Title: Using features of meaningful experiences to guide primary physical education practice

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Using features of meaningful experiences to guide primary physical education practice

Abstract

Providing meaningful experiences in physical education has long been identified as a key objective for teachers to strive toward. Supported by a critical friend, a beginning teacher used self-study methodology to analyse ways she drew from the features of meaningful experiences to guide her planning and instruction in primary physical education. Data from a striking/fielding games (e.g. softball, cricket) unit were collected and analysed. Results demonstrate how the teacher came to use the features of meaningful experiences (i.e. social interaction, fun, challenge, motor competence, personally relevant learning, and delight) in integrated ways to guide her planning and instruction in physical education. Through committing to prioritising meaningfulness and reconceptualising ways an experience may be meaningful, the teacher was able to foster these experiences for students primarily through using features of meaningful experiences to filter her decisions. This study offers preliminary support for pedagogies and approaches teachers may use to prioritise meaningful experiences in primary physical education.

Keywords

pedagogy, meaningfulness, autonomy, self-study, elementary, games

Introduction

Providing students with personally meaningful experiences has long been recognised as a key objective that physical education teachers should strive for (Arnold, 1979; Beni, Fletcher, & Ní Chróinín, 2017; Kretchmar, 2001; Metheny, 1968). Ennis (2017) identified personal meaning as one of three foci that may best enable teachers to design and enact transformative physical education curricula to engage and prepare students for a lifetime of physical activity. Individuals are more likely to commit to physical activity based on intrinsic motivational factors, such as meaningfulness, satisfaction, pleasure, and joy than for extrinsic reasons, such as improved physical fitness and weight management (Teixeira et al., 2012). These outcomes not only apply to physical activity in its broadest sense; they have direct relevance for physical education (Ntoumanis, 2001). Meaningful elements of participation must not be underestimated because they hold a key in helping young people make sense of their physical education experiences and to identify the ways movement can enrich their existence and serve as a source of their identity (Ennis, 2013; Kretchmar, 2001; Thorburn & McAllister, 2013). For example, Kretchmar (2006) has suggested that, while health-related benefits of physical activity are a positive outcome of physical education, children are often less concerned with their health than with the enjoyment that may be derived from experiences that are meaningful. He identifies several fundamental freedoms (the freedom to express, explore, discover, invent, and create) as vital, but often overlooked, outcomes of physical education that contribute to quality of life. While these foundations strongly support an approach to physical education that prioritises meaningfulness, few teachers can articulate strategies or pedagogies they rely on to intentionally promote meaningful experiences for young people (Chen, 1998; Kretchmar, 2006). Based on this gap in research and practice, Ennis (2013, 2017) and Kretchmar (2001, 2007) have therefore advocated

for the intentional development of pedagogies and design of curricula that specifically prioritise meaningful engagement in physical education.

A recent review of empirical literature on the topic of meaningful experiences in physical education and youth sport (Beni et al., 2017) provides some clues about how teachers may better plan for situations and experiences that consistently aim to promote meaningfulness for students. In that review of 50 peer-reviewed articles published since 1987, there was strong support for the following features of meaningfulness experienced by young people in physical education and youth sport:

- Social interaction: students share positive interactions with others, including both peers and the teacher, and have opportunities to work/play in groups.
- Challenge: students are enabled to participate in activities that are neither too easy nor too difficult by modifying games/activities and allowing students to make choices.
- Fun: students find lessons to hold immediate enjoyment.
- Motor competence: students learn and develop physical skills necessary to engage in activities and perceive themselves to be or become competent.
- Personally relevant learning: students understand *what* they are learning, *why* it matters, and *how* it relates to their lives beyond the physical education classroom.
- Delight: a concept that is difficult to plan for but can be observed through students being caught up in the moment or experiencing a sense of accomplishment, facilitated through goal-setting and hard work (see for example, Kretchmar, 2005b).

The prevalence of these features of meaningfulness as expressed by young people provide teachers and researchers with a robust framework supported by evidence from the literature to help them identify *what* to prioritise in order to promote meaningful experiences. However,

beyond what typically constitutes a meaningful experience, little is known about *how* practicing physical education teachers might go about using these features to guide their decision-making in the planning and enactment of their lessons.

Several pedagogical models, particularly those grounded in student-centred pedagogies, such as Sport Education and Game-Centred Approaches (GCAs), contain strategies that teachers can use to promote meaningfulness. For example, students have responded favourably to use of the Sport Education model, particularly to the opportunities it provides for students to interact positively with one another as they take on a variety of roles and responsibilities in teams (Kinchin, MacPhail, & Ní Chróinín, 2009; Tsangaridou & Lefteratos, 2013). This also resulted in Sport Education being more fun than other traditional approaches to teaching games and sport (Wallhead & Ntoumanis, 2004). In addition, GCAs were identified as contributing to the relevance learners found in their physical education lessons, which led to students having fun and finding value in physical education (Fry, Tan, McNeill, & Wright, 2010; Georgakis & Light, 2009). While pedagogical models have been found to contribute to the meaningfulness students find in physical education, the promotion of a meaningful experience is often a convenient rather than explicit and prioritised outcome of these models, coming after, for example, the development of literate sports participants in the case of Sport Education (Hastie, de Ojeda, & Luquin, 2011) or tactically aware games players in the case of GCAs (Harvey & Jarrett, 2014).

One of the few studies to focus on ways teachers can use meaningfulness to guide their practice was conducted by Nilges (2004), who aimed to access the meaning of movement amongst fifth-grade students within a unit of creative dance. Nilges (2004) offered useful suggestions about instructional techniques that might be used to assist students in accessing meaningful experiences (such as asking probing questions and individualising instructions);

however, these were not brought together in a structured framework to help teachers intentionally plan or enact lessons that focus upon meaningful experiences. Although pedagogical strategies can be selectively extracted from research on the models described above and Nilges's work, there are few examples of concrete and practical approaches to support and guide implementation of teaching strategies to create meaningful experiences. There is therefore a need for research targeted at developing and understanding pedagogies that prioritise meaningfulness in school physical education programs.

With this gap in the literature thus identified, the purpose of this article is to illustrate the ways one beginning teacher (Stephanie)[1] used the features of meaningful experiences (Beni et al., 2017; Kretchmar, 2006) to systematically guide her pedagogical decision-making in teaching a unit of striking and fielding games (e.g. softball, cricket) in primary physical education. With the support of a critical friend (Tim), Stephanie used self-study of teaching and teacher education practice to examine the ways these features supported her in making intentional pedagogical decisions in terms of planning, instruction, and assessment to support meaningful experiences. The research question was: *How can the features of meaningful experiences support a primary physical education teacher's planning and instruction to enable the prioritisation of meaningfulness for students?*

Methodology

This research was conducted using self-study of teaching and teacher education practice methodology. While much of the self-study research has focused on the practices of teacher

[1] It is worth noting issues of voice and authorship at this point of the manuscript. We use first person plural (i.e. we, our) when referring to our collective opinion or to tasks undertaken by all three authors, such as data analysis. Third person singular (i.e. Stephanie, Tim) is used when referring to individual participants in the research.

educators (Vanassche & Kelchtermans, 2015), it also has value for teachers who are committed to more deeply understanding their practice (Samaras, 2011). With respect to teaching practice, Samaras (2011: 10) describes self-study as "a personal, systematic inquiry situated within one's own teaching context that requires critical and collaborative reflection in order to generate knowledge, as well as inform the broader educational field." While self-study may be considered one form of reflective practice, Dinkelman (2003) suggests it is "a deliberate and more formalized form of reflection" (11) than that typically engaged in by teachers and teacher educators. Another aspect that sets self-study apart from other forms of reflective practice is that, regardless of the context in which the research takes place, self-study researchers take responsibility for sharing the insights gleaned from their work with an aim to make their private understandings of professional practice public to extend the knowledge base of teaching (Vanassche & Kelchtermans, 2015). It is this responsibility that has driven us to share what we have learned from conducting this research.

Context

Stephanie's decision to conduct a self-study of her physical education teaching practice began with a desire to examine and improve her teaching, specifically in relation to providing meaningful experiences for students in physical education. She teaches at a small, privately funded school located in a suburban community in Canada. Over the past few years, home-schooled children from the local area have been invited to participate in physical education and sporting events, and do so from time to time. Given the small size of the student body (varying from roughly 6-26 students in the entire school), students often participate in their one-hour, twice-weekly physical education classes with students from other grades. In the class that provided the population of students for this study, there were eight students (aged 7-13 years).

Differentiating instruction for students of a variety of ages and motor skill levels had been one of Stephanie's greatest teaching challenges leading up to this research. For example, she struggled to provide students with an appropriate level of challenge to maintain their attention and facilitate learning. This led her to wonder about the extent to which her students' individual experiences in physical education were meaningful and how she could more consistently teach toward this aim. With this in mind and based on the outlining of key features of meaningful experiences by Beni et al. (2017), Stephanie planned a unit of striking/fielding games (e.g. softball, cricket) where she would intentionally use the features to guide her planning and instruction.

Research design

The study took place over a period of eight weeks encompassing a total of 16 physical education lessons. During this time, students engaged in a unit of developmental games from the striking and fielding game category (i.e. games with a striking and a fielding team). The first 12 lessons were structured using the Teaching Games for Understanding (TGfU) pedagogical model. In each lesson students were introduced to a novel, non-formal, developmental striking and fielding game with a gradual increase in cognitive and motor complexity within and across lessons (for example, requiring the use of more complex skills and greater variety of tactics). The inspiration for many of these games came from various teaching resources; however, Stephanie often modified the games to suit the diverse developmental needs of her students. After playing a lead-up game at the beginning of each lesson, students were given the opportunity to develop cognitive and motor skills related to the game that were then applied upon returning to game play at the conclusion of the lesson. Figure 1 contains a sample lesson

plan from one of the lessons taught utilising TGfU. Within the figure, specific strategies or tools that aimed to address specific features of meaningful experiences are highlighted.

Lesson 5

Cricket with Kicking

Planning for meaning:

Social Interaction (SI):

- Emphasise communicating with teammates when making tactical decisions
- Cycling through roles
- Working together in small groups

Fun (F):

- Watching a video
- Novel game/activity
- Game-like skill development activities

Challenge (Ch):

- Use of developmentally appropriate modifications
- Choosing the level of challenge in skill development activities

Motor Competence (MC):

- Use of skill development activities relative to game (particularly important in this lesson as it is likely that many students will be unfamiliar with cricket; however, skills to be used are highly modified)

Delight (D):

Personally Relevant Learning (PRL):

- Use of multi-media (video) to give an understanding of what cricket is and why it matters
- Guiding students in drawing connections between cricket (unfamiliar) and baseball (familiar)

Game: Kick-It Cricket

- Teams of about 6 (3 & 3). Fielding team rolls pitch; batting team kicks. Batter runs to the pylon and back as many times as possible and may stay at the pylon if they choose to. A run is scored each time a batter returns home. If a fielder catches the ball or throws it to the pitcher while the runner is between bases, the runner is out. (Consider what members of the running team do when not running)

Game Appreciation:

- Watch short video (PRL) about cricket
- How is cricket different from baseball?

Tactical Awareness:

- How do you decide if you should keep running or stay on the base you're on? (e.g. be aware of what the fielding team is doing; communicate with teammates)

Making Appropriate Decisions:

- Brief return to game; focus on communicating (SI) with teammates to know whether to run or stay

Skill Development: kick, run, throw, communication

- **Activity 1:** In a group of 3 (SI), set up 2 pylons a distance apart (you choose) (Ch). Take turns playing each of the following roles (SI): batter, bowler/fielder, coach. The bowler/fielder bowls the ball to the batter who kicks it anywhere they please. The batter runs between the 2 pylons as many times as possible before the bowler returns the ball to the 'home' pylon. The coach gives the batter instructions on when to run or stay. After 2 or 3 turns, switch roles.
  - Extension (Ch): The fielder may also have the option of throwing the ball to the pylon

(wicket) to get the runner out.

- **Activity 2:** Set up a few "wickets" (pylons or bowling pins) against the wall and practice knocking them down from various distances and angles. Encourage students to be aware of surroundings and be sure they won't hit anyone before throwing the ball.

Game: Kick-It Cricket

- Extension (Ch): Bowler may also knock down (or make contact with) the wicket to get the batter out

Conclusion:

Exit Slip – Personally Relevant Learning

Figure 1: Sample lesson plan

The final four lessons were structured using elements of the Sport Education teaching model and consisted of a three-lesson tournament followed by a one-lesson culminating festival. While unusual, the decision to change teaching models was largely due to the unique context of the class in which students from across several primary grades participated in their lessons simultaneously. Based on previous experience with the group, Stephanie noted that while younger students seemed to benefit most from the TGfU model, older students often flourished in a setting more closely aligned with the Sport Education model. At the start of the tournament, students were grouped into teams and given the opportunity to develop a team name, cheer, colour, and poster. In each of the three lessons that were part of the tournament, students played one game for the majority of the one-hour class. Students then voted on which of the three games they wished to play at the festival – a culminating event to which students invited their parents and other guests. The festival was structured such that it simulated a genuine sporting event. Students participated in the planning of the event and requested that such things as music, noise makers, balloons, and snacks and drinks for guests be incorporated.

It is worth pointing out that although Stephanie used two established pedagogical models, the purpose of this research was not to determine the effectiveness of each model's alignment with the features of meaningful experiences or the teacher's ability to implement the models with fidelity. The main purpose of the research was to identify how the features of meaningful

movement experiences (Beni et al., 2017) served as a framework for enacting teaching strategies that promote meaningful physical education experiences for students in this context (of mixed ages and abilities). Some of those strategies included teaching and learning principles from TGfU and Sport Education. Readers may wish to refer to Landi, Fitzpatrick, and McGlashan (2016) for an extended discussion about the value of selecting models based on the contexts in which they are being employed.

Participants

In addition to Stephanie's role as the primary research participant, six of the eight students consented to submitting exit slips and four of the eight to participating in one-on-one interviews. Parents provided written consent. In order to protect the anonymity of participants, pseudonyms are used in place of student names and any institutions or other people referenced in the data, including the name of the school in which the study took place. This research was approved by the Research Ethics Board of Brock University.

Data collection & analysis

Several qualitative data sources were utilised in the study, which helped build trustworthiness in the interpretations made. Self-generated sources included Stephanie's artifacts (such as lesson plans) as well as 16 personal reflections (≈ 41,000 words), which were written at the end of each class within the unit of work. Because this was Stephanie's first self-study, she used a template to structure her reflections. The template focused on the ways she was able to plan and enact meaningful experiences for her students and the challenges she faced in doing so. Tim acted as a critical friend to Stephanie, responding to each of her reflections with probes and prompts to inquire into her pedagogical decisions and their outcomes. Tim is a university-based teacher educator who had engaged in self-studies of pedagogies that promote meaningful

experiences in the past. Critical friendship is a common feature of self-study research because the interactivity inherent in the relationship serves to question taken-for-granted assumptions and approaches to teaching and open up new ways of thinking about practice (Schuck & Russell, 2005). The written reflections shared between Stephanie and Tim were supplemented by two recorded conversations (each lasting approximately 30 minutes), which served to consolidate main themes from the written reflections and responses. Student-generated data sources included exit slips (n = 26) which recorded students' written responses to a brief set of questions at the end of select lessons and which focused on the ways in which their experiences of Stephanie's practice were meaningful. The exit slips were distributed to and collected from students and typed by another staff member before being given to Stephanie to ensure students' responses remained anonymous. Semi-structured interviews (n = 4) were also conducted at the end of the striking/fielding games unit. Because he had no previous relationship with Stephanie's students, Tim conducted the interviews to reduce issues around power, authority, and other important ethical concerns in the research process.

We engaged in a collaborative analysis of the data, which was inductive and recursive, (Samaras, 2011) meaning that themes and patterns were generated from the data as they were being collected. In particular, we were searching for evidence of how the features of meaningful experiences were used by Stephanie to guide her pedagogical decision-making. In line with this focus, we also looked for examples of pedagogical strategies she used to promote the features and evidence that her students identified the features as contributing to the meaningfulness they experienced in physical education. Following guidelines suggested by Samaras (2011), this analytic process first involved an individual reading of the artifacts (particularly the lesson plans) and written reflections, which were coded to identify situations that were planned or enacted and

involved the explicit prioritisation of meaningful experiences. The second part of the process involved analysing student interview transcripts and exit slips to find corroborating or disconfirming data that might suggest, for example, that the features did not contribute to meaningfulness. The process was recursive in that the data being collected and analyzed each week served to inform decisions Stephanie was making in subsequent lessons as the study progressed. This, along with drawing data from multiple sources and using multiple participants, helps to establish some degree of trustworthiness in our interpretations. Moreover, the use of critical friendship allowed Stephanie to consider alternative interpretations of her practice that she might not have been able to arrive at alone. Similarly, analysis of student data helped to minimise the gaps between Stephanie's perspectives and the reality of her own practice.

Findings and discussion

From the outset of this research, Stephanie identified the need for an intentional and explicit focus on the promotion of meaningful experiences if she were to strive for these consistently in her practice. She made a point of making the concept explicit to students, defining meaningfulness and each of the six features in age-appropriate terminology from the beginning of the unit. Drawing on a range of ideas from the physical education literature, she implemented specific strategies to promote situations that aligned with the features of a meaningful experience: social interaction, fun, challenge, motor competence, personally relevant learning, and delight (Beni et al., 2017; Kretchmar, 2006). Our major finding concerns insights gained from the ways Stephanie used these features of meaningful experiences as a guide for her planning and instruction. Specifically, we identify the importance of teachers intentionally

prioritising meaningfulness in physical education and recognising the value in promoting meaningfulness in the short- and long-term.

Using the features of meaningful experiences to guide planning decisions

Throughout the striking/fielding games unit, Stephanie's evolving understanding of the six features of a meaningful movement experience (social interaction, fun, challenge, motor competence, personally relevant learning, and delight) heavily influenced her pedagogical decisions. As a result of her observations of students throughout the study, she was able to conclude that meaningful experiences rarely just "happened". On the contrary, she invested a great deal of time and effort into planning and preparing for such experiences, including developing intentional strategies for planning and enacting each of the six features as well as reflecting on her own actions and decisions both during and after each lesson. Specifically, prioritising meaningful experiences guided Stephanie's reflection in- and on-action (Schön, 1983) to help her better understand how she was planning and enacting pedagogies that promote meaningful experiences. She initially planned toward each feature in a checklist-type fashion by, for example, incorporating personal goal-setting opportunities to facilitate appropriate challenge and utilising cross-curricular learning strategies to enhance personal relevance of students' learning experiences. Further, at the conclusion of each lesson and in preparation for the next, she reflected on the lesson, including her planning and teaching decisions, as well as the reactions of students to consider changes she would make to her plans and approach in future lessons. Throughout this process, she found that certain features of a meaningful experience, including social interaction, fun, and motor competence, were easier to plan for than others. For example, social interaction was often planned for by providing students with numerous opportunities to engage in individual-, partner-, and group-work opportunities, and considering

such things as how groups would be selected (e.g. student-selected versus teacher-selected). She also found it important to plan for fun through, for instance, turning various components of the lesson, including skill development activities, into games, which students identified as being a fun way to learn. She found planning for increased motor competence to be simplified through the use of the TGfU teaching model as each lesson incorporated a focused skill development component.

Stephanie also felt the need to make decisions that were specific to the situation and climate in which the lesson was taking place, writing: "Though I plan for each of the six [features], I often find this 'checklist' type planning to be unrealistic. I find the adjustments I'm making throughout the lesson to be often more valuable than the plans I made in the first place" (Reflection 8). This was in part due to the way that the features seemed to be integrated. She found that planning as if there were distinct lines between each feature seemed to misrepresent how students experienced meaningfulness in their physical education lessons. For example, motor competence paired with an appropriate level of challenge was often found to result in fun. One student commented: "Now you can have more fun because you know how to play it and you have the right level of challenge" (Interview 1). Similarly, students tended to associate social interaction and challenge, suggesting, for example, that overcoming what was thought to be an insurmountable challenge together as a team was the highlight of the lesson (Reflection 2). While this does not negate the importance of planning ahead, it highlights the necessity of being ready and willing to make adjustments throughout the lesson "in the moment" and in response to the reactions of students while considering the ways the features integrate and overlap with one another to contribute to the meaning students derive from their experiences.

Utilising reflection-in-action was especially important for incorporating the components of challenge, personally relevant learning, and delight. Although Stephanie planned for specific modifications to activities and games to ensure appropriate levels of challenge, she found it difficult to predict how challenging an activity needed to be for each student. For this reason, she found making modifications in the moment to be more useful because they were based on direct observations of students' engagement and experience. She also found it very difficult to plan for delight and opted to look for moments to facilitate its appearance through, for example, Kretchmar's (2005b, 2006) notions of guiding students to their personal playgrounds and encouraging students to prepare for delight through hard work.

Additionally, while finding it quite challenging to plan for personally relevant learning, Stephanie often looked for ways to help students make connections to their lives outside the classroom as she was teaching the lesson. For instance, in one lesson during which students seemed to be struggling to interact positively and were constantly asking if she would rearrange the teams, she asked them to consider whether 'trading' the people that annoy them was an option in other areas of their lives (for example, their siblings); they agreed it was not. In light of this, Stephanie asked them to consider whether or not trading team members should be a valid option in physical education. "They thought about this for a while and agreed [it should not]. For the rest of the class, there were no requests to change team members and they seemed to work quite well together. It was a good opportunity to connect what they're doing in the classroom with broader aspects of their lives (and again confirms what I felt about planning for personally relevant learning in my last reflection – that it often happens in the moment)" (Reflection 11). While utilising these forms of reflection took some practice, Stephanie gradually became more confident in her ability to do so as she progressed through the lessons, which she

found to be greatly facilitated by her commitment to the importance of prioritising meaningful engagement in physical education.

Committing to the prioritisation of meaningful experiences

Stephanie found her evolving understanding of the concept of meaningful experiences to be essential in her feeling comfortable planning for and prioritising each of the features in each lesson. A strong knowledge base about the nature of meaningful experiences based upon the current body of literature was therefore important for her. For example, in one reflection she wrote, "In order to teach toward meaning, a good understanding of these six features is essential. I suppose you could say you need to adopt the philosophy and have a solid understanding of it" (Reflection 8).

Stephanie found her commitment to prioritising meaningful experiences was essential to the success she felt she was finding throughout the unit. There were a number of instances when she felt she needed to be aware of why she was making certain decisions and be able to make this reasoning explicit. As she worked through the reasoning behind her decisions, she found that the features of meaningful experiences were influencing her thinking in more ways and to greater depths as the unit progressed. For example, she initially struggled when making decisions related to the role of competition. While some students expressed stress and frustration when competing against members of an opposing team, others (particularly older students) desired a greater emphasis on overt, externally referenced forms of competition. She further found that her own conception of competition as a meaningful feature of her own movement experiences was influencing her decisions. She attempted to find a balance by allowing students *some* opportunities to engage with peers in spirited competition, but eliminating certain externally referenced elements of competition, such as score-keeping, in the majority of lessons.

While acknowledging that this is contrary to the intended format of the Sport Education model, the decision was informed largely by her intentional prioritisation of meaningful experiences as she noticed that many of the components of a meaningful experience were compromised when winning became students' top priority. In a conversation with Tim, she talked through her thought process: "They don't think about passing the ball to somebody else, or if someone on their team makes a mistake, then they get angry with them… Their social interactions go downhill, and how much they're willing to challenge themselves" (Critical Friend Conversation 2). Even students recognised the effect this was having on their learning and engagement. For example, one interviewed student suggested that proper technique was compromised with an overt focus on externally referenced competition saying, "I find that when there is no points, people take the time because they are not rushing to see if they can get a point or anything. They are taking their time striking correctly, fielding correctly" (Interview 4).

Acknowledging that Kretchmar (2005a), among other scholars, has argued favourably for the role of competition in a meaningful experience, in this instance Stephanie's decision-making was informed by her commitment to fostering meaningful experiences for all learners and planning for them through emphasising each of the six features. Stephanie reframed the emphasis of competitive situations to focus more on internally based references, such as challenging oneself to strive for a personal best. This is not to suggest that the findings of the present study contradict such assertions regarding the role of competition, but rather that they reinforce recommendations from Beni et al. (2017) to consider age and other developmental factors when incorporating overt competition in physical education while also highlighting the subjective nature of meaningfulness.

Autonomy-supportive strategies

Stephanie's decision to provide students with greater levels of autonomy was identified as beneficial for student learning and motivation and consequently in fostering meaningful experiences in physical education. One way Stephanie endeavoured to do this was to be open to being guided by student voices. The primary line of reasoning behind this was her understanding from the literature of the important role that autonomy, and in particular providing students with choice, has played in students' meaningful experiences (Beni et al., 2017). In their discussion of self-determination theory, Mandigo et al. (2008: 408) state: "when individuals feel autonomous, related and competent at an optimally challenging task, their intrinsic motivation is enhanced. This sense of intrinsic motivation in turn increases their desire to do the activity at that time and in the future". Thus they recommend the use of autonomy-supportive strategies, such as offering students choice and involving them in decision making, to increase intrinsic motivation and enhance learning.

Following suggestions from Mandigo et al. (2008), Stephanie planned for ways to involve her students in their learning experience and enhance the personal significance of their experiences through the use of autonomy-supportive strategies including offering choice and involving students in decision-making regarding such things as the specific activities in which they would engage, the rules of the activities, the level of challenge they experienced in specific activities, and in planning the culminating festival. Though the intention to utilise these autonomy-supportive strategies was planned for, she also looked for ways to incorporate them while she was teaching by, for example, encouraging students to consider the level of challenge with which they were engaged and inviting them to make modifications to activities when they felt it appropriate to do so. As a result of modifying activities themselves, students were able to recognise ways their choices could lead to an optimal level of challenge. For example, she noted

that students "made comments about how changing the piece of equipment would make the activity more or less challenging" (Reflection 4) and that having the opportunity to choose between striking from a tee or from a pitcher helped them decide upon an appropriate level of challenge (Exit Slip 4).

Students responded favourably to opportunities to exercise autonomy. For example, a number of students spoke positively of having the opportunity to design a skill development activity, with one student suggesting: "It makes you feel like you have your own choice to do stuff and you are not just under strict rules and regulations of how you are supposed to do it" (Interview 2). Another student shared: "I know a lot of people said that they liked that way better than her telling us what to do or giving us a paper to say" (Interview 4). When asked why, the student suggested it allows them to use their imaginations and manage their time wisely by practicing the skills they need to work on most. Some students also believed that sharing their opinions would "benefit others" (Exit Slip 1), suggesting that providing students with autonomy to make their own decisions can also have positive effects on their own learning as well as that of others.

In conjunction with student data, Stephanie's personal reflections supported the use of student-designed games and activities that provided students with the opportunity to make choices. In many of the lessons, students were given the opportunity to engage in small-sided games in which they were permitted to make modifications to suit their own or their team's needs. Stephanie found this to be meaningful for students, "not only because it allowed for a 'just right' level of challenge, but also because they essentially designed the game themselves. It gave them the freedom to play an active role in their own learning" (Reflection 8). Additionally, providing students with the opportunity to be a part of planning the festival proved to be a source

of great anticipation. Stephanie noted: "As I listed off things that we would incorporate from the list of festival ideas they had created, they celebrated the fact that *their* ideas had been selected [in planning for the festival]" (Reflection 12).

Interestingly, students initially seemed quite hesitant to take responsibility for their own decisions, acting as though they needed permission to do so. For example, in one lesson Stephanie suggested a particular modification from the outset of the game. As the game went on, she stood to the side observing as one of the teams struggled through the game. It took them some time before coming to ask if they could make a modification. Stephanie wrote, "I found it interesting that, despite my suggesting that this adjustment be made right away if they felt it necessary, some of them still felt they needed my permission to do so" (Reflection 11). The students' hesitance to engage in their own decision-making is likely a reflection of their socialisation into the school setting and culture, where decisions tend to be made for them rather than by them (Hastie & Siedentop, 1999). This level of autonomy was seemingly unexpected from the students, and it took some time for them to come to terms with this being allowed or even encouraged in their learning environment.

While finding this approach very helpful, it is acknowledged that it requires a degree of developmental appropriateness. With this in mind, there were times Stephanie challenged students' decisions and intervened when she felt it necessary. However, she also found that, while her experience and education may provide her with more theoretical knowledge of movement, individual students have rich personal and experiential knowledge of their own abilities and limitations. While some students may be inclined to take advantage of such an approach, in the present study Stephanie felt that students were often *more* motivated to engage and challenge themselves when given the opportunity than when given direct instruction. At the

end of one lesson she reflected on her decision to provide students with choice: "I did not have to motivate them to continue or to challenge themselves. They were eager to do so" (Reflection 7). This understanding is supported by Ennis (2017), who points to the wide body of research confirming that teachers who provide strong autonomy support see increases in students' intrinsic motivation, which results in decreased teacher control.

Features of meaningfulness can be experienced in both the short- and long-term

Although Stephanie's objective throughout the study was to facilitate meaningful experiences for her students on a day-to-day basis, her intentions were challenged as she quickly came to realise that aiming for positive, meaningful experiences all of the time was quite unrealistic. Furthermore, she came to find it unrealistic to think that anything worthwhile needed to have the students necessarily feel positive. In fact, she observed that some of those experiences that did not feel positive for students in the moment could be beneficial and even meaningful in the long-term. Stephanie found this to be particularly true regarding social interactions in the class. For example, in her second reflection she discussed the difficulty she was experiencing managing social interactions in the classroom, yet stated: "In some ways I feel like 'working it out together' might end up being beneficial though it doesn't feel positive in the moment." This was confirmed by one student who said: "When you get into a team, you're working together of course, and it is hard because some people have different opinions than others, but I really liked working together" (Interview 2). The student identified the challenges associated with listening to and understanding differing opinions as valuable.

This was also true of experiences that might have been referred to as delightful. Kretchmar (2005b) has suggested that due to its residing on the deeper end of a spectrum of meaningfulness one does not directly *plan* for delight. However, its arrival may be made more

plausible through faithful commitment to practice and training and simply working hard. Indeed, Stephanie often found that experiences where students made a significant investment of effort over a period of time resulted in meaningful, and perhaps delightful, experiences. This was made possible in part by students setting and achieving goals for themselves. While working toward their goals was not always enjoyable in the moment, students expressed feeling proud of themselves when they achieved them; one student shared, "It feels really good when you set a goal for yourself and accomplish it" (Reflection 11). In summary, Stephanie took the perspective that an experience that seems lacklustre in the moment need not necessarily be labelled meaningless and may actually become foundational to deeper movement experiences in the long-term. This understanding led Stephanie to interpret the meaning derived from movement experiences across a spectrum.

Early in the study Stephanie recognised that students were evaluating the meaningfulness of their experiences as falling on one of two extreme ends of a spectrum of meaning. This resulted in students interpreting those experiences that were not extravagantly meaningful for them as (by consequence) meaningless. Further, conceiving of experiences in such extremes seemed to influence their perceptions of the entire lesson. For example, in one lesson Stephanie noted that a particular student commented early in the game on how much fun he was having, yet as the lesson progressed, students had some difficulty managing their social interactions and quickly became frustrated. At the end of the lesson, the aforementioned student suggested that the game was meaningless, seeming to completely forget how much fun he had during the game. In response to such experiences, Stephanie decided to vary the terminology she was using with her students based on a recommendation made by Tim, her critical friend, who suggested: "Rather than, 'It *was* meaningful,' we could say, 'It's *toward* [meaningful]'" (Critical friend

conversation 1). In this way, she asked students to think of the meaningfulness of their experiences across the full range of a spectrum. In one lesson, she did so by asking students to "forget about whether or not there was one little thing they did or did not enjoy about the lesson and rate the entire thing in terms of whether it was more toward meaningful or meaningless" (Reflection 9). Using this terminology, most of them were able to highlight many positive moments with all of them suggesting their experience was toward meaningful. Students were able to interpret experiences that fell on neither end of the spectrum and could explain their reasoning behind their decision-making. In addition, they learned that something could be meaningful in varying degrees. That is, an experience did not have to be rated at 10/10 to be perceived as meaningful. In addition to utilising this terminology throughout the lessons Stephanie was teaching, a similar approach was taken in student interviews where they were asked to indicate how they would rate the meaningfulness of their experiences throughout the unit on a number line with meaningful experiences on one end and meaningless experiences on the other and to explain their selection. Students learned to reflect on an entire experience or sequence of experiences and assign appropriate degrees of meaningfulness accordingly. Meaningfulness did not have to be absolute in this way but could be viewed as a tendency toward the positive side of a spectrum. This also challenged Stephanie's own notion of meaningful experiences as she came to realise that her perception of experiences as either meaningful or meaningless was overly simplistic. She found thinking of meaningful experiences across a spectrum to be a more realistic and appropriate way of reflecting on experiences – both for her students and herself.

Conclusion and future directions

Beni et al. (2017) identified the need for appropriate frameworks and specific strategies to support how teachers facilitate and promote meaningful engagement in physical education as a major gap in the literature. Our research makes a contribution by providing preliminary insight into one teacher's experience of using a framework that consists of social interaction, challenge, fun, motor competence, personally relevant learning, and delight as features of meaningful experiences. Of particular importance was the need for Stephanie to commit to the prioritisation of meaningfulness – in both philosophical and practical senses – to guide her decision-making. This commitment provided Stephanie with a coherent frame of reference that enabled her to make and justify changes to her practice and the pedagogical models she used so that the promotion of meaningful experiences was the prioritised outcome for students. Stephanie's prioritisation of meaningfulness as a primary outcome for students allowed her to make justifiable decisions to change elements of the GCA and Sport Education models that best suited her students' needs *and* which aligned with her beliefs about the purposes of physical education. The role of a critical friend also helped Stephanie deepen her understanding of the nature of meaningful experiences in physical education and question some of the assumptions she had previously held about teaching and learning.

Another key finding was support for the value of autonomy-supportive strategies, such as allowing students to play an active role in the planning of games and activities, giving them opportunities to set and achieve meaningful goals for themselves collectively and individually, and allowing students to share their perspectives on facilitating meaningful experiences (Dismore & Bailey, 2011; Ennis, 2017; Enright & O'Sullivan, 2010; Smith & Parr, 2007). Although a number of studies have supported offering choice to students in secondary physical education (Enright & O'Sullivan, 2010; Smith & Parr, 2007), less is known about utilising such

519 an approach with primary school-aged students. A degree of developmental appropriateness was
520 required in employing autonomy-supportive strategies with young learners, as was guidance
521 from Stephanie in decision-making; students were given opportunities to make choices within
522 guidelines and under supervision. The findings from the current study offer support for the
523 purposeful use of such an approach in fostering meaningful experiences in one primary physical
524 education classroom.

525 Stephanie also found the use of the six features of a meaningful experience outlined by
526 Beni et al. (2017) and Kretchmar (2006) – social interaction, fun, challenge, motor competence,
527 personally relevant learning, and delight – to be crucial in shaping her decision-making and
528 ability to foster meaningful experiences when teaching physical education. Using these six
529 features to guide her planning and to reflect upon and adjust her decision-making both during
530 and following each lesson facilitated a significant improvement in her confidence related to her
531 ability to teach using meaningful experiences as a prioritised filter for her pedagogical decision-
532 making. In keeping with findings from Beni et al. (2017), she also found it important to
533 acknowledge the integrated nature of the features. We conclude that when the features are
534 planned for in concert with one another, they serve to heighten the meaningfulness of students'
535 experiences. We advise that the features are best thought about as an integrated set rather than as
536 a checklist. Although the use of the six features was essential to Stephanie's ability to make
537 explicit and purposeful plans, she conceived of these plans as *enabling the prioritisation* of
538 meaningful experiences as opposed to offering a step-by-step guide by which meaningful
539 experiences may be had. While there were many positive moments and experiences throughout
540 the unit, there were also situations in which she felt her planning and attempts to make
541 experiences meaningful did not work as she had hoped or expected. In certain situations, though

she attempted to make room for meaningful experiences, she found that the ultimate outcome was highly dependent upon whether or not her students would make the most of the opportunity. Thus it was necessary to work closely with and involve students in her attempts to facilitate meaningful experiences. At times this proved difficult, due to both Stephanie's and the students' socialising experiences of teaching and learning. We suggest this highlights the need for teachers to consider the highly subjective nature of meaningful experiences and be willing and able to make adaptive changes *in* practice (Beni et al., 2017; Chen, 1998; Ennis, 2017; Nilges, 2004).

This is not the first study in which a teaching approach aimed at prioritising meaningful experiences in physical education has been utilised. Our work builds upon that conducted by Nilges (2004) who identified several instructional techniques that could be used to access meaningfulness for students. We have shown how the use of a structured framework that involves six features of meaningful experiences can help support teachers to explicitly prioritise meaningful experiences in the planning and enactment of their lessons on a day-to-day basis within specific units of work. The current study offers preliminary support for the theoretical and practical value of the six features of meaningfulness as a framework to help primary physical education teachers in their practice (Beni et al., 2017).

While this study is one of the first to look at the practical implications of utilising a pedagogical approach that prioritises meaningful experiences in the classroom with school-aged children, the small sample size of the study as well as the unique setting in which the lessons were taught serve as reminders that the outcomes of this research are provisional and grounded in the context in which it was conducted. Further, this particular unit of lessons was taught in a games-based context. The transferability of these findings into other areas of physical education,

such as dance and aquatics, requires further investigation. While Nilges (2004) has offered some support for the prioritisation of meaningful experiences in dance within physical education, the usefulness of the particular approach utilised in the current study requires investigation. Additionally, the use of this approach within games-based physical education lessons requires further study in other classrooms and with other teachers who may hold divergent sets of priorities and beliefs. Further research should also aim to investigate PETE students' experiences of learning to utilise a similar approach that prioritises meaningful experiences in physical education.

Ennis (2017: 8) has suggested: "Moving forward, the next steps to enhance and transform the PE experience should involve designing and testing transformative PE curricula that infuse student experiences with a focus on mindfulness, motivation, and meaning". The current study serves as an example of one teacher using a meaning-oriented approach as a focus to enact a transformative physical education agenda. As a way forward, we agree with Ennis's (2013: 120) assertion that, "Developing new approaches [for implementing meaningful, educative curricula] that are effective and can be implemented in complex physical education settings is one of the next great tasks for our teacher scholar partnerships," and suggest the current study offers a preliminary step in this direction.

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