

Physical and Health Education Canada National Conference, Whistler BC, 2018
Research Council Forum:
Selected Graduate Student Posters and Presentation Abstracts

Advantages of identifying and incorporating indigenous ways of knowing in physical and health education teacher education

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Advocating for more socially just forms of Physical Health Education Teacher Education (PHETE) programming that bring attention to racism, colonialism, and include other ways of knowing, has been overlooked by Canadian PHETE researchers (Halas, 2014). Indigenous ways of knowing historically have been excluded from contemporary educational institutions and other Eurocentric knowledge systems (Battiste, 2005). Thus, there is a critical need to better understand how to enhance university PHETE programs through the incorporation of Indigenous ways of knowing and culturally responsive teaching practices that respect a diverse student population (Halas, 2014). The purpose of the proposed study is to gain a better understanding of how Indigenous ways of knowing may be both practically and theoretically included in PHETE programs. I propose that the inclusion of Indigenous ways of knowing advocates for a culturally responsive form of physical education (PE) that would meet the needs of a greater number of students and lead to increased numbers of individuals who would be motivated to lead physically active lifestyles. This study adopts a narrative inquiry theoretical framework, derived from concepts of the Deweyan theory of experience. Through the process of narrative inquiry, I will collaborate with the Mohawk people of Kahnawá:ke, a Kanien'kehá:ka community on the St. Lawrence River near Montreal, Quebec, Canada. Mohawk participants will provide knowledge around their experiences and how to incorporate culturally responsive Indigenous ways of knowing into PHETE programs. The inquiry into how they believe Indigenous ways of knowing may enhance how PHETE programs prepare pre-service teachers to engage Indigenous youth within PE (Flicker, et al. 2015). PHETE programs will then hopefully incorporate more culturally responsive forms of PE that would meet the needs of a greater number of students and lead to increased numbers of individuals who would be confident, competent, and motivated to lead physically active lifestyles.

Children's independent outdoor activity: Associations with allowed independent mobility and the neighbourhood environment

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Independent outdoor activity (IOA) can be beneficial for children's physical, social, emotional, and cognitive well-being. The purpose of this study is to understand how children's independent outdoor activity is associated with both parental allowance for independent mobility and parental perceptions of the physical and social environments. In 2016 and 2017, 10- to 13-year-old children (n=97) and their parents residing in three neighbourhoods in Metro Vancouver participated in a study on the socioecological determinants of play. Children's objective mobility and activity data were collected for 7 days through the use of GPS watches (Garmin Forerunner 220) and accelerometers (Actical, Philips Respironics, Bend OR), respectively, and activity diaries and location-based interviews were used to obtain more details about their activities during the study week. Parents completed a series of questionnaires designed to elicit their perceptions about their child's allowed independent mobility and their perceptions of their neighbourhood physical and social environments. Spatial and temporal aspects of IOA will be computed and regression models will be used to examine the effects of allowed IM and aspects of the physical and social environments on IOA. Child age and gender will be controlled for as potential confounding variables. The R Project for Statistical Computing software (V.0.99.903) will be used to complete all statistical analyses. Data collection is ongoing (anticipated completion in December 2017). The sample to date includes 71 mothers (%) and 11 fathers (%) of 85 children (47% female) aged 10 to 13.

Alisha's Story: Race and femininity in middle school physical education

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Physical education (PE) is one way to help foster lifelong physical activity engagement during the critical middle years (Doolittle, 2016). However, gender differences have been found in levels of enjoyment, participation and perceived competence in middle years PE, with girls recording lower scores in all categories (Cairney, 2012; Johnson, 2015). Because gender is only one aspect of a person's identity, it is important to acknowledge and attempt to understand how other aspects, especially race, shape one's gendered experiences (With-Neilsen & Pfister, 2011). Given that PE environments are sometimes regarded as highly gendered spaces, Azzarito and Solomon (2005) have called on PE scholars to include discussions about the intersection of gender and race when discussing conceptualizations of the body and pedagogical theories for physical activity. Results shared in this presentation come from a broader study, the purpose of which was to better understand the culture of a middle years PE class, with a focus on the role that student gender may play in their PE experiences. The study used a feminist ethnography and employed extensive observations, interviews and document analysis to collect data. Use of an intersectional lens shines a light on the way that one student's PE experience was fundamentally different than her peers. As the only Black girl in her class, Alisha's race intersected with her identity as a girl to create multiple layers of oppression in her PE class. Girls in Alisha's class actively attempted to "other" her by policing her femininity, while reinforcing their own gender within the highly masculine environment. As a result, Alisha had strong negative feelings about PE that were related to body shaming, criticism of her sexuality, bullying and exclusion. The culture of this PE class, hegemonic gender, and representations of black women and girls will be discussed throughout the telling of Alisha's story.

A narrative exploration of girls' experiences in elective physical education: Why do they continue?

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Physical inactivity is a serious public health concern in Canada, especially among the country's youth. Adolescent girls, in particular, suffer many life-long consequences due to inactivity. Physical Education (PE) can offer a solution. However, the vast majority of girls discontinue enrollment in PE as soon as the mandatory credits are met. Tailored PE courses designed to meet the needs and interests of girls may motivate girls to continue participating in PE. This narrative inquiry explored three girls' stories of their past experiences in elementary, middle, and high school PE, as well as their current experiences in a tailored elective PE course entitled Girls Actively Living (GAL). The goals of this study were to explore how the girls' experiences with the course content, learning environment, and assessment in GAL affected their perceptions of PE. Additionally, it was of interest how their experiences outside of PE influenced their desire to continue in elective PE and how their experiences in GAL affected their perceptions of physical activity. Findings emphasized the importance of (a) variety and cooperation within PE course content, (b) a fun and welcoming PE learning environment, (c) fair and private assessment, and (d) feelings of confidence, social safety, and competence for girls in PE.

Experiences of stress and coping in elementary physical education: An interpretive work-in-progress of children with movement difficulties

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Quality physical education is intended to benefit the development of the whole child but requires engagement in various movement activities to learn “through the physical,” which places emphasis on a child’s motor abilities and skills. One to two children in every elementary classroom experience significant and persistent movement difficulties (MD) that impact their learning and performance in physical education. From a motivational perspective, these children may perceive experiences in physical education as stressful because they challenge or threaten their innate psychological needs to have close relationships, be effective in their interactions with the environment, and freely determine their own course of action. Skinner and Wellborn (1994) define coping as “how people regulate their own behavior, emotion, and motivational orientation during psychological stress” (p. 112). Researchers speculate children with MD use maladaptive coping responses, such as avoidance, to prevent their poor motor coordination from being on display. The purpose of this interpretative, qualitative study in progress is to explore how children with MD experience and cope with stress in physical education and understand the perceived effectiveness of their responses. Approximately 8-12 children with MD in Grades 4 to 6 will be recruited from elementary schools, with three children currently participating. All children will be asked to make two pictures to show what physical education is like for them prior to the first semi-structured interview to help facilitate the reflection process. A second interview will be scheduled with participants to provide them the opportunity to elaborate on their experiences. The audio-recorded interviews will be transcribed verbatim and analyzed, with Skinner and Wellborn’s (1994) theory informing the interpretation of the findings. A resource will be developed based on the findings to increase awareness amongst teachers about the stressors children with MD cope with to ensure their needs are fulfilled in physical education.

First-Aid: A critical component of physical and health literacies in schools

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Safety is the top priority in physical and health education, while first-aid is an essential safety component. Normally performed by laypeople, first-aid refers to the urgent and initial assistance given to anyone suffering a sudden illness or injury in order to preserve life, prevent rapid health deterioration, and promote recovery. Everyone experiences numerous and various illnesses and injuries (e.g., choking, wound, poisons) that need first-aid at home, in schools and communities. First-aid enhances safety awareness, reduces accidents, and saves lives. Research reveals that many people are unable to appropriately respond to illness and injuries, which leads to worsened illness or injuries, disabilities, or even death. Although people deem it a life-skill, most students in schools never learn first-aid. Evidence in school-based first-aid programs iterate that relevant training can be implemented successfully for all ages in schools. In fact, students are required to learn basic first-aid techniques in many countries (e.g., Norway, Ireland, Wales, most states in the U.S.). In Canada, first-aid appears to have limited importance in curricula; however, safety is undoubtedly recognized as a vital element in the curriculum (e.g., physical education) and school policy. To elevate the importance of this essential skill, we propose that students should systematically learn basic first-aid techniques and procedures as core knowledge of physical and health literacies to save self and others at home, in schools and communities as a lifelong skill. As the best fit to teach first-aid, physical education and/or health education should systematically introduce first-aid in the Comprehensive School Health framework. There is currently no research on first-aid as physical and health literacies. This study will discuss why, what, and how to teach the systematic knowledge and skills of first-aid to K-12 students and examine the challenges and solutions in the implementation of first-aid education in schools.

Pre-service teachers' understanding and interpretation of social Interaction as part of a meaningful physical education experience

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The promotion of meaningful experiences is a primary way that teachers can enact a transformative physical education curriculum for students (Ennis, 2017). However, little is known about ways teachers can intentionally prioritize meaningful experiences. Recent advances have led to a framework that outlines the following features of a meaningful experience: social interaction, challenge, fun, motor competence, delight, and personally relevant learning (Beni, et al., 2017). This study examines how pre-service teachers understand and interpret positive social interaction as one feature of meaningful experiences in physical education. The study took place in one undergraduate class where the instructor emphasized ways social interaction formed important benchmarks of several pedagogical models (e.g., TGfU, Sport Education). Participants (n = 8) took part in two individual interviews at the beginning and end of one academic term. Non-participant observations (7) of the class were conducted and exit slips (50+) collected from students. Pre-service teachers had somewhat superficial views of positive social interaction at the first data collection point, whereby finding and making friends or encouraging one another were emphasized. While important, this revealed a lack of sophistication in interpreting social interaction. Through the course, the instructor often expressed a more complex view of positive social interaction that included: building a classroom community that respects diversity and difference; conflict resolution, and sometimes having challenging conversations about sensitive issues, which can foster richer relationships. At the end of the course, students showed a deeper understanding of social interaction, particularly in comparison to their initial interviews. This study is significant because it highlights the need for PETE instructors to be explicit in articulating and demonstrating ways in which social interaction can be understood, interpreted, and enacted. This can disrupt students' prior superficial beliefs and guide them in developing a more complex understanding of social interaction and strategies to enact them.

A longitudinal examination of motor competence in middle childhood

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The development of motor skill proficiency is influenced by a child's physical growth and maturation, genetic potential, and affordances in the child's physical and sociocultural environment. By the beginning of middle childhood, children have most of the maturational necessities (e.g. myelination and depth perception) needed to master fundamental motor skills. However, there is cross-sectional evidence that children's motor skills are not developing optimally. This study examined the locomotor (LM) and object control (OC) skill proficiency of boys and girls longitudinally from grade 2 to 4. Participants were 236 children (52% female; Mean age = 7.8 years in grade 2) and motor skills were assessed using the Test of Gross Motor Development-2. Repeated measures analysis of variance, with sex as a factor, revealed an overall positive effect of time on LM and OC skills for both boys and girls. However, post hoc tests showed the change for OC was only significant for grade 2 to 3, with scores remaining at 35/48 for boys and 29/48 for girls from grade 3 to 4. LM skills continually improved. Multivariate analysis of variance showed significant sex-based difference in LM ($p = .001$) and OC skills ($p < .001$). Pairwise comparisons revealed that boys had significantly higher OC skills than girls did in each grade, and girls had higher LM skills than boys in grade 2 and 3. These findings indicate that children's fundamental motor skills are not developing optimally. The plateau in OC at grade 3 for both boys and girls is concerning since the children's motor and perceptual systems are sufficiently mature to allow them to master these skills. Public elementary schools in British Columbia need to ensure that children have opportunities to master OC and LM skills so that children have the opportunity to apply these skills to sports and recreational activities.

Review of pedagogical approaches and quality physical literacy experiences for youth

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Physical literacy is considered a precursor for physical activity and sport participation, with development of the concept providing a renewed way of thinking that has united practitioners across various disciplines. With the physical literacy movement still in its infancy in Canada, sport, education and recreation organizations have a significant role to play in bringing physical literacy to the forefront of their work. Canada's approach to physical literacy can be described as a 'multi-institutional,' where interested and willing organizations have a central commitment to a common definition of physical literacy; yet each organization focuses on different elements of physical literacy that are aligned with their organizational purpose, philosophy and expertise. Canadian youth are one demographic in particular where physical literacy initiatives are important, as research shows that physical activity levels start to decline as children enter into adolescence. Studies have demonstrated the importance of the pedagogical practice in development of motor skills in participants in both sport and educational settings, but there is less research on the specifics of effective pedagogical approaches in developing physical literacy. Physical literacy differs from the concept of motor skill development as it is more holistic in nature, combining the psychomotor, cognitive and affective domains. The focus of this session will be to present a synthesis of findings and best practices from a review of current literature on physical literacy, including grey literature, on the influence of the pedagogical approach to physical literacy development in youth. Discussion and sharing of common practices used by practitioners in education, sport and recreation working with youth will be encouraged as part of this session.

The rise of sport academies and their current appeal to parents and youth

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The focus of this research study is to examine some of the influences that have led to the increased number of school sports academies in the Edmonton, Alberta, region. An examination of the information available via literature and school websites show that the number of school sports academies have grown from two schools in 2005 to 30 schools in 2017. There are twelve different sport specializations offered across the 30 schools with hockey available at 23 of the schools. This growth in the number of sports academies can be attributed to the Province of Alberta's Alternative Programs policy which allows school districts to develop local courses that cater to the needs of their students. School sport academies can fill a gap for those students who want more from standard physical education classes. It can also provide an alternative way to learn life skills, improve self-esteem, self-perception, and psychological well-being as well as providing an alternative to those parents who are looking for options that are different from the traditional academic programs. The use of a grounded theory method will inform this study as the examination of how sports academies are governed and how LTAD is being utilized will be studied. Additionally, the researcher intends to use this knowledge to formulate a plan whereby the formula and approach used by the lead teachers in these sports academies can be taken and used in a similar way in the training of business students who train and compete in case-study competitions in their own field of study. This emerging research is intended to blend the similar training approaches from two different fields of study to see how the LTAD model can be utilized outside of the sports training arena which it was initially intended to be used for. The intent of this research and subsequently presenting at this conference is to unveil how Sports Academies have grown so significantly in the province of Alberta over a very short time and to discuss the debated benefits and critiques of such schools. Additionally, the researcher will show how some of the school leaders of these sports academies are utilizing the LTAD model and how he (as the researcher) can try to use the LTAD model in a different context (Business case study competition training).

The bodily experiences of teachers in physical and health education: Using Pinar's notion of 'currere' to understand embodiment

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This paper deepens our understanding of identity--individually and collectively--to awaken a sense of agency within health and physical education towards greater existential understanding of the role bodies and social relations play in health and physical education. We take up William Pinar's autobiographical/biographical method of 'currere' to narrate our relationship with our body as an essential but overlooked component of our practice as educators. With strong sporting backgrounds and much confidence, we entered the profession to share our experiences with youth, only to be confronted with our own strengths and weaknesses as professionals in our field. Using Pinar's notions of 'currere' we individually engaged in a conscious analysis of our bodily trajectory into education and our everyday embodiment in schools and the workplace. Building on the scholarship of others (see Ennis, 2017; Kilborn, 2014; Owens & Butler, 2017), our paper offers an existential analysis of our journey through the epistemic and the embodied realities of teaching with and through the body. Our paper will share and weave together the results of a six-month self-study using the four stages or method of Pinar's approach to 'currere.' First, a turn inward and a regressive exploration of our intellectual body biographies; second, a move outward with a progressive imagining of our individual and shared futures; third, an analytic of our phenomenological relationship with our bodies in relation to the past, present and future; and fourth, a synthesis of our individual and collective experiences in relation to larger political and cultural webs of understanding. The method of 'currere' frames the paper and the thematic of the teacher's body in relation to concepts of gender, heteronormativity, race, culture and ability are incorporated and assessed using Butler's notion of performativity as we analyze our individual and collective complex bodies and social relations. We highlight how we are more than technocratic teachers and conclude by suggesting that through greater attention to our existential experiences we are all ethically positioned to disrupt oppressive narratives of bodies, health and wellbeing.

Teachers' conceptualizations of physical literacy: Are we discursively (de) constructing the term?

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This study will deliberately highlight the examination and research surrounding how physical literacy is taken up as a concept for discourse and disparity in Physical Education Health and Wellness reform. It is an invitation to open up a subjective space with intention, so that what is known may be further understood, and the conditions to which 'unfamiliar pedagogy' within Wellness Education and curriculum is conceptualized, interrupted and implemented. The purpose of this study will be to examine teachers' conceptualizations of physical literacy through a constructivist worldview; advancing the theoretical understanding of how physical literacy discourse and the practices it endorses are operationalized. Specifically, this study will ask:

1. How do PE teachers interpret the construct of physical literacy?
2. Have PE teachers understood the construct of physical literacy as embodied learning?
3. What aspects of physical literacy research are teachers aligning with/embedding in their practice?

In welcoming other ways of knowing and coming to these truth(s) it is anticipated that teachers, through the hermeneutic process, will succor their understanding of the constructions of the body and pedagogy within contemporary culture.