REFEREED ARTICLE

Embracing Holistic Physical Education: A Pedagogical Shift From Traditional Approaches

Jordana Etkin

Abstract

This article advocates for a transformative shift in physical education (PE) from Eurocentric paradigms towards a holistic approach. Drawing on Canadian perspectives prioritizing academic physical, mental, and social development, it underscores the necessity of embracing holistic PE to foster inclusivity, cultural relevance, and lifelong wellness. Through a comprehensive review of literature and research, the article explores the integration of holistic methods for PE by promoting student-centred practices and diverse activities, cultivating physical literacy while embracing self-esteem, resilience, and ecological awareness. This pedagogical approach aims to create a more inclusive and impactful learning environment, nurturing lifelong wellbeing for all students.

Physical education (PE) classes promote physical fitness, skill development, and lifelong wellness; yet conventional approaches to PE have often been criticized for their narrow focus on Eurocentric sports and performance-oriented curricula potentially sidelining diverse student populations. Robinson et al. (2019) stressed the Canadian rationale for PE, prioritizing physical, mental, and social development, advocating for an approach encompassing physical fitness, competence, and confidence. In response, educators are exploring holistic PE as an innovative practice that champions inclusivity, cultural relevance, and holistic wellness to support lifelong physical activity (PA) and contemporary pedagogies (Kilborn et al., 2016).

As a physical education teacher, I became increasingly frustrated with the narrow focus of current physical education outcomes and expectations. After an aha moment teaching a high school PE class, I questioned the broader purpose outlined in curriculum documents, wondering how they contribute to lifelong health and wellness, particularly for those not engaged in sports. That teaching experience is my north star, guiding me while I strive to better integrate health and wellness into my teaching practice through a variety of domains. Along this journey, I dove into academic journals and texts to explore holistic education and its relevance to physical education.

Additionally, I turned to Canadian statistics to grasp the specific challenges faced by people in our country. It is important to note that these challenges are experienced globally. By synthesizing information from a variety of sources, my aim was to emphasize the importance of holistic education, and offer practical guidance for enhancing physical education practices. Through this article, I aspire to advocate for a more holistic approach to physical education, reflecting cultural diversity while nurturing overall wellbeing and positive lifelong habits.

Holistic education is a well-documented comprehensive approach emphasizing development across physical, mental (Mooses, et al., 2017), emotional, and social domains to boost confidence, cognitive competence, and intrinsic motivation (Griggs & Fleet, 2021). This approach responds to societal shifts towards sedentary lifestyles and mental health challenges in children, adolescents, and adults. Recognizing the importance of education for the whole child, physical educators encourage the prioritization of student participation in daily PA, while

imparting the skills required for lifelong healthy, active living (Dyson, 2014).

This article explores the concept of holistic PE, offering evidence-based insights into the implementation of the physical, mental, emotional, and social dimensions. Meaningful reform in PE curricula and teacher practice would promote student lifelong wellbeing by fostering inclusivity and effective learning environments in schools.

Literature Review

Canadian classrooms are increasingly diverse, with more Indigenous (Shiver et al., 2020) and newcomer students. Amid this change, educators face the challenge of creating inclusive learning environments within a colonial educational system. Nationwide, the overarching goal of PE emphasizes the acquisition of knowledge, skills, and attitudes for healthy active living through PA (Kilborn et al., 2016). Pill et al. (2022) advocated for pedagogical shifts that prioritize reflecting students' identities and cultures across subjects to promote overall health. The Canadian Society for Exercise Physiology (CSEP, n.d.) recommended those aged 5 to 17 years participate in a minimum of 60 minutes of moderate to vigorous daily physical activity. Recognizing low physical activity rates, less than 40% of Canadian students in that age range meet the CSEP PA guidelines (Statistics Canada, 2015), Vasquez et al. (2022) highlights the need to incorporate diversity into PE classes to ensure relevance for all. Halas (2006) proposed a model for culturally relevant physical and health education, emphasizing academic and motor development alongside cultural competence and critical consciousness. The objective is to affirm students' cultural identities, perspectives, and values within the curriculum (Ennis, 2017).

Impetus for Change

In the 1990s, new policies for education were written, prioritizing time for mathematics and English language arts, while simultaneously reallocating funds for programs including the arts and PE (DeCorby et al., 2005). Since this time, there has been pushback from educators on the importance of these programs for students. Unfortunately, there are still many hurdles ahead.

PA behaviours are shaped by a range of social and economic factors including, but not limited to, income, socioeconomic status, education, employment, gender, and culture (Statistics Canada, 2015). There are many marginalized students in Canada, including those living in poverty, experiencing trauma, neglect or abuse, and those with additional needs. Although sedentary behaviours are increasing globally, it is particularly within these demographics that PA rates have declined, resulting in poorer overall health and wellness than those in other demographic areas or with other societal challenges (Statistics Canada, 2015).

Institutional factors, including but not limited to the amount of allotted time in the school day, other curricular subject teaching priorities, staff available to provide quality instruction, timetabling, physical space available for the increase of classes, and the availability of equipment (Morgan & Hansen, 2008) are additional challenges. The curriculum, and pressure on teachers to teach many subjects, are often the greatest institutional challenge (Morgan & Hansen, 2008). DeCorby et al. (2005) argued that the requirement to share the space with the onset of additional PE classes might prove difficult, explaining that there must be a coordinated effort to work together in delivering quality programming, with organized classes in a manner in which there is optimal time for activity. As school divisions received cuts to funding, the barriers for PE increased (Morgan & Hansen, 2008), and that lack of funding was detrimental to the purchasing of equipment for PE programs. Old equipment could not be replaced, and it was increasingly more challenging to maintain the equipment students use for play.

In Manitoba specifically, the allotted PE class time faces backlash from physical educators because Manitoba Education, Citizenship and Youth (2007) includes recess and intramurals in the assigned moderate to vigorous physical activity minutes. At four 30-minute classes a cycle, or six 30-minute classes a cycle, schools are falling short of providing enough moderate to

vigorous activity time for students. The prevalence of obesity has risen, and is expected to increase steadily unless there is a change in the nutrition and activity levels of Canada's young people (Roblin, 2007). PE teachers must become lobbyists for change, working to understand the challenges presented and advocate against them by developing goals and strategies, and by targeting those with decision making power on the benefits and long-term implications for a more physically active lifestyle (Roblin, 2007).

The Holistic Approach

Holistic education, which emerged in the 1980s, seeks to address students' emotional, social, ethical, and academic needs within an integrated learning environment. This approach prioritizes positive school environments and offers comprehensive support to students, addressing both academic and nonacademic needs. Holistic development encompasses physical, emotional, moral, psychological, and spiritual attributes (hooks, 1994), attesting to the importance of community support and a compassionate understanding of the world. Additionally, educators, alongside students' families and friends, play a key role in helping students discover their identities and connect meaningfully with their community and the world through holistic teaching methods. Regardless of age, students "want knowledge that is meaningful ... connection between what they are learning and their overall life experiences" (hooks, 1994, p. 19). A holistic approach provides opportunities tailored to students, creating a safe and supportive environment wherein students' strengths shine.

Holistic Physical Education

PE classes are pivotal in motivating students to engage in PA, yet many curricula traditionally emphasize team sports (Lara-Sanchez et al., 2010). Challenges in traditional, sport-centric approaches contribute to decreases in youth engagement (Ennis, 2017). While recognizing the significance of a sport-based curriculum, it is essential to address the limitations regarding inclusivity and cultural relevance, advocating for the inclusion of diverse activities (Ladson-Billings, 2014). Esports may be an alternative way for students to engage in "team" sports that have individual elements, as well, while learning about the importance of physical fitness, digital literacy, and academics (Steinkuehler et al., 2023). As educators, our responsibility lies in equipping students with the tools to advocate for lifelong health (Tucker, 2019). Given that PE may serve as students' primary source of activity, offering diverse activities in PE classes not only fosters physical fitness, but also enhances self-esteem, dignity, and self-discipline (Nelson, 2020).

A holistic approach to PA integrates physical fitness with mental, emotional, and social wellbeing through engaging activities, games, and creative movement (Ennis, 2006). Activities that promote sustainability and mental wellbeing are crucial for inclusive practices and individual identities (Dyson, 2014). Despite challenges such as sedentary lifestyles, poor dietary habits, substance abuse, and mental health issues, the main objective of PE in Canada is to strengthen knowledge, skills, and attitudes conducive to lifelong living through PA (Kilborn et al., 2016).

Discussion

PE classes are essential for the development of fundamental psychomotor (locomotor, manipulative, etc.) skills, strategies, and creative movement, vital for lifelong physical activity and wellness (Dyson, 2014). These skills improve cardiorespiratory fitness, muscular strength, and emotional regulation, reducing the risk of obesity and diabetes (Centers for Disease Control, n.d.). On the other hand, sedentary behaviors among youth pose health risks, emphasizing the importance of regular participation in PE classes to enhance activity levels and academic performance (Mayorga-Vega et al., 2018). Increased engagement in preferred PA is associated

with improved physical and psychological health and reduced disease and mortality rates (Whitehead & Blaxton, 2017).

PE is an essential component of students' holistic education, offering ample opportunities for creating and promoting healthy habits. Unfortunately, when adults are asked about their memories of PE class, they frequently report negative recollections (Griggs & Fleet, 2021; Sullivan, 2021). Instances of being picked last for team sports, enduring ridicule during participation, and facing teasing/taunting are common remembrances. Robinson et al. (2019) eloquently stated, "When movement is experienced as joy, it adorns our lives, makes our days go better, and gives us something to look forward to ... when movement is joyful and meaningful it may even inspire us to do things we never thought possible" (p. 240). Effective, quality PE programs focus on holistic education, fostering physical literacy by building confidence and competence through knowledge, skills, and attitudes for lifelong engagement in PA (Kilborn et al., 2016; Robinson et al., 2019).

Holistic PE seeks to address the shortcomings of traditional PE classes by embracing a student-centred approach. At its core, holistic PE is guided by the journey for lifelong PA and wellness, through the mind-body-spirit connection, inclusivity and accessibility, and ecological awareness.

Mind-Body-Spirit Connection

Holistic PE acknowledges the interconnectedness of mind, body, and spirit, motivating the intentional tuning into one's needs (Tucker, 2019). Through mindfulness practices, reflective exercises, and holistic movements, students reduce distractions while fully engaging in self-awareness, emotional resilience, and a deeper connection to the present (Tucker, 2019). As research of holistic practices becomes more widely available, physical educators are inclined to provide students with a movement culture, mimicking their futures (Mattson & Larsson, 2021).

Emphasis on the mind-body-spirit connection is most prevalent through practices such as expressive movements and yoga, building self-confidence and self-esteem by focusing on individual expression rather than competition (Ballard & Chase, 2004). Dance and yoga, when integrated into PE classes, serve as tools promoting flexibility, stress management, and mood regulation while facilitating physical literacy, movement understanding, and self-expression – all the while nurturing a mind-body connection (Cox et al., 2017; Levenberg et al., 2020). By integrating yoga and dance into PE, educators foster holistic development, instilling lifelong habits of self-awareness, PA, and emotional balance (Szekeres et al., 2022). These practices not only enhance physical fitness but also promote positive attitudes, laying the groundwork for healthy, active lifestyles (Levenberg et al., 2020).

Ecological Awareness

Outdoor education as a component of holistic PE fosters ecological awareness and environmental stewardship among students (Bascope & Reiss, 2021). Extending beyond individual wellbeing, immersing students in natural settings provides opportunities for direct, hands-on experiences with the environment, strengthening a deeper connection to nature (McInerney et al., 2011). Through activities such as orienteering, hiking, rock climbing, kayaking, and nature observation, students develop an appreciation (Sutherland & Legge, 2016) and first-hand knowledge of ecological systems.

Addressing inequalities stemming from colonization, culturally relevant physical education (CRPE) is rich in meaningful and relevant activities that affirm the cultural identities of students (Halas, 2011). These experiences encourage the development of skills and understanding of the environment (Sutherland & Legge, 2016), as students learn about the importance of preserving natural habitats and minimizing human impact. Through a three-step process – familiarizing oneself with the community, strengthening cultural awareness, and developing an

understanding of bridging cultural gaps in educational experiences (Shiver et al., 2020; Vasquez et al., 2022) – educators are provided with strategies to implement CRPE. By incorporating outdoor education into PE classes, physical educators empower students to become responsible and environmentally conscious citizens who positively contribute to the preservation of our planet.

Inclusivity and Accessibility

Inclusivity and accessibility are foundational to holistic PE, ensuring that all students, regardless of background or ability, have equitable opportunities (Petrie et al., 2018) for participation and success. The goal of inclusivity and accessibility is to champion an environment wherein each student feels valued, respected, and embraced, nurturing a sense of belonging through teamwork, collaboration, and positive peer relationships (Syaukani et al., 2023). To achieve this outcome for all students, physical educators must consider the diverse needs and interests of their students, adapting activities and instructions accordingly. Modifying or adapting equipment, tasks, time, student groups (Petrie et al., 2018), or adult support helps to accommodate varying skill levels, in order to ensure engagement in PE class.

As previously noted, holistic PE promotes inclusivity by embracing diverse cultural perspectives and experiences, recognizing the importance of inclusive representation (Petrie et al., 2018) and cultural relevance in the curriculum. Honing in on cultural relevance, this involves incorporating a variety of activities and games from different cultures and backgrounds, enabling students to see themselves reflected in the learning process. Petrie et al. (2018) identified a wide range of activities that reflect on cultural experiences (e.g., hunting, fishing, trapping), leisure activities (e.g., skateboarding, bike riding, scooters), and quality time (e.g., hide and seek, frisbee, climbing trees). Thus, physical educators need to challenge the curriculum's status quo to consider the myriad of ways students are active outside the school walls.

Although some of these activities are challenging to reproduce within PE classes, physical educators must fight to move forward to include activities of relevance and interest within these areas. By celebrating students' diversity, culture, and ability, holistic PE fosters a sense of unity and acceptance among students, and the desire to smash barriers to participation. By prioritizing inclusivity and accessibility, holistic PE creates an environment wherein all students can thrive, laying the foundation for lifelong participation in PA.

Benefits of Holistic Physical Education

Early PE experiences are pivotal for developing fundamental movement skills and establishing lifelong PA habits that influence future motivation (Savina et al., 2016). Engagement in PA during childhood supports the development of self-regulation skills and strengthens motor inhibition, movement, and social competence, contributing to greater cardiorespiratory fitness, muscular strength, and emotional regulation (Centers for Disease Control, n.d.; Whitehead & Blaxton, 2017). Students who value PE classes are more likely to remain physically active after graduation, benefiting both physical and academic performance (Mayora-Vega et al., 2018; Robinson et al., 2019).

Participation in PA not only enhances cognitive skills such as attention, concentration, and memory, but also releases chemicals such as dopamine and serotonin, contributing to improved cognition, positive classroom behaviours, and attitudes towards learning (Centers for Disease Control, n.d.; Syaukani et al., 2023). Holistic PE classes provide opportunities for independent and team-based activities that support cognitive skills including cooperation, strategic and critical thinking, reasoning, and problem-solving, with structural changes in the brain supporting academic achievement and overall brain development (Mandolesi et al., 2018; Rasmussen & Laumann, 2012; Tomporowski et al., 2008).

Additionally, holistic PE classes offer psychological benefits, boosting energy levels, confidence, self-esteem, and mood while reducing stress and anxiety levels through preferred activities (CSEP, n.d.; Salmon, 2001). Participation in PA supports emotional regulation and resilience in managing emotions and coping with stress, ultimately contributing to psychological wellbeing (Salmon, 2001).

PE is imperative for promoting positive development in marginalized students and those with needs, significantly contributing to gross motor skill development, social success, self-esteem, and peer participation (Morley et al., 2005). For at-risk students, holistic PE cultivates healthy lifestyles, fundamental skills, and healthy behaviours, addressing the lack of "typical" childhood activities while contributing to increased self-esteem, attendance, academic achievement, and reduced mental health issues (Collingwood, 1997; Halas, 2011).

Recommendations for Stakeholders

Developing and implementing a collaborative PE curriculum requires concerted efforts from various stakeholders. Engaging with physical educators to understand their needs and preferences is essential. Raising awareness about the benefits of holistic PE helps build support for these initiatives, while advocacy for policies and practices that support the implementation of holistic PE in schools is crucial. Additionally, establishing mechanisms for regular feedback ensures that the curriculum remains responsive and adaptable. This continuous loop facilitates ongoing improvements and adjustments, ensuring that the PE curriculum meets the evolving needs of all students.

Curriculum Development and the Ministry of Education

Absent of a national PE curriculum, how physical educators interpret their local curricula varies among provinces, divisions or districts, and schools. Within the dynamic landscape of Canadian schools, PE curriculum policies play a crucial role in establishing a foundation that supports a lifetime of physical activity, health, and wellbeing. Throughout the revision process, curricular re-development should focus on the current PE curriculum, general and specific learning outcomes, strands, skills, and knowledge (Manitoba Education and Training, 2000). Specifically, it is the duty of curricular developers to question the intended outcomes and how they contribute to a holistic approach towards lifelong physical and mental health (Penney & Jess, 2004). "Typically, specific sports or activities... rather than young people's lives, needs, and interests – have almost immediately come to the fore in commentaries, debates, recommendations, and requirements" (Penney & Jess, 2004, p. 276). Effecting change in PE practices requires the revision of provincial (potentially national) standards that emphasize the incorporation of mental, emotional, and social health alongside physical fitness.

Curriculum development tends to run on an eight—to-ten year cycle, and is led by the Ministry of Education within each province. Ideally, each Ministry collaborates with experts in the field, acquiring input from physical educators in a range of positions and locations: rural and urban, elementary, junior, and high schools, and those working with diverse individuals. When developing PE curricula, designers must advocate for policies that mandate regular reviews and updates to reflect holistic and inclusive practices. Futures-driven policy and curriculum development requires all parties involved to consider how they can provide and design activities appropriate for individuals with diverse needs, abilities, and interests in their ever-changing lives (Penney & Jess, 2004).

Resource and funding allocations are key to supporting a holistic PE curriculum. Funding plays a significant role in curricular transformation for professional development, resources, and facilities that support holistic PE. Providing grants for schools to pilot innovative PE programs that move away from Eurocentric models can complement more inclusive practices. Professional development for PE teachers is vital. Organizing and funding opportunities focused

on holistic practices and cultural competence can enhance teaching quality. Encouraging collaboration and knowledge sharing among schools within each division or district can lead to more consistent and effective implementation of holistic PE practices.

School Personnel

In supporting curricular change in PE, school division superintendents and school administrators play crucial roles. Superintendents are pivotal in promoting professional development by organizing and funding opportunities for PE teachers that focus on holistic practices and cultural competence. By encouraging collaboration and knowledge sharing among schools and teachers within the division, they build a culture of continuous learning and improvement. Additionally, superintendents are responsible for monitoring and evaluating the effectiveness of PE programs in promoting overall wellbeing. Implementing systems to regularly assess these programs and using feedback to make decisions ensures that the curriculum remains effective and responsive to student needs. Resource allocation is another critical aspect, because superintendents must ensure that schools have the necessary equipment and facilities to support a holistic PE curriculum. Promoting partnerships with local organizations and communities further enhances PE instruction and implementation, providing students with diverse and enriching experiences.

Principals and vice-principals complement these efforts by directly supporting teacher training. They facilitate ongoing training for PE teachers in holistic education practices and culturally responsive teaching methods, encouraging attendance at workshops, conferences, and other professional development events. By cultivating a supportive environment, school administrators foster a school culture that values and prioritizes health and wellness. They also promote collaboration among teachers to integrate PE with other subjects, enhancing the overall educational experience. Engaging the community (Thomson & Robertson, 2014) is another key responsibility, as principals and vice-principals build relationships with local cultural groups, health professionals, and fitness organizations to enrich the PE program. Organizing community events and activities that promote holistic health and wellness further strengthens the connection between the school and the community, maintaining a supportive environment for students' physical, mental, and emotional wellbeing.

Physical Education Teachers

Quality daily PE programs in schools capitalize on important, relevant lessons about active, healthy living. Positive experiences in these school programs are a catalyst for healthy behaviors and students remaining active through adolescence (Mayora-Vega et al., 2018) into adulthood. By restructuring their thinking and practice away from traditional Eurocentric PE classes, and by incorporating a variety of PAs that reflect and promote holistic health (such as yoga), physical educators will contribute to the lifelong health of Canadian students (Metzler, 2016; Sport for Life Society, 2019). Essential instruction consists of lessons that include a wide variety of age-appropriate activities establishing a focus on skill development, teaching games for understanding, and physical literacy, with an emphasis on fun, personal health, joy, and individual achievement. The combination of these components assists students in developing appropriate habits needed to live physically active lives.

Engaging in continuous learning through professional learning communities (PLCs) and regular professional development regarding holistic PE and holistic health is imperative for physical educators. With constant changes in best practices, staying informed ensures implementation of the most effective and inclusive strategies. This commitment to ongoing training encourages adaptations to the methods used to meet the evolving needs of students, incorporating the latest research on physical, mental, and emotional wellbeing. By remaining current with changes in holistic health and inclusive education, physical educators can establish

more engaging, diverse, and supportive learning environments that promote lifelong wellness for all students.

Designing a program that balances physical fitness with mental and emotional wellbeing enables physical educators to develop an environment where all students feel included and respected. These culturally responsive teaching practices promote equity and wellness, teaching students about their overall health and wellness. There are ample examples and the research is plentiful, acknowledging the long overdue need for change within PE curricula. By expressing the need for a credible alternative vision for PE, physical educators can proactively shape their role and succeed in creating a dynamic, inclusive, holistic PE curriculum.

Conclusion

Adopting a holistic PE pedagogy represents a shift from traditional approaches to an inclusive, culturally relevant, and ecologically aware learning environment. Embracing lifelong wellness through the interconnectedness of mind, body, and spirit nurtures self-confidence, empowering students to thrive physically, mentally, and emotionally (Petrie et al., 2018). Prioritizing holistic wellness and lifelong participation in PA enhances physical fitness and academic performance while promoting psychological wellbeing, making it a vital component of a comprehensive education. Quality PE should encourage and facilitate all students to engage in PA, promoting lifelong participation while maintaining health, fitness, and overall wellbeing (Griggs & Fleet, 2021). As our understanding of health and wellness evolves, holistic PE classes emerge as agents of positive change, championing equity, diversity, and sustainability in pursuit of a healthier future for all. Holistic education instills a lifelong passion for learning and resilience in embracing new experiences.

References

- Ballard, W. A., & Chase, M. R. (2004). Nontraditional Recreation Activities: A catalyst for quality physical education. *Journal of Physical Education, Recreation & amp; Dance*, *75*(3), 40-45. https://doi.org/10.1080/07303084.2004.10609251
- Bascopé, M., & Reiss, K. (2021). Place-based STEM education for sustainability: A path towards socioecological resilience. *Sustainability*, *13*(15), 8414-8430. https://doi.org/10.3390/su13158414
- Centers for Disease Control and Prevention. (n.d.). https://www.cdc.gov/
- Canadian Society for Exercise Physiology. (n.d.). https://csepguidelines.ca/
- Columna, L., Foley, J. T., & Lytle, R. K. (2010). Physical education teachers' and teacher candidates' attitudes toward cultural pluralism. *Journal of Teaching in Physical Education*, 29(3), 295-311. https://doi.org/10.1123/jtpe.29.3.295
- Collingwood, T. R. (1997). Providing physical fitness programs to at-risk youth. *Quest*, *49*(1), 67-84. https://doi.org/10.1080/00336297.1997.10484224
- Corbin, C. B. (2002). Physical education as an agent of change. *Quest*, *54*(3), 181-195. https://doi.org/10.1080/00336297.2002.10491773
- Cox, A. E., Ullrich-French, S., Howe, H. S., & Cole, A. N. (2017). A pilot yoga physical education curriculum to promote positive body image. *Body Image*, *23*, 1-8. https://doi.org/10.1016/j.bodyim.2017.07.007
- Decorby, K., Halas, J., Dixon, S., Wintrup L., & Janzen, H. (2005). Classroom teachers and the challenges of delivering quality physical education. *The Journal of Educational Research*, 98(4), 208-221.
- Dyson, B. (2014). Quality physical education: A commentary on effective physical education teaching. *Research Quarterly for Exercise and Sport*, *85*(2), 144-152. https://doi.org/10.1080/02701367.2014.904155

- Ennis, C. D. (2006). Curriculum: Forming and reshaping the vision of physical education in a high need, low demand world of schools. *Quest*, *58*(1), 41-59. https://doi.org/10.1080/00336297.2006.10491871
- Ennis, C. D. (2017). Educating students for a lifetime of physical activity: Enhancing mindfulness, motivation, and meaning. *Research Quarterly for Exercise and Sport*, 88(3), 241-250. https://doi.org/10.1080/02701367.2017.1342495
- Gay, G. (2000). *Culturally responsive teaching: Theory, research, and practice.* Teachers College Press.
- Griggs, G., & Fleet, M. (2021). Most people hate physical education and most drop out of physical activity: In search of credible curriculum alternatives. *Education Sciences*, *11*(11), 701-711. https://doi.org/10.3390/educsci11110701
- Halas, J. (2006). Developing a white race-consciousness: A foundation for culturally relevant physical education for Aboriginal youth. In Ellen Singleton & Aniko Varpalotai (Eds.), *Stones in the sneaker: Active theory for secondary school physical and health educators* (pp. 155-181). The Althouse Press.
- Halas, J. (2011). Aboriginal youth and their experiences in physical education: "This is what you've taught me." *PHEnex Journal, 3*(2), 1-22. ROAD database.
- Harrison, J. M., Blackmore, C. L., & Buck, M. M. (2001). *Instructional strategies for secondary school physical education* (5th ed.). McGraw-Hill.
- hooks, b. (1994). Teaching to transgress. Routledge.
- Kilborn, M., Lorusso, J., & Francis, N. (2016). An analysis of Canadian physical education curricula. *European Physical Education Review*, 22(1), 23-46. https://doi.org/10.1177/1356336x15586909
- Ladson-Billings, G. (1995) Toward a theory of culturally relevant teaching, *American Educational Research Journal*, 32(3), 465-491.
- Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: A.K.A. the remix. *Harvard Educational Review*, *84*(1), 74-84. https://doi.org/10.17763/haer.84.1.p2rj131485484751
- Lara-Sanchez, A. J., Zagalaz-Sanchez, M. L., Martinez-Lopez, E. J., & Berdejo-Del- Fresno, D. (2010). Non-traditional sports at school. Benefits for physical and motor development. *Journal of Physical Education & Sport, 28*(4), 47-51.
- Levenberg, M. G., Armstrong, T., & Johnson, I. L. (2020). Teaching dance for understanding: Reconceptualizing dance in physical education. *Journal of Physical Education, Recreation & Dance*, *91*(6), 3-7. https://doi.org/10.1080/07303084.2020.1770519
- Mandolesi, L., Polverino, A., Montuori, S., Foti, F., Ferraioli, G., Sorrentino, P., & Sorrentino, G. (2018). Effects of physical exercise on cognitive functioning and wellbeing: Biological and psychological benefits. *Frontiers in Psychology*, *9*. https://doi.org/10.3389/fpsyg.2018.00509
- Manitoba Education, Citizenship, and Youth. (2007). Scheduling kindergarten to grade eight physical education/health education: A resource for school administrators. Winnipeg. https://www.edu.gov.mb.ca/k12/cur/physhlth/scheduling/document.pdf
- Manitoba Education and Training. (2000). *Kindergarten to Senior 4 physical education/health education*. Winnipeg. https://www.edu.gov.mb.ca/k12/cur/physhlth/framework/intro.pdf
- Mattson, T., & Larsson, H. (2021). "There is no right or wrong way": Exploring expressive dance assignments in physical education. *Physical Education and Sport Pedagogy*, 26(2), 123-136. https://doi.org/10.1080/17408989.2020.1752649
- Mayorga-Vega, D., Martínez-Baena, A., & Viciana, J. (2018). Does school physical education really contribute to accelerometer-measured daily physical activity and non-sedentary behaviour in high school students? *Journal of Sports Sciences*, *36*(17), 1913-1922.
- McCarty, T., & Lee, T. S. (2014). Critical culturally sustaining/revitalizing pedagogy and Indigenous education sovereignty. *Harvard Education Review, 84*(1), 101-124. https://doi.org/10.17763/haer.84.1.q83746nl5pj34216

- McInerney, P., Smyth, J., & Down, B. (2011). "Coming to a place near you?" The politics and possibilities of a critical pedagogy of place-based education. *Asia-Pacific Journal of Teacher Education*, 39(1), 3-16. https://doi.org/10.1080/1359866x.2010.540894
- Metzler, M., W. (2016). School-based team research to address grand challenges through P–12 physical education programs. *Research Quarterly for Exercise and Sport, 87*(4), 325-333.
- Mooses, K., Pihu, M., Riso, E., Hannus, A., Kaasik, P., & Kull, M. (2017). Physical education increases daily moderate to vigorous physical activity and reduces sedentary time. *Journal of School Health*, *87*(8), 602-607. https://doi.org/10.1111/josh.12530
- Morgan, P., & Hansen, V. (2008). Classroom teachers' perceptions of the impact of barriers to teaching physical education on the quality of physical education programs. *Research Quarterly for Exercise and Sport*, 79(4), 506-516.
- Morley, D., Bailey, R., Tan, J., & Cooke, B. (2005). Inclusive physical education: Teachers' views of including pupils with special educational needs and/or disabilities in physical education. *European Physical Education Review*, *11*(1), 84-107. https://doi.org/10.1177/1356336x05049826
- Nelson, H. (2020). *The benefits of physical education: How innovative teachers help students thrive*. https://www.apu.edu/articles/the-benefits-of-physical-education-how-innovative-teachers-help-students-thrive/
- Nicol, C., Archibald, J., & Baker, J. (2013). Designing a model of culturally responsive mathematics education: Place, relationships and storywork. *Mathematics Education Research Journal*, *25*(1), 73-89. https://doi.org/10.1007/s13394-012-0062-3
- Penney, D., & Jess, M. (2004). Physical education and physically active lives: A lifelong approach to curriculum development. *Sport, Education and Society*, *9*(2), 269-287. https://doi.org/10.1080/1357332042000233985
- Petrie, K., Devcich, J., & Fitzgerald, H. (2018). Working towards inclusive physical education in a primary school: "Some days I just don't get it right." *Physical Education and Sport Pedagogy*, 23(4), 345-357. https://doi.org/10.1080/17408989.2018.1441391
- Pill, S., Evans, J. R., Williams, J., Davies, M. J., & Kirk, M.-A. (2022). Conceptualising games and sport teaching in physical education as a culturally responsive curriculum and pedagogy. *Sport, Education and Society*, *27*(9), 1005-1019. https://doi.org/10.1080/13573322.2021.1964461
- Rasmussen, M., & Laumann, K. (2012). The academic and psychological benefits of exercise in healthy children and adolescents. *European Journal of Psychology of Education*, 28(3), 945-962. https://doi.org/10.1007/s10212-012-0148-z
- Robinson, D. B., Randall, L., Gleddie, D. L., Barrett, J., & Berg, S. (2019). Canada's 150-minute "standard" in physical education: A consideration of research evidence related to physical education instructional time. *Curriculum Studies in Health and Physical Education*, *10*(3), 226-246. https://doi.org/10.1080/25742981.2019.1642116
- Roblin, L. (2007). Childhood obesity: Food, nutrient, and eating-habit trends and influences. *Applied Physiology, Nutrition, and Metabolism*, *32*(4), 635-645. https://doi.org/10.1139/h07-046
- Salmon, P. (2001) Effects of physical exercise on anxiety, depression, and sensitivity to stress. *Clinical Psychology Review*, *21*(1), 33-61. https://doi.org/10.1016/s0272-7358(99)00032-x
- Savina, E., Garrity, K., Kenny, P., & Doerr, C. (2016). The benefits of movement for youth: A whole child approach. *Contemporary School Psychology*, *20*(3), 282-292. https://doi.org/10.1007/s40688-016-0084-z
- Shiver, V. N., Richards, K. A., & Hemphill, M. A. (2020). Preservice teachers' learning to implement culturally relevant physical education with the teaching personal and social responsibility model. *Physical Education and Sport Pedagogy*, *25*(3), 303-315. https://doi.org/10.1080/17408989.2020.1741537
- Sport for Life Society. (2019). *Developing physical literacy: Building a new normal for all Canadians*. https://sportforlife.ca/

- Statistics Canada. (2015, November 27). *Non-medical determinants of health*. https://www150.statcan.gc.ca/n1/pub/82-221-x/2012002/def/def2-eng.htm
- Steinkuehler, C., Anderson, C. G., Reitman, J. G., Lee, Je S., Wu, M., Wells, G., & Gardner, R. T. (2023). Enriched esports: The design and four-year examination of a school-affiliated competitive videogame program for youth. *Journal of Interactive Learning Research*, *34*(1), 59-119.
- Sullivan, L. (2021). *Is PE in Crisis? Leading meaningful change in physical education.* Scholarly. Sutherland, S., & Legge, M. (2016). The possibilities of "doing" outdoor and/or adventure education in physical education/teacher education. *Journal of Teaching in Physical Education*, *35*(4), 299-312. https://doi.org/10.1123/jtpe.2016-0161
- Syaukani, A. A., Mohd Hashim, A. H., & Subekti, N. (2023a). Conceptual framework of applied holistic education in physical education and sports: A systematic review of empirical evidence. *Physical Education Theory and Methodology*, *23*(5), 794-802. https://doi.org/10.17309/tmfv.2023.5.19
- Szekeres, L., Adams, J. B., & Bogota, T. (2022). Intro to yoga and mindfulness for physical education grades 1 and 2. *Journal of Physical Education, Recreation & Dance*, *93*(5), 56-57. https://doi.org/10.1080/07303084.2022.2053493
- Thomson, D., & Robertson, L. (2014). Fit for what? Critical analysis of the Canadian physical education curriculum. *Critical Education*, *5*(16). http://ojs.library.ubc.ca/index.php/criticaled/article/view/184236
- Tomporowski, P. D., Davis, C. L., Miller, P. H., & Naglieri, J. A. (2007). Exercise and children's intelligence, cognition, and academic achievement. *Educational Psychology Review*, *20*(2), 111-131. https://doi.org/10.1007/s10648-007-9057-0
- Tucker, K. (2019). Whole child, whole teacher: Wellness in the school and the classroom. *Journal of Physical Education, Recreation & Dance*, *90*(6), 56-58. https://doi.org/10.1080/07303084.2019.1614776
- Vasquez, M., Gaudreault, K., & Flory, S. B. (2022). Strategies to support and deliver culturally relevant physical education, *Strategies*, *35*(5), 3-7. https://doi.org/10.1080/08924562.2022.2100538
- Whitehead, B. R., & Blaxton, J. M. (2017). Daily well-being benefits of physical activity in older adults: Does time or type matter? *The Gerontologist*, *57*(6), 1062-1071.

About the Author

Jordana Etkin, a tenth year physical education teacher in Winnipeg's inner-city, holds an M.Ed. in special education (2020) and is pursuing an M.Ed. in curriculum and pedagogy (due 2025). Fond of time with family and friends, reading, listening to live music, and exploring Manitoba's trails, she treasures summers at her family cabin enjoying the great outdoors.