movement, b) *significance*: judgements related to the emotional value of the experience in striving to achieve the goal, and c) *coherence*: positioning the experience relative to other life experiences (Leontiev, 2017; Martela & Steger, 2016). Within PE, meaningfulness involves attention to the purpose and goals of movement for an individual, personal judgements related to the emotional value of the experience, and a sense of coherence where PE connects to other life experiences (Chen, 1998). This tripartite structure has informed the development of the Meaningful PE approach, which has enabled a growing understanding of what a pedagogy of meaningfulness might look like when applied in a PE setting (Fletcher & Ní Chróinín, 2021).

Within Meaningful PE, democratic and reflective pedagogical principles provide theoretically-grounded guidance on how to personalise and individualise experiences in ways that better match an individual's preferences (Fletcher & Ní Chróinín, 2021). Inclusion is at the heart of a democratic approach, with attention to autonomy-supportive approaches, involvement of students in decision-making through pedagogies of voice and

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ownership of the experience towards self-direction. Involving children in genuine dialogue within democratic processes can support children to negotiate and contribute to making and enacting collective decisions (Light & Harvey, 2017). Reflective pedagogies emphasise the role of goal-setting and reflection in making value judgements, and the participant making sense of experiences within the context of their lives. Setting collective as well as individual goals can help to personalise an experience, encourage participants to invest in the experience, and to make sense of the experience. Encouraging children to set and work towards both longer- and shorter-term goals, as well as goals in different domains, helps them to take a 'bigger picture' view of their experiences. Making sense of one's own and other's experiences can provide a lens to respond to and support a variety of learning needs and interests across contexts and can facilitate that problematising of structural inequalities. Growing evidence suggests these approaches can enhance learners' engagement and the how they judge their experiences (Howley et al., 2021). Attention to meaningfulness also promotes responsiveness in how elements of the curriculum are emphasised and chosen by placing the learner at the centre of decision-making (Wintle, 2022).

Despite meaningfulness being emphasised as a personal and individualised process, it is clear that there are common features of meaningful experiences for children. Several features of Meaningful PE provide direction on what is important to the quality of children's participation (Beni et al., 2017). For example, social interaction recognises the social and collective nature of PE experiences. Being with friends and others is important to the quality of experience. The features of challenge and motor competence are closely related. Experiencing 'just right' challenge is important to motivate and engage learners, while learning new skills, being competent and feeling competent to participate are deal-breakers for participation for many. Fun and enjoyment are features that place a focus on being 'in the moment'. Fun is central to how an experience is judged, particularly for children. We often ask: who seeks out experiences that are *not* fun? The feature of personally relevant learning emphasises how the participant sees the importance of the experience in terms of how it connects and fits with other parts of their lives. The importance of physical activities within the context of other activities determines an individual's relationship with physical activity; if an individual's relationship with physical activity is an important and significant relationship the individual is more likely to be engaged in physical activity (Koski & Zacheus, 2012).

This set of features has been helpful to teachers as touchpoints to guide their pedagogical approach (for example, Vasily et al., 2021). Down (2021) used the features to guide a cycling unit with 5-6-year-old kindergarten students. The features helped him plan learning intentions and offered clarity in evaluating the value of the learning experiences. Clearly, participants within a PE group will have different preferences and needs; thus,

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creating meaningful experiences for everyone all the time is unrealistic. Also, meaningful experiences are not limited to the pedagogical ‘gifts’ of the teacher; they require the participant to commit, invest and persist. In this way, working towards the presence of the features in a PE class alone is not sufficient. What a teacher *can* do is implement democratic and reflective approaches, paying attention to what is important to their young participants. The features of Meaningful PE can provide a useful steer for a teacher to get started but should not be limiting in how PE is approached or how participant’s voices are accessed and heard.

Physical education in early childhood

While there has been recent interest in prioritising meaningfulness in PE and growing understanding of how to promote meaningfulness with older children (Fletcher et al., 2021), this is not matched by vivid descriptions or empirical evidence of how to teach for meaningfulness in early childhood settings. PE in early childhood is becoming an increasing area of interest for those seeking to understand and influence physical activity engagements in response to alarming trends towards disengagement from an increasingly young age (WHO 2019). This increased attention is driven primarily by health and economics rather than an urgency built around what is lost in childhood when the intrinsic values of play and movement are sidelined (Petrie & Clarkin-Phillips, 2018).

Early childhood experiences play a formative role in children’s future learning and engagements. Children aged 3-4 are experiencing formal schooling for the first time. Their understanding of PE may be indistinct from their free play and informal physical activity learning breaks at school. These children may not have a frame of reference for what PE is ‘supposed’ to look like. On the one hand, PE may be perceived as an opportunity to play and have fun with their friends; young children want to play in interesting and varied environments (Sando & Sandseter, 2022). On the other hand, “children’s participation in formalised physical activity programmes may enable them to be more familiar with the culture of school learning: lining up, following instructions, and waiting to be told when to move and what to do” (Petrie & Clarkin-Phillips, 2018, p.515). There is limited empirical research internationally on young children’s experiences of early childhood PE or on the pedagogies and approaches teachers of PE adopt with young children (Petrie & Clarkin-Phillips, 2018). What is consistently evident across contexts is the important role of the teacher and the environment created in impacting on the quality of children’s experiences (Stork & Sanders, 2008).

Powerful pedagogies of early childhood provide one avenue to better understand and influence children’s motives and experiences. In particular, there is clear value of storytelling processes in promoting children’s language development, literacy and numeracy skills as well as their social and emotional development (Cremin et al., 2017; Merjovaara

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et al., 2020). Also, there is some limited evidence that story-telling can promote physical skill learning. For example, Duncan et al. (2019) combined movement and story-telling to promote young children's physical skill learning as well as their language competences by acting out scenes from 'The Gruffalo' storybook. Within an Italian context, Tortella et al. (2020) have also demonstrated the value of a movement-story approach to movement with pre-schoolers. This evidence provides encouraging direction for the potential of story-telling as a frame for PE with young children.

Alongside increased motor competence, story-telling also has potential to compliment other features of Meaningful PE. Stories can play a role in promoting a democratic approach with young children. Mardell and Kucirkova (2016) explain:

...a democratic classroom community is a community, where children have the opportunity to collectively create ideas and make meaning together. This involves far more than children voting for what kind of crackers they want for snack. It involves children and teachers creating a culture together by establishing the rules, rituals, stories, artefacts and ideas that define the group (p. 170).

Choice and ownership of the developing storylines are central to children's agency as learners within the story-telling process. The teacher is encouraged to provide a scaffold for the children to build their own personal stories rather than imposing a narrative upon them.

Aligned with the democratic and reflective pedagogical principles of Meaningful PE, stories also provide natural structures for goal-setting (what is going to happen or what do I hope to happen?) and reflection (what happened?) on children's movement experiences. For younger learners, the processes of goal-setting and reflection may be more limited than they might be for an older learner due to an incomplete sense of time, intention and consequence (Thorpe, 1993). Children's understanding of time makes longer term goals less relevant and increases the importance of immediate and achievable goals in combination with open-ended and child-directed activities that do not require an adult-imposed intention. Also, events may be judged more simplistically. There is no doubt that young children have thoughts and opinions about their experiences, can articulate what they like and what is important to them. Understanding how young children engage differently with goal-setting and reflection is important to exploration of meaningfulness with young children.

Promotion of mastery motivational climates provides some direction on promoting meaningful physical activity engagement in early childhood settings (Rudisill & Johnson, 2018). Understanding that young children naturally seek out and persist at appropriate levels can bolster teachers who seek to promote significant movement experiences with

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young children. Children are attracted to activities that are novel, authentic, and have an appropriate level of challenge (Hastie et al., 2018). Thorpe (1993) emphasises the need to take great care to ensure that short-term events satisfy the child: fun and positive affect in the immediate moment are significant to draw young children back to re-engage. Activities that sustain interest and investment are those that all children can succeed at, can be modified as needed, and include incremental steps of success to promote progress (Hastie et al., 2018). Understanding what attracts and holds children's physical activity attention is important to promoting one experience leading to the next, towards establishment of a pattern, or habit, that children might commit to in the longer term.

When used in ways that allow for personalisation of the narrative by children storytelling can help children find common ground with others while also allowing for their unique perspectives (Mardell & Kucirkova, 2016). Similarly, the Meaningful PE approach is student-driven and context specific, as it allows for various aspects of the student learning experience to be continually shaped according to the aspects of learning that they find most meaningful. Given the lack of understanding about how Meaningful PE might be enacted in an early childhood setting, the purpose of this research was to share how one teacher (Zack) prioritised meaningfulness in one unit of physical education with children aged 3–4 years.

Methodology

Setting & participants

This research was conducted at the affiliate K-12 international school of The King Abdullah University of Science and Technology (KAUST) in Saudi Arabia. The school's student population is rich in cultural diversity (72 nationalities according to school demographic data), with the majority of students coming from middle to upper socioeconomic households (Vasily et al., 2021).

The participants were the teacher (Zack) and the children in his kindergarten class ($n = 12$). Zack was a teacher at The KAUST school who, at the time of starting this research, had spent the previous 6 years delivering their K-1 PE program. Prior to that, he spent over 10 years working in early childhood education at two other international schools, spending the last 10 working in early years PE. All students included in the present research were aged 3-4 years at the time of data collection and were participating in the K-1 PE program at The KAUST school. Ethical approval for the study was granted by Brock University Social Science Research Ethics Board. Informed consent was provided by parents/ guardians of the children involved.

Research design

Qualitative case study approaches can be used to draw on a variety of data sources to help facilitate the exploration of a phenomenon within a particular context (Baxter & Jack, 2008), while exploratory case studies are used to evaluate interventions that have no clear, single set of outcomes (Yin, 2003). This study used a single, qualitative, exploratory case study methodology (Baxter & Jack, 2008) to examine what teaching for meaningfulness might look like in one early years PE setting. Findings are offered as a starting point for future research on this topic and in other early years PE contexts. As a qualitative inquiry, it was not our intent to generate and analyse data that is large in scale or generalisable. Rather, in a search to make meaning of the participants' lifeworld, our research design was small-scale and naturalistic and sought to generate deep and rich forms of data that are acknowledged as bound in the unique contexts in which the research is taking place. Moreover, rather than striving for validity and reliability we seek to offer credible, authentic, and trustworthy representations of the data, the participants, and their lived experiences. Such an approach requires multiple forms of data that are clearly articulated and provide an audit trail of the research process.

Data collection

Across a six-week period Zack planned, taught and reflected on his approach to teaching. Data that informed development of this case study were drawn from a variety of sources, both directly related to the teaching experience and other sources including presentations Zack completed and communications on Twitter.

Zack's planning documents (n = 6) and teacher reflections (n = 8) were primary data sources in making sense of his approach. Each lesson plan provided a 1-week (2 lesson) overview of Zack's lessons, as well as information about lesson objectives, equipment, music, storylines, and other details related to his approach to movement competence (Connell & McCarthy, 2014). Lesson reflections were completed following each lesson to the same prompts, for example: *What were the stand-out elements that enhanced children's personally relevant learning today?*, and *What would you change next time to try to increase the relevance?*

Lesson plans and reflections provided insight into Zack's planning decisions, as well as the ongoing adjustments he made from lesson-to-lesson based on his observations of students. Lesson reflections were shared with Author 4 who acted as a kind of critical friend by engaging in written responses to his reflections as well as online discussions. These discussions were led by Zack, allowing him to explore his thinking, and seek clarification and direction in relation to his decision-making. Topics for discussion related to the scope, practice, and the application of Meaningful PE.

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Zack often used Twitter to share informal commentary related to his teaching and to document interactions with his K-1 learners, sharing both teacher- and student-produced artefacts from lessons and providing an ongoing, informal journal account as the unit of learning progressed. All “tweets” and “retweets” from Zack’s Twitter account (@mrZackpe) between July 01, 2018 and July 14, 2020 that explicitly mentioned Meaningful PE, that “tagged” the Twitter handle for @meaningfulPE, or one or more aspects of the teaching approach (for example, social interaction, meaningfulness, challenge) met the search criteria for inclusion (n = 30). Tweets from Zack’s pedagogical coach (@andyvasily) that were not already retweeted by Zack but mentioned Zack’s Twitter handle and/or Meaningful PE were also included as data (n = 5).

Zack also provided a teacher narrative document (n = 1) and a recording of a webinar (n = 1) presentation to provide additional context related to his personal teaching philosophy, planning process, and experiences implementing the Meaningful PE approach. Images (n = 60) were also extracted from these other data sources and included to highlight student experiences and specific aspects of Zack’s teaching approach.

Some of the K-1 students (n = 4) participated in short, informal, event-based interviews during lessons to attempt to capture their experiences. The interviews were completed by Zack’s pedagogical coach, who the children were familiar with. All students interviewed were asked the same two questions: What was their ‘important’ place in the movement space? and What they liked to do in their ‘important’ place? Students were also provided with opportunities to point to visuals or physically demonstrate their thinking as alternatives to responding to questions verbally. The principle of continuous assent was applied in speaking with the children about their experiences. Following McEvelly (2015), if a child showed they were more interested in moving than talking, then the interviewer disengaged.

Data analysis

Raw data were organised into a single document and analysed according to Thomas’s (2006) general inductive approach to qualitative data analysis. Inductive analysis approaches, although guided by specific evaluation objectives, allow for categories or findings to arise organically from the raw data (Thomas, 2006, p. 238). The inductive coding process led to the creation of categories, which presented themselves as the main pedagogies used by Zack to promote meaningful experiences for his K-1 students. These pedagogies included ideas related to, for example, environmental design, the promotion of social interaction, movement competence and autonomy.

For the purposes of this study, we use Leach and Moon’s (1999) definition of pedagogy as the relationship between the four elements of an educational encounter – the teacher, the

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learners, the learning task, and the learning environment. For example, music was identified as a pedagogy because it was explicitly planned for by Zack (the teacher), to correspond with the movement skills, or content, being taught/performed in each lesson. Certain aspects of the learning environment were also portrayed in ways that corresponded to lyrics from the songs selected. Zack also encouraged students to sing along with the music, which also further engaged students in their learning experience. As pedagogies were identified during the inductive coding process, category descriptions were developed to reflect the criteria for inclusion and all associated data, and corresponding text segments were eventually added to all relevant categories during the initial or secondary coding periods. Each piece of data coded was also analysed for links to other identified pedagogies. The links between the pedagogies allowed for those most relevant to Zack's practice to be identified and emphasised in the story of the case. Next, the relationships between Zack's pedagogical priorities and the ideas of Meaningful PE were analysed, which allowed for pedagogies to be placed into five distinctive groups. Finally, the order of the story was constructed following a logical order, starting with planning considerations, as presented below in the findings section.

Trustworthiness

As a representation of one teacher's practice that occurred in a unique contextual setting it is important that such a representation is trustworthy and resonates with readers' own experiences. To ensure trustworthiness, all data were reanalysed during a second reading after the initial inductive coding process to ensure that relevant text segments/data were included in all categories for which they met the description criteria. Pedagogy descriptions were also edited and refined after the initial reading to avoid overlap and to ensure that only data that matched each description was included in each category. Stakeholder checks also occurred at various points throughout data reading and organisation. Stakeholder or member checks enhance the credibility of findings by "allowing those who have specific interests in the evaluation to comment on or assess the research findings, interpretations, and conclusions" (Thomas, 2006, p. 244). Data analysis categories and identified pedagogies were shared with all authors after first and second readings for commentary to ensure the findings of the analysis presented in the case were an accurate representation of Zack's approach to teaching.

Findings: Zack's story

Zack was first introduced to Meaningful PE when his pedagogical coach at The KAUST School provided him with a copy of the literature review conducted by Beni et al. (2017) that addressed meaningful experiences in PE and youth sport. At the time, Zack was

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looking for ways to elicit more engagement from his young learners in PE and the Meaningful PE approach represented a way in which he could place his student's input and feedback at the forefront of his lessons. Zack planned the unit guided by the features and principles of Meaningful PE. Given his focus on engagement, ideas related to personal relevance were particularly important in providing a lens for his pedagogical decision-making. He aimed to facilitate experiences his young learners might identify as significant or meaningful led by the question: "How is what I am teaching relevant to the lives of my students?"

1. Planning age-appropriate content and pedagogical approaches

A fundamental aspect of Zack's approach to enacting pedagogies of meaningfulness was to ensure that all aspects of his lessons were accessible to his K-1 learners from a developmental standpoint. He shared, "*I wanted to make teaching relevant to students' lives through developmentally appropriate pedagogical strategies – strategies designed to capture their attention and bring out their passions*" (Webinar, slide 24). This quote demonstrates Zack's awareness of placing the developmental needs of his students at the centre of all his pedagogical decision-making.

Zack planned intentionally and in detail with attention to children's motor skill development. His timeline for the unit included explicit planning for movement concepts such as body control, space, pacing and flow. Learning outcomes related to basic locomotor skill acquisition and the recognition and repetition of patterns. Zack used Connell and McCarthy (2014)'s kinetic scale to plan and assess the sensory, reflexive, and motor aspects of the various movement skills that were introduced. Each block of weeks was dedicated to a movement concept. These were selected to help build students' motor competence.

Intentional language choices and pedagogical strategies grounded in repetition were at the core of Zack's approach to developing his students' motor competence. This involved the explicit teaching of various directional language terms (up, down, high, low, near, around etc.). Both directional terms and movement skills were introduced gradually and sequentially to help consolidate learning. As a way to support how he used language to support student learning, Zack selected storytelling as an explicit pedagogical approach. He viewed storytelling as "*the language of childhood*" (Webinar, slide 19). Zack created a unit called "*The Magic Soup Pot*"; the magic soup pot served as a metaphor for something to hold or carry the stories that would be used (see Figures 1 and 2). The magic soup pot thus served as a starting point to facilitate a variety of story-based lessons for his K-1 learners.



FIGURE 1 The Magic Soup Pot



FIGURE 2 The stories within the Magic Soup Pot

Zack described the rationale behind the magic soup pot metaphor and how it might help how he facilitated meaningful experiences for students:

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... the medium is the message – the concepts, skills, and information embedded in the stories are necessarily personally relevant because they are delivered in a way that can best be understood by the children (Lesson Reflection 6).

For Zack, stories in and of themselves do not guarantee a personal connection for the students. In his first reflection (Lesson Reflection 1), Zack noted how an unsuitable story hindered rather than helped: *“it may not have been the kind of story that speaks to the students and their personal experiences”*. Here Zack highlights that storytelling does not automatically serve as a pedagogy to make learning more memorable and personally relevant for early years students; if the content does not match interests or the complexity of narratives make the story less accessible. Each story provided a provocation for the children to move – a treasure to capture, a mountain to climb, or a quest to complete. In this way, storytelling was the organising frame for the children in Zack’s class to engage in their PE lessons. Each lesson began with the story. During the lesson, children explored story elements and enacted the narrative in the physical space, enhanced by props, music and visuals which all helped bring the story to life.

2. Bringing the story to life

Zack used environmental design as a strategy to help bring the stories to life. Each story was designed with a direct relationship between the narrative and specific movements to be performed in the physical activity space. Design deliberations included considerations related to inclusion, creativity and provocation. Promoting skill practice involved carefully organising equipment and other structures in the learning space to correspond to each story’s narrative and the movement skills and concepts being taught. For example, in one reflection Zack wrote:

Today’s concept was levels (high/medium/low.) In the first story, we went on a treasure hunt... We had a mountain, a cave, a river, and an apple tree in our gym, all made from mats, printed materials, and various other things. This gave the students a chance to apply their conceptual understandings and skills surrounding levels in a very concrete and engaging way (Lesson Reflection 4).

The organisation of the learning environment played a critical role in bringing the story to life. The space was divided into separate movement areas where each area corresponded to a movement. Figure 3 shows some examples of how the spaces were constructed using available equipment:



FIGURE 3 Examples of the movement spaces: clockwise from top left: The Caterpillar Bridge, The Scales, The Pathways, The Cable Cars, The Mountain (centre.)

Each time a new area was introduced, students were given the opportunity to build on their previous knowledge. Zack elaborated:

I introduced areas slowly, individually, and consecutively over a few weeks. We studied The Mountain in-depth for a week, learning how to use and be safe on it. After that, we introduced The Scales and explored them. Then the children would be encouraged to move from The Mountain to The Scales in order. We kept going until all areas were introduced and could be traversed consecutively (Teacher Narrative, p. 9).

In addition to the narratives within the stories, Zack used several other elements to tie various aspects of his practice together. For example, music that corresponded to each narrative was also planned for explicitly. Through playing songs such as “*The Bridge*” by Sonny Rollins and “*Diamonds*” by Rihanna, Zack used music to highlight movement skills or important aspects of the guiding narrative (Lesson Plans, Feb. 2–3, Feb. 11–13). He also created alternate renditions of songs for students to chant during learning that corresponded with specific storylines (i.e. “*Wiggly fish, they swim under bridges*” to the tune of Old Gray Mare) to further involve students in their learning experiences. Visuals also helped to orient students prior to learning and provided additional context during instruction.

Taken together, the practicing of physical skills, storytelling elements, and associated language concepts, all helped to develop the children’s language and understanding of meaningfulness.

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3. Promoting a shared language of meaningfulness

Zack introduced the concept of meaningfulness at the beginning of the unit using the term “*important*” to capture personally significant aspects of participation (Lesson Plan, Feb. 2-3). He explained that, unlike “meaningful”, “*important*” was an accessible term for his learners that provided them with the necessary vocabulary to express what was most relevant to them in PE (Lesson Reflection 1).

In addition to using repetition to solidify their understanding of the term “important”, Zack used a variety of different instructional techniques. During the first week of the unit, students were introduced to Chloe the Leopard Cub, a character with whom they could share their most “*important*” aspects of PE class (Lesson Plan, Feb. 2–3). Students were reintroduced to this character and the concept of importance during subsequent lessons. Zack also read Margaret Wise Brown’s *The Important Book* to his students over the course of multiple lessons (Lesson Plans, Feb. 11–17), which helped to deepen their understanding of the term (Lesson Reflection 2). Zack wrote: “*When we first introduced the term, I feel that the children weren’t fully comprehending the meaning, but as we persevered, the understanding is starting to dawn*” (Lesson Reflection 3).

A shared understanding of the term “*important*” sparked conversations with students about the meaningful aspects of their participation. Various characters, story plots, and other constructs from stories explored in class became part of the shared language for students to express their perspectives on their experiences. For example, when asked to choose his most important place, one student stated: “*the mountain*”; referring directly to the pile of mats in an area in the class by the name used to describe it in the stories (Interview, Student C). In his final reflection, Zack also noted the potential for this shared language to be used as an avenue for students to explore meaningfulness and expression in other new contexts. Looking ahead he planned what might happen next:

For the next two weeks, we will try to take pictures around the community, utilise some of the characters from previous stories, and make a new story that will drive home the point a bit more effectively (Lesson Reflection 8).

Interviews with students suggested a similar enthusiasm for continuity in future lessons. Another student who also identified the mountain as his most important place, specified that he wanted to play with the mountain “*all of the years*” (Interview, Student A), supporting the potential for the shared language developed to be used as a meaningful way to introduce new activities and subsequently make them familiar.

4. Opportunities for individual and group voice and choice

Providing students with opportunities to make choices about their learning was foundational to Zack's approach to meaningfulness. Zack shared, "*I am a big believer in student choice, which is a personal relevance driver across all grade levels and walks of life*" (Webinar, Slide 15). One way that Zack planned for student choice was through explicit exploration time during class periods. The organization of the learning environment was central to how students experienced this exploration time. Zack elaborated on this:

Part of my design philosophy involves dividing the PE space into two halves. One is a relatively empty area where the students and I can move freely, while discussing and experiencing big ideas, concepts, individual skills, exploring spatial awareness, and sharpening fundamental movement skills in a teacher-driven manner. The other half of the room is an area filled with purpose-built structures that encourage students to apply these skills in their own ways and on their own time. We could call these two areas the guided area and the discovery area (Webinar, slide 15).

While certain students used the exploration time as an opportunity to solidify their motor competence through repetition, others used it as an opportunity to seek out new challenges and adventures (Teacher Narrative, p.12). Speaking to the prevalence of social interaction in certain popular areas in the learning space, Zack also noted how the students were continuing to make their own groupings based on similar interests (Lesson Reflection 3). Purposeful exploration allowed for opportunities for students to socially interact with each other in real time.

Students were involved in selecting which stories to enact using the visuals located in "*The Magic Soup Pot*". Zack describes this process in the following excerpt:

Today, students were challenged to make coalitions to choose our next story to re-tell. They needed to find the story they wanted to tell from the choices taped to the ground, vote by putting their foot onto it, and then rally other students onto their side (Lesson Reflection 8).

The story visuals that made up "*The Magic Soup Pot*" provided students with readily available information to support them in their decision-making and allowed them to reflect on the meaningful aspects of their previous experiences to make choices about their future learning. Zack also observed that giving choices can sometimes require scaffolding and support:

Democracy can be messy, especially when it involves three-year-olds arguing over who gets to choose something. As regrettable as the arguments may be, they do present a learning opportunity. Conflict resolution, negotiation, and self-regulation are just a few of the things we can work on when arguments arise and we don't just sweep them under the rug, but rather steer into and through them (Lesson Reflection 8).

By intervening and providing support where necessary, Zack ensured that the challenge was not too great for students and that the positive social interaction between peers and the democratic life skills being introduced were not compromised by difficult discussions and conflict related to the decisions being made.

Most importantly, the choices and decisions that the learners made about their participation were made within the context of the stories' narratives. In this sense, the choices had a strong connection to the stories, which made the decisions relevant to their immediate context and personally relevant in the moment.

5. Supporting reflection

Zack acknowledged the challenges in supporting reflection with young children, saying: "One of the challenges of working with three-year-olds is that they don't always have the capacity to analyse and articulate the reasons behind their choices." Zack used visuals to help scaffold student reflection. The title page of each story was pasted on the floor of the PE space in "*The Magic Soup Pot*" (See Figure 1). These visual representations provided a frame of reference for students when asked to recall their previous experiences in PE, laying the groundwork for identifying the "*important*" aspects of these experiences and encouraging future reflection in the process.

After following the order of the story through many repetitions, Zack encouraged students to explore and select their most "*important*" place to play (Teacher Narrative, p. 11). He observed, "*the children are giving off the impression that they are connecting the term to a place in the gym that is special to them*" (Lesson Reflection 3). Zack noticed that certain students chose to play at the same area repeatedly (Teacher Narrative, p. 11). For some children, this selection was based on practicing a physical skill, such as climbing or rolling. Alternatively, other students actively sought out variety.

Visuals were also used as a medium to help facilitate student expression. Using the Seesaw app, Zack had students take pictures of their important places in the PE space and then encouraged them to use the draw and tell function to explain the choice of picture (Lesson Plan 2, Feb 2–6). Figure 4 shows an example of one student's choice: the mountain.



FIGURE 4 One of the children circled 'The Mountain' as their "important" place on the SeeSaw application

By projecting a map of the classroom layout onto a screen for the class, Zack could also ask students to point to their most important place on the map and then go to that place, which helped students to make connections between the map visual and the physical locations in the gym (Lesson Reflection 3).

A shared understanding of the term "important" was further developed with the help of Chloe the Leopard and reading 'The Important Book'. This laid a foundation for the children to analyse their experiences and identify what movement spaces and associated movements were most important to them. Consistent engagement with these reflection activities across the 6-week unit helped the children to become familiar with the processes and allowed them to practice identifying what was important to them and represent this in different ways.

Discussion

Meaningful PE provided a mechanism for Zack to systematically prioritise the meaningfulness of early childhood students' PE experiences. Zack's starting point was a desire to amplify the personal relevance of learning experiences for the children in his PE class. Taking on the ideas of Meaningful PE did not represent a major shift in practice for Zack. Similar to others who have successfully engaged with Meaningful PE (Ní Chróinín et

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al., 2019; Vasily et al., 2021), the distance between his starting point and a vision based on Meaningful PE was close for Zack, as he already used many of these elements to varying degrees before this research. Adopting a Meaningful PE approach was attractive to Zack in enhancing the relevance of learning for his students. Embracing Meaningful PE as a pedagogical guide to decision-making helped make his practice more coherent and present a consistent experience for the learners. This paper represents Zack's story, a single case in a particular and unique context. While this limits our ability to generalize the findings to other settings (or to replicate this research design) our hope is that sharing Zack's story can provide motivation and a springboard for others to take up some of these ideas in their practice.

From a list of features of meaningful experiences in PE, Zack selected personal relevance as one that he would prioritise. Zack did not disregard the other features; for example, it was still important that young learners had fun and had positive interactions with their peers. It is just that these features were not the top priority. This thinking is consistent with the equaliser metaphor proposed by Beckey (2021), where the features are presented as channels that can be amplified or dampened according to the needs of a specific group of learners. Zack believed that amplifying personal relevance would help him orient his teaching practice in a way that would better serve his learners. The flexibility of the Meaningful PE approach served as a way to ensure that this feature remained at the forefront of his pedagogical decision-making.

The concept of 'developmental appropriateness' coloured Zack's approach to planning and teaching and informed how he selected content and enacted pedagogical strategies. First, he selected content at an appropriate level for children to practice. Zack's approach was informed by Connell and McCarthy's (2014) ideas about the relationship between movement and learning in young children. Zack promoted a mastery-oriented climate based on repetition. He designed the environment to promote practicing of several targeted skills where tasks were not too hard or too easy and children were encouraged to make choices and take ownership of their efforts. Second, he selected story-telling as a frame for learning activities. His reflections on each lesson demonstrate the success of story-telling in creating a motivating and exciting learning environment where the story's narrative provided a purpose for movement. He used PE equipment to successfully represent parts of the story. While the children's physical activity was not quantified, the compelling evidence of the children's engagement suggests that, similar to other research that connected movement and story narrative (Duncan et al., 2019), story-telling inspired the children to move. The value of story-telling to frame the movement learning experiences of young learners merits further investigation. Further, the selection of developmentally appropriate content taught through a story-telling pedagogical approach provided an ideal context for children to learn in PE.

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The pedagogical principles of Meaningful PE (Fletcher & Ní Chróinín, 2021) that emphasise democratic and reflective approaches were strongly evident in Zack's approach; he planned towards meaningfulness, he included pedagogies that reflected democratic and reflective principles, and he used the features of Meaningful PE as a touchstone for his everyday decision-making. There were some aspects of Meaningful PE that were more or less magnified based on the needs of the participant. For example, Zack planned so that short term events satisfied the participants in ways that drew and held their attention (Rudisill & Johnson, 2018; Thorpe, 1993). Echoing the experiences of others teaching PE to elementary school children (Beni et al., 2019; Down, 2021), the flexibility of Meaningful PE allowed Zack to shape his approach to best meet the needs of his young learners.

Democratic teaching practices that promote inclusivity, pupil contributions to individual and collective decision-making, and offer autonomy support are crucial for facilitating meaningful experiences for students in PE (Fletcher & Ní Chróinín, 2021). Democratic approaches were pitched at an appropriate level for these young learners. Choices were explained and decision-making, such as informal votes on story choices, were carefully scaffolded. For example, Zack's division of the learning environment demonstrated how an emphasis on purposeful exploration in combination with autonomy support can be used as a driver of meaningfulness. Embedding choice in the learning environment through purposeful exploration laid the groundwork for the experience of various features of Meaningful PE. Zack paid close attention to the features of participation that were important to his young learners. Motor competence was promoted through the environmental design. Just-right challenge was considered in the selection of developmentally appropriate stories and complementary activity content. Social interaction was promoted through the formation of ad hoc groups based on where students chose to practice. Together, these factors created a fun and engaging learning experience. Zack scaffolded learning experiences to help children make judgements about their value.

When used in ways that capture the continuity of experience, reflection can help students to generate awareness of the meaningful aspects of their experiences in PE (Ní Chróinín et al., 2021). The use of the "Magic Soup Pot" as a metaphor and visual reference point for all the stories to sit within helped the children to keep track of their learning experiences with some coherence. This also supported the development and consistent use of a shared language of learning with students. Zack's decision to explicitly create a shared understanding of "important" with his early years students is consistent with previous studies that have advocated for the use of a shared language for students to communicate the meaningful aspects of their experiences in primary PE settings (Beni et al., 2017, 2019; Ní Chróinín et al., 2021). Within this reflective framework, children made

judgements about their experiences. Giving children opportunities to select and spend time in their “important” places across lessons also helped Zack to build a picture of their individual perspectives. Noticing who chose to locate themselves with friends, consistently in the same location or in new areas of challenge all provided insight on children’s preferences.

Images also support primary-age students in sharing their meaning-making and interpretations of their experiences (Ní Chróinín et al., 2019). Zack supported learners’ reflection using visual representations to prompt their abilities to recall and analyse their experience. Also, multiple forms of representation may help some young learners express themselves. Photographs and images provided concrete representations that children could draw upon in sharing their experiences. The children were able to identify the places that were ‘important’ to them in the physical activity space. For example, using a map of the space helped children to position the activities involved relative to each other and make comparisons. In contrast, the interviews conducted with the children were less helpful, providing limited evidence of their experiences. Ultimately, showing what was important through making choices about their participation more effectively communicated their preferences than talking about those experiences retrospectively.

But were the children’s experiences meaningful? From the perspective of the children, some of their experiences were valuable and “*important*”. The movement experiences Zack provided matched their needs and interests in developmentally appropriate ways. Zack chose to use “important” as a synonym for ‘personal relevance’. Children’s physical responses and choices in lessons provide evidence that Zack’s approach worked; the children held a shared understanding of the term. Other synonyms for ‘personal relevance’ may be more appropriate for older children and other contexts.

Reflecting some of the challenges reported by McEvilly (2015), children’s accounts can sometimes represent simplistic judgements lacking supporting evidence or depth. Despite his efforts to help children represent themselves, Zack had to infer some aspects of their engagement and learning through observation. For example, observing students’ preferences during free-time helped him gain insight on their engagement patterns. Further evidence was inferred through their movement responses, facial expressions, excitement and sustained engagement. Overall, the children were physically active and practiced their skills through enjoyable and challenging movement experiences. Of course, a meaningful experience is not guaranteed for all based on these inferences but taken together, Zack’s observations and the children’s responses suggest that his approach seems to represent a coherent effort towards facilitating meaningful experiences in an early childhood setting. Adopting the pedagogical principles of Meaningful PE in combination with attention to the features of Meaningful PE created the

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conditions for children to have experiences that they viewed as important and wanted to repeat; the experiences were meaningful to the learners. Zack's approach focused on personal relevance. Research exploring the other features of Meaningful PE with young children would be helpful in providing further insight on the quality of children's experiences in early childhood settings.

Conclusion

Zack's approach exemplifies what a pedagogy of meaningfulness might include in an early childhood setting. Both the content and the story-based pedagogical approach were developmentally appropriate and a good match for his teaching, his learners, and the environment where learning was occurring. The case shows how stories can be brought to life in movement experiences that are personally relevant to young learners. Democratic and reflective pedagogies can be implemented in PE with young learners to help work towards experiences that are important to them.

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