

Charting a Course for Culturally Responsive Physical Education

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In this article, we explore the absence of understanding related to culturally responsive pedagogy in physical education for Aboriginal students. In so doing, we examine the limited literature related to culturally responsive physical education and the especially limited literature dedicated to Aboriginal students within physical education. Recognizing that this absence should present a very obvious concern for pre-service physical education teachers, in-service physical education teachers, teacher educators, and most importantly, Aboriginal students themselves, we borrow from the few most notable pedagogues who share our concern and offer a framework and suggestions for future practice and inquiry. We make these suggestions for future practice and inquiry with the wholehearted belief that a commitment to culturally responsive pedagogy can improve upon the immediate and long-term physical education experiences of Aboriginal and non-Aboriginal students.

Dans cet article, nous portons notre attention sur le manque de compréhension par rapport à la pédagogie tenant compte de la réalité culturelle des élèves autochtones dans les cours d'éducation physique. Ainsi, nous étudions le nombre limité de publications qui touchent les cours d'éducation physique adaptés à la culture, et notamment celles, encore plus limitées, qui traitent de la culture autochtone. Reconnaisant que cette lacune devrait constituer une préoccupation bien évidente pour les stagiaires en éducation physique, les enseignants en éducation physique, les formateurs d'enseignants et, surtout, les élèves autochtones eux-mêmes, nous puisons chez les pédagogues importants qui partagent nos préoccupations (ils sont peu nombreux) et offrons un cadre et des suggestions pour des pratiques et des recherches futures. Nous proposons ces suggestions pour les pratiques et les études futures, sincèrement convaincus qu'un engagement visant une pédagogie adaptée à la culture peut améliorer, dans l'immédiat et à long terme, les expériences des élèves autochtones et non-autochtones dans les cours d'éducation physique.

For over five centuries, the Indigenous world has experienced the repercussions of opposing worldviews through what Ermine (1995) has labeled the subjugation of Indigenous people and the discounting of their ideas. Certainly it is widely understood and accepted that, beginning with European colonization in 1492, Indigenous knowledge systems have been purposely and systematically suppressed (Churchill, 1999). Contributing to the historical damage effected by North American colonization is the current oppressive education of Aboriginal students in EuroCanadian, or “whitestream Canadian” (Halas, 2006, p. 157), classrooms. More specifically, within this post-residential school era, education within Canada largely continues to be based on Western worldviews and consequently continues to colonize, through what Battiste (1986) has

coined “cognitive imperialism” (p. 23), those with historically differing and/or opposing worldviews. Within such a milieu, the oppressed are functionally forced to “internalize the image of the oppressor and adopt his [or her] guidelines” (Freire, 2005, p. 47) or fail. Dissonance and resistance to this oppression likely contribute to the struggles many Aboriginal students experience in contemporary school environments. Brown (1998) has elaborated on such effects, suggesting, “confusion, apathy, hostility, ambivalence, nihilism, [and] withdrawal” (p. 122) are only some of the scars left upon the personalities and psyches of Aboriginal students.

Currently, throughout all of Canada, Aboriginal students are routinely introduced to curricula and/or pedagogies that are plainly incongruous or discordant with both their contemporary and historical ways of knowing. Battiste (1998) has noted that, even in Aboriginal controlled schools where communities are striving to decolonize education, federal government policies impose provincially mandated curriculum designed from a Eurocentric base. Battiste has further argued, “Indigenous knowledge, embraced in Aboriginal languages, is thus being supplanted in First Nations schools with Eurocentric knowledge supported by federal policies that mandate provincial curriculum” (1998, p. 21).

Such scenarios obviously provide potential for cultural conflict. Aikenhead (2006) has labeled such conflict “culture clash” (p. 387) in his work related to Aboriginal ways of knowing and the discourses characterizing Western science. When such a culture clash is experienced, Aikenhead has suggested Aboriginal students become,

expected to set aside their Indigenous ways of knowing, including its alternative notion of knowledge as action and wisdom, which combines the ontology of spirituality with holistic, relational and empirical practices in order to celebrate an ideology of harmony with nature for survival. (p. 388)

In response to the continued post-colonial oppression of Aboriginal students in Canadian schools, and to the cultural conflict experienced by Aboriginal students, researchers have finally begun to investigate Aboriginal worldviews in their quest to identify and provide culturally responsive pedagogy for Aboriginal students. Research into culturally responsive pedagogy has required an understanding of worldviews other than the Western worldviews shaping much of what occurs within Canadian schools and society. Some of this work has focused on the very-obvious potential tension between Western worldviews and Aboriginal worldviews related to science and science discourses (Aikenhead, 2001; MacIvor, 1995). Similarly, there is also a considerable body of work examining the tensions between Aboriginal and Western worldviews with respect to mathematics teaching (Barton, 2008; Lipka, 1991; Lunney Borden, 2012; Nicol, Archibald, & Baker, 2012). These scholars have looked to Indigenous knowledge and community practices to create meaningful learning opportunities for Aboriginal students. Many have concluded that culturally responsive pedagogy can benefit all students, Aboriginal and non-Aboriginal.

That being said, we acknowledge that employing culturally responsive pedagogy may be a daunting task for some. It requires teachers to develop a detailed knowledge about specific cultural groups. It also requires teachers to make curricular adaptations so that they may convert curricula into more culturally responsive designs (Gay, 2002). Gay (2002) has found some teachers may be so uncomfortable addressing cultural differences and so worried about stereotyping and over-generalizing that they ignore the existence of culture in their classrooms altogether.

Furthermore, culturally responsive pedagogy has also been problematic for some teachers who believe cultural diversity and their subject area are incompatible (Gay, 2002). For example, subjects such as mathematics and science are often seen by some teachers as lacking in a cultural base. As a consequence, some teachers do not recognize the significance of employing strategies to support cultural diversity. Yet many researchers in the fields of culturally responsive science and mathematics education (Aikenhead, 2001; Barton, 2008; Lipka, 1991; Lunney Borden, 2012; MacIvor, 1995; Nicol, Archibald, & Baker, 2012) have challenged this misconception and demonstrated how culturally responsive approaches can benefit Aboriginal students.

Additionally, teachers who use culturally responsive pedagogy ought to employ a variety of pedagogical approaches to meet the various needs of their students; this can be challenging for some (Ladson-Billings, 1995a). In addition to teachers becoming required to question their own teaching practices, culturally responsive pedagogy also necessitates that teachers develop a socio-political or critical consciousness so that they may come to appreciate how school curricula and policies marginalize various cultural groups (Ladson-Billings, 1995a). Culturally responsive pedagogy enables teachers to identify and confront controversial issues such as racism and sexism (Gay, 2002). Furthermore, students are also positioned to identify the current social inequities in their communities in order to seek out solutions, serving as a form of cultural critique (Ladson-Billings, 1995a). All of these things can prevent teachers from wanting to engage with culturally responsive pedagogy; indeed this is not easy work. Yet to this we ask, “What is the cost of not doing so?”

While pedagogues focusing on notions of social justice have previously acknowledged that culturally responsive pedagogy is required for teaching Aboriginal students (Brown, 1998; Castagno & Brayboy, 2008; Halas, 1998), such suggestions have come with limited background information or explanation of Indigenous or Aboriginal worldviews as they relate to physical education. Indeed, such work within physical education is unfortunately limited, particularly to Māori and Pacific Islanders (Hokowhitu, 2008; Salter, 2002, 2003). This limitation is especially true for the North American context; few peer-reviewed articles can be found related to culturally responsive physical education for Canada’s, or the United States’, Aboriginal peoples (Flory & McCaughtry, 2011).

It is important for pre-service and in-service physical education teachers to recognize that “even though it may be politically correct and acceptable to display behaviors and attitudes that embrace racial neutrality, ‘race matters’” (Harrison & Belcher, 2006, p. 740). Such a recognition might require some of those who are most intimately involved with physical education students (i.e., their physical education teachers) to abandon any harboured habits or wishful fantasies related to colour blind discourses (see Cochran-Smith, 1995; Halas, 2011). With such an understanding, physical education teachers might also be enabled to abandon the meritocracy myth—the “idealistic egalitarian philosophy of the ‘level playing field,’ which describes the sportsfield as an objective site where race...drops by the wayside to enable people from all persuasions an ‘equal opportunity’” (Hokowhitu, 2008, p. 81). Though it would obviously be ideal for all physical education teachers to recognize and accept this notion that race matters, such recognition does not come without a call to duty. That is, it necessitates that physical education pedagogues and teachers engage with, and co-construct, requisite knowledge related to culturally responsive pedagogy in physical education for, and with, Aboriginal students. Dominant discourses in physical education need to be disrupted through a deliberate engagement with Aboriginal perspectives so as to transform physical education practices.

Furthermore, physical education teachers need to critically examine their own power and privilege so that they may address their own biases or misconceptions in order to become culturally responsive educators and allies.

With this understanding, following is an overview of some key terms/ideas and a review of the limited literature as it relates to culturally responsive physical education, with a specific and purposeful focus on responsiveness for Indigenous/Aboriginal students. Following that is a proposed framework and suggestions for future practice and inquiry related to culturally responsive physical education teaching and research.

Terms and Ideas Elaborated

“Indigenous” and “Aboriginal”

The terms Indigenous and Aboriginal refer to separate, yet overlapping, groups of peoples. So that the use of these terms within this article may be entirely clear, further elaboration is necessary.

Indigenous. Indigenous has been chosen to include first peoples throughout the world (including Aboriginal peoples from Canada and the United States). However, it is essential to highlight that this broader term, Indigenous, is still somewhat problematic for some, for two important reasons.

First, quite clearly, most of the world’s population might, in good faith, label themselves as Indigenous. To this point, Maybury-Lewis (2006) has elaborated, “the very term *indigenous peoples* is confusing because most people in the world are ‘indigenous’ to their countries in the sense of having been born in them or being descended from people who were born in them” (pp. 19-20). Notwithstanding such an observation, Maybury-Lewis has also provided further criteria for a clearer distinction; though Indigenous peoples are similarly native to their countries in this sense, they are also able to make another claim, namely “that they were there first and still there, and so have rights of prior occupancy to their lands” (p. 20). While such a distinction makes clear the differentiation between Indigenous and non-Indigenous peoples in countries such as Canada, the United States, Australia, and New Zealand, such differentiation is not as easily possible within most European, Asian, and African countries (Maybury-Lewis, 2006). That is, since the origin of humankind around 200,000 years ago² (Dawkins, 2009; Leakey, 1994), humans have migrated throughout these regions, making such claims especially difficult. Considering that all of humankind originated in Africa and that humankind’s first great migration was into Asia (Dawkins, 2009; Leakey, 2006), Maybury-Lewis’s criteria for distinction become less than ideal for peoples living on these continents.

Second, Smith (1999) has suggested that the term is problematic because the use of the single term for many groups of peoples appears to “collectivize many distinct populations whose experiences under imperialism have been vastly different” (p. 6). For example, while Canada’s Aboriginal, Australia’s Aborigine, New Zealand’s Māori, Greenland’s Inuit, and Japan’s Ainu populations may all be identified as Indigenous peoples, they unquestionably have encountered imperialism at different times, by different peoples, and in differing manners.

Recognizing these two important points related to Indigenous, the term is included within the remainder of this article with the following understandings. Where peoples are referred to as Indigenous *peoples* (rather than Indigenous *people*), it should be recognized that this large grouping still recognizes “there are very real differences between different [Indigenous] peoples”

and that the term is meant to enable “the collective voices of colonized people to be expressed strategically in the international arena” (Smith, 1999, p. 7). Moreover, to further differentiate “true” Indigenous peoples from those who might self-label themselves as Indigenous (while benefitting due to their being situated as a privileged colonizing elite), herein Indigenous peoples are those who have also been subjected to colonization. Such colonization is not to be understood as a practice of the past but, rather, should be accepted as a process that continues today. Smith (1999) has plainly explained this point about Indigenous people:

They share experiences as people who have been subjected to the colonization of their lands and cultures, and the denial of their sovereignty, by a colonizing society that has come to dominate and determine the shape and quality of their lives, even after it has formally pulled out. (p. 7)

For those uncertain about whom these Indigenous peoples are, it might be helpful to consider Wilmer’s (1993) suggestion that, “indigenous peoples represent the unfinished business of decolonization” (p. 5).

Aboriginal. Within Canada, Aboriginal peoples are understood to include First Nations, Inuit, and Métis peoples. Within the United States, Aboriginal peoples are often labeled as Native American/American Indian, Alaska Native, Native Hawaiian, or Pacific Islander. The three groups identified as Aboriginal peoples in Canada and the four groups identified as Aboriginal peoples in the United States present, in many ways, an over-simplification of the many different ethno-linguistic groups in both countries. For example, in addition to the several hundred ethno-linguistic groups in the United States (grouped into such larger groups as Na-Dené, Iroquoian, and Siouan-Catawban), there are 11 Aboriginal language groups in Canada (e.g., Athapaskan, Haida, and Algonquian) with over 65 different dialects.

Herein lies the same limitation in language use as was explained with respect to the term Indigenous. It is again important to emphasize the point that although the term Aboriginal peoples is used to identify Indigenous peoples within Canada and the United States, the use of the term must be made with a constant remembrance of the scores of unique Aboriginal peoples living in this particular geographic area. Furthermore, the encompassing term Aboriginal peoples allow these same groups to have a collective voice of colonized people (in this case with especially similar colonizing experiences) in a national or bi-national arena.

Past, Present, and Future

Although commonly accepted Western scientific theories and Aboriginal peoples’ oral histories do not necessarily agree about the dates and methods of Aboriginal origins in North America, they both clearly suggest that Aboriginal peoples inhabited the region before the arrival of Europeans. Currently, archaeological, geological, and genetics-based evidence suggest that the first inhabitants of North America emigrated from Asia (Beringia), across the Bering Strait by way of a land and/or ice bridge, no earlier than 16,500 years ago (Goebel, Waters, & O’Rourke, 2008). From there, these first peoples migrated throughout Canada and into the Americas, populating most regions of present day North America until the onset of European colonization (beginning in 1492) and well into the 19th century (Woodcock, 1990).

Alternatively, Aboriginal peoples’ oral histories suggest that they were always only present here as a result of a genesis orchestrated by the Creator. Among Aboriginal peoples, eight unique genesis stories exist and are present in many stories shared orally for many generations

(University of Calgary, 2010). By all accounts, Western science and Aboriginal oral histories agree on this important point. Aboriginal peoples lived throughout North America before colonizers arrived from overseas; Aboriginal peoples were, quite literally, the first people to set foot on the continent.

As of the end of the 20th century, there were about 31.5 million Indigenous peoples in the Americas and another 58,000 Inuit in Greenland: 750,000 Indigenous peoples in the Pacific Islands; 250,000 Indigenous peoples in Australia; and 300,000 Indigenous peoples in New Zealand (Maybury-Lewis, 2006). African Indigenous peoples (that is, African people considered to be tribal outsiders within their own countries) numbered 14 million and, all considered, Indigenous peoples made up roughly 5% of the total world population (Maybury-Lewis, 2006).

The percentage of people living in the United States identified as Native American/American Indian or Alaska Native alone has been estimated to be .8% while the percentage of Native Hawaiian or Pacific Islander alone has been estimated to be .7% (United States Census, 2003). Within Canada, the percentage of people who are identified as Aboriginal has been estimated to be 3.8% (Statistics Canada, 2006). While Aboriginal peoples in Canada currently only account for 3.8% of the total population, projected demographics across Canada suggest that this will change radically within the near future. For example, by 2017 the percentage of the population projected to be Aboriginal within Saskatchewan is expected to reach 20.8% and the percentage of the population projected to be Aboriginal within Manitoba is expected to reach 18.4% (Statistics Canada, 2005; The Encyclopedia of Saskatchewan, 2010).

Culturally Appropriate, Based, Congruent: Sorting out Terminology

In the past thirty-plus years, pedagogues have presented a number of similar-sounding (though, sometimes, differing in definition) terms to describe pedagogy that purposely accounts for and embraces students' culture. These labels have included culturally appropriate (Au & Jordan, 1981; Hale, 2001; Yazzie-Mintz, 2007), culturally based (Lipka, 1991), culturally congruent (Berger & Epp, 2006; Mohatt & Erickson, 1981), culturally relevant (Hefflin, 2002; Ladson-Billings, 1995a, 1995b; Tyler, Boykin, & Walton, 2006), and culturally responsive (Belgarde, Mitchell, & Arquero, 2002; Castagno & Brayboy, 2008; Gay, 2000; Ismat, 1994). Of these terms, the two that have been taken up most recently and most often by education scholars include culturally relevant and culturally responsive.

Culturally relevant pedagogy. Ladson-Billings's (1992, 1994, 1995a, 1995b) early work related to critical pedagogy and African American students introduced culturally relevant pedagogy to the lexicon of many scholars and teachers. Certainly aware of the many (previously mentioned) terms that were being employed at the time, Ladson-Billings (1992) has provided a clear definition of culturally relevant pedagogy so as to differentiate itself from many of these other labels. Situating culturally relevant teaching as a critical pedagogy and a pedagogy of opposition (1992), Ladson-Billings (1995a) has explained that culturally relevant pedagogy rests on three propositions: "(a) students must experience academic success; (b) students must develop and/or maintain cultural competence; and (c) students must develop a critical consciousness through which they challenge the status quo of the current social order" (p. 160). These three criteria (i.e., academic success, cultural competence, critical consciousness) are to be present in all teaching and research described as being informed by culturally relevant pedagogy.

Culturally responsive pedagogy. Various terms employed in previous publications focusing on school-home incongruence and conflict (e.g., culturally appropriate, culturally congruent, culturally compatible) seemed, to Ladson-Billings (1995b), to “connote accommodation of student culture to mainstream culture” (p. 467). In contrast, culturally responsive might be understood to refer to a more “dynamic or synergistic relationship between home/community culture and school culture” (p. 467). Klug and Whitfield (2003) have explained that culturally responsive schooling “builds a bridge” (p. 1) between a student’s home culture and a student’s school so as to effect improved academic achievement. Gay (2000) has further elaborated on cultural responsiveness, explaining:

Culturally responsive education recognizes, respects, and uses students’ identities and backgrounds as meaningful sources for creating optimal learning environments. Being culturally responsive is more than being respectful, empathetic, or sensitive. Accompanying actions, such as having high expectations for students and ensuring that these expectations are realized, are what make a difference. (p. 3)

Klug and Whitfield (2003) have suggested, “culturally responsive pedagogy describes teaching in a way that ‘makes sense’ to students who are not assimilated into the dominant culture” (p. 151). Ismat (1994) has added that culturally responsive curriculum:

capitalizes on students’ cultural backgrounds rather than attempting to override them; is good for all students; is integrated and interdisciplinary; is authentic and child centered, connected to children’s real lives; develops critical thinking skills, incorporates cooperative learning and whole language strategies; is supported by staff development and pre-service preparation; and is part of a coordinated, building-wide strategy. (p. 151)

While both “cultural relevance” and “cultural responsiveness” are labels that are currently utilized by scholars and teachers, often as synonyms, Nicol, Archibald, and Baker (2012) have highlighted what they see as the differences between the two terms by looking at their etymology:

The word *relevant* stems from ‘relevare’ meaning ‘to lessen, lighten’ and ‘congruity’ meaning ‘agreement.’ It is associated with the words ‘relieve’ and ‘appropriate.’ *Responsive*, on the other hand, is related to ‘respondre’ meaning to ‘respond, answer to, promise in return’ and stems from *re* meaning ‘back’ and *spondere* ‘to pledge.’ Thus culturally relevant education can be considered as an ‘appropriate relief’ of an educational problem prompting questions of *whose* problem, where it is located, what should be done, and who should be involved. Alternatively, culturally responsive education emphasizes the reciprocal relationship that exists among those who constitute an educational community. Considering culturally responsive education emphasizes the collective responsiveness to problems making it more difficult for culturally responsive education to simply be a more expedient way of acculturating students to dominant social norms. (p. 3)

Thus, the remainder of this article will employ the terms culturally responsive pedagogy or culturally responsive physical education.

Searching the Literature

In searching for relevant information related to culturally responsive pedagogy within physical education, literature searches were restricted to three of the more popular databases commonly

Table 1
Boolean Logic Search Results for Three Databases

Search Terms	ERIC	ProQuest	SPORT Discus
"culturally relevant" or "culturally responsive" and "aboriginal" or "indigenous"	128	95	7
"culturally relevant" or "culturally responsive" and "physical education"	16	13	12
"physical education" and "aboriginal" or "indigenous"	20	5	16
"culturally relevant" or "culturally responsive" and "aboriginal" or "indigenous" and "physical education"	1	0	0

accessed for peer-reviewed education and physical education texts. These three databases were the Education Resources Education Center (ERIC), ProQuest, and SPORTDiscus. All searches were limited to peer-reviewed journals in English and published no earlier than January 1, 1991. Search terms included, "culturally relevant," "culturally responsive," "aboriginal," "indigenous," and "physical education." Searches were limited to terms within the abstracts of ProQuest and SPORTDiscus articles and searches were limited to keywords (all fields) within ERIC articles.³ Once all of the articles were accessed, the most relevant ones were reviewed. This also resulted in the subsequent review of additional publications cited in some of these initial articles. The results from all Boolean logic searches are included in Table 1.

Upon consideration of the search results illustrated in Table 1, one might immediately recognize the extensive amount of inquiry that has been dedicated to culturally responsive pedagogy for Aboriginal and Indigenous students within the past 20 years. To further elucidate this, consider that an "all fields + text" ProQuest search for "culturally relevant/responsive" and "aboriginal/indigenous" yielded 1214 results. Still, notwithstanding the considerable attention dedicated to culturally responsive education for Aboriginal/Indigenous students, the quantity of scholarship dedicated to culturally responsive pedagogy, physical education, and Aboriginal/Indigenous is clearly very limited.

Culturally Responsive Pedagogy and Physical Education

The limited literature related to culturally responsive pedagogy within physical education has been focused largely on two separate themes/groups: urban education and female students. While work into culturally responsive physical education and female students has had little-to-no reference to ethnicity or race, culturally responsive physical education and urban education has generally been closely aligned with these constructs.

Given that most teachers are predominately white, middle class, and suburban, they very often are called upon to teach urban citizens who are in many respects unlike themselves. They teach students who are of "different ethnic, cultural, economic, and geographical backgrounds than their own, for almost 80% of urban students are African American, Hispanic, or Asian

American” (Flory & McCaughtry, 2011, p. 50). It is important for these teachers to critically examine their own place of power and privilege and to develop an understanding of the culture of the students they teach. Gay (2002) has argued, “*explicit knowledge* about cultural diversity is imperative to meeting the educational needs of ethnically diverse students” (p. 107). Yet few models exist that demonstrate how such explicit learning has taken place in the context of physical education.

Within the United States, urban physical education literature has been especially related to physical education for African Americans; this is entirely consistent with the demographics of many urban centres within the United States where the percentage of students who are African American may be as high as 90% (McCaughtry, Barnard, Martin, Shen, & Kulinna, 2006). In Flory and McCaughtry’s (2011) application of cultural responsiveness to physical education, they have suggested the requirement of three core needs for teachers: “(a) to have a sophisticated knowledge of community dynamics, (b) to know how community dynamics influence educational processes, [and] (c) to devise and implement strategies reflecting cultural knowledge of the community” (p. 49). They have also presented a model of cultural relevance as an ongoing cyclical process (rather than a linear process or “one-shot” intervention).

Some of the “practical” suggestions for physical education teachers include allowing increased games play within physical education programs. This is due to the reality that few after-school physical activity opportunities are afforded to urban youth (McCaughtry et al., 2006). Furthermore, given the perception that many African American male (and some female) students enjoy considerable social capital through their basketball exploits within the relative low cost, ease-of-access, and rapid reward game structure, McCaughtry et al. (2006) have found that teachers felt pressured (often by administrators as well as students) to privilege this single sport within their programs. Teachers’ decisions to constantly revisit basketball within their programs may placate their students, but in many cases this has also been deemed a “forceful impediment to quality teaching” (p. 495) as the product could be most adequately described as “streetball.” While some researchers might label students’ iteration of recreation-like basketball or streetball as being problematic (Flory & McCaughtry, 2011; Rovegno, 1994), such an assertion necessarily requires further examination. That is, a fair question to ask is, “Why must teaching students to play streetball, as opposed to basketball, be construed as problematic when it is the only game they can play within their own communities?” While research informs us that teachers are experiencing a sort of individual and collective dissonance over the dilemma of providing locally relevant physical activities, no *answers* are clearly articulated within the physical education literature. That is, teachers are left uncertain about what activities they should plan for these urban students—activities that carry capital in their immediate communities or those that carry capital in “outside” communities.

A number of studies have focused on the reality shock and resultant teaching struggles that occur when pre-service and/or in-service physical education teachers are placed in inner-city urban schools (Burden, Hodge, O’Bryant, & Harrison, 2004; Stroot & Whipple, 2003; Williams & Williamson, 1995). Repeatedly, novice teachers find themselves feeling unable to teach students from backgrounds unlike their own, often sharing that they feel they were inadequately prepared within their teacher preparation programs (Melnychuk, Robinson, Lu, Chorney, & Randall, 2011; Stroot & Whipple, 2003). Columna, Foley, and Lytle (2010) have further suggested, “if teacher candidates are not exposed to diversity training early in their teacher preparation programs, they may maintain or develop stereotypes about students they view as different” (p. 297; see also Irwin, 1999). Teacher preparation might include teaching experiences

within a multicultural environment; such a placement allows pre-service physical education teachers to make sense of boundary crossings, insider/outsider perspectives, and language barriers (Culp, Chepyator-Thomson, & Hsu, 2009).

Hastie, Ellen, and Buchanan (2006) have studied Anglo elementary teachers' understanding of their praxis as they taught a distinctly African-American dance to their African-American students. These white teachers generally felt especially uneasy teaching African American ethnic dances to their African-American students. However, while the teachers wrestled with such issues as teacher apprehension, concerns about their legitimacy, and continual ethical uneasiness, they did become more enabled to consider political and social aspects related to pedagogy as a result of the experience.

Culp (2010) has suggested physical education teachers ought to closely consider the physical environment (i.e., their gymnasiums and classrooms), believing teachers who are committed to providing culturally responsive physical education ought to pay explicit attention to the sights, sounds, and symbolism found within their students' learning space. Sparks (1994) has modified a number of strategies for building a culturally responsive instructional approach to the physical education context. In so doing, Sparks has offered concrete examples for seven separate strategies including how one might build trust, for example, learn how to pronounce names correctly; become culturally literate, for example, making home visits; and build different methodological approaches, for example, vary instructional approaches to meet the needs of many cultures. King (1994; see also Delpit, 1993, 1995) has offered insight into different uses of language within homes and how this might be taken into account within physical education. For example, while a suburban Anglo parent might pose a question to make a demand, "Isn't it time to take a bath?" an urban African American parent might make the same demand using a much more clear and direct statement like, "Get your rusty behind in the bathtub!" Consequently, in the physical education class, African American students spoken to by their Anglo teachers in a "white" manner often become confused and frustrated (King, 1994).

Culturally Responsive Physical Education for Aboriginal/Indigenous Students

Literature relating to Aboriginal/Indigenous learning styles tends to over-generalize and assume a *one-size-fits-all* approach to teaching students from Indigenous populations. It is important to be mindful of the fact that there is as much diversity within and among Aboriginal and Indigenous populations as there is within society in general. Teachers must be cautious not to over-generalize. That being said, Indigenous communities share a common experience in colonization with a loss of language, culture, and ways of being and knowing. Thus, it can be helpful to look to research done in a variety of Indigenous contexts to seek common themes and approaches that have benefitted Indigenous students and supported the decolonization of their educational experiences. The strategies and approaches employed in various Indigenous contexts can provide insight to researchers seeking a way forward in a specific Indigenous community. With this in mind, we explore the limited literature related to culturally responsive physical education for Aboriginal/Indigenous students.

Some of the literature related to culturally responsive physical education for Aboriginal/Indigenous students include "teaching tips" and additional information for physical education teachers. Ninham's (1992) unpublished masters thesis has made clear that many contemporary sporting activities are adaptations of originally Indigenous games and activities. This, Ninham (1992) has suggested, makes the physical education classroom an "excellent

environment to implement culturally specific games and activities” (2002, p. 12). Recognizing that oral traditions continue to be an important practice within many world cultures, Ninham (2002) has also suggested that storytelling ought to play a significant role within physical education. Ninham (2002) has further described a number of multicultural activities—for example, Long Ball from the Iroquois; Kick Ball Relay from the Puebla, Navajo, Zuni, and Tarahumara; and the Scissors Broad Jump from the World Eskimo-Indian Olympics—that might be included within a physical education program aiming to be culturally responsive.

Macdonald, Abbott, Knez, and Nelson (2009) recognized that although the “place of physical activity and sport is significant in the discourses of cultural diversity and social progress...there is relatively little research or theorizing about race, ethnicity, cultural diversity and physical activity” (p. 1). Utilizing critical race theory (CRT), Macdonald et al. have investigated the place and meaning of physical activity (including within physical education) in the lives of urban and remote Indigenous Australian children. Upon considering their interviews with young Indigenous Australians and contemplating their own other observations, Macdonald et al. have provided some directions for further consideration, especially related to decentering whiteness and making explicit personal ethnicity and privilege for those in the mainstream.

Without question, pedagogues and the Ministry of Education within New Zealand have been stand-alone leaders in addressing culturally relevant physical education for Indigenous peoples. Smith (as cited in Salter, 2000) has suggested a number of principles to guide curriculum and pedagogy for cultural responsiveness in Māori contexts. These included *tinu rangatiratanga* (principle of relative autonomy), *taonga tuku iho* (principle of cultural aspirations), *ako* (principle of reciprocal teaching), and *whānau* (principle of relationships in groups), among others (Salter, 2000). While the identification of these principles in itself is both informative and beneficial, it is also worth noting that a number of familiar existing curricular strategies within physical education were identified to be consistent with some of these principles (Salter, 2003). These included selected styles from the spectrum of teaching styles (Mosston & Ashworth, 1986), managerial/teaching/coaching roles as in sport education (Siedentop, 2002), games making as in *Teaching Games for Understanding* (Werner, Thorpe, & Bunker, 1996), and principles of responsibility as in Hellison’s (1995) *Teaching for Personal and Social Responsibility* model.

The Ministry of Education first signified its sincere attempt to meet the needs of New Zealand’s Māori students with the introduction of *taha Māori* initiatives with Māori dimensions of schooling considered appropriate for all students, Māori and non-Māori in the 1980s.⁴ The Ministry of Education’s *Health and Physical Education in the New Zealand Curriculum* (1999) has made explicitly clear that *all* schools and teachers must:

Ensure that the concept of *hauora* (total well-being) is reflected in students’ learning experiences in health education and physical education at all levels of schooling; recognize that *te re Māori* (Māori language) and *ngā tikanga Māori* (Māori cultural values and practices) are *taonga* (treasures) and have an important place within the health and physical education curriculum; develop health education and physical education concepts within Māori and other cultural contexts that are relevant to students, for example in the context of *te reo kōri*. (p. 50)

Salter (2000) has explained *te reo kōri* combines aspects of movement, music, language, and Māori cultural values in ways that encourage students to “develop movement skills through a range of Māori activities; develop an appreciation of Māori cultural values; and use and practise the Māori language” (p. 51). Within New Zealand, *te reo kōri* has been afforded significant

exposure within the curriculum. It is situated as a major content theme/activity area alongside traditional categories such as aquatics, athletics, gymnastics, and dance. Within *te reo kori*, students are to be introduced to a number of traditional Māori physical activities, including *poi* (ball on a string), *haka* (ritualistic posture dance), and *mau rakau* (weaponry) within their physical education program (Salter, 2000, 2002). However, despite the presence of *te reo kori* within the curriculum “as written,” its presence within the curriculum “as lived” (Aoki, 2005) has not been always altogether successful. For example, teachers have experienced discomfort and resistance as they fear contravening cultural propriety, have a lack of content knowledge, and continue to rely on direct approaches to teaching (Salter, 1998; Walker, 1995).

Fraser (2004) has suggested that secular public schooling has a “moral obligation to reflect indigenous values if understanding, respect and cultural identity are to be promoted and cherished” (p. 87). As the 1999 New Zealand health and physical education national curriculum included a definition and statement on spirituality (referring largely to values, beliefs, meaning, and purpose), it was especially obvious that Māori values might find a teaching and learning space within physical education. The curriculum document outlines the relationship between spirituality and values, as spiritual wellbeing (*taha wairua*) and is defined as “the values and beliefs that determine the way that people live, the search for meaning and purpose in life, and personal identity and self-awareness” (Fraser, 2004, p. 88). The curriculum further includes a model for considering Māori beliefs to conceptualize the place of spirituality in education.

Within Canada, much of the limited work related to culturally responsive physical education for Aboriginal students has been completed within the prairies (see Halas 1998, 2002, 2006, 2011; Halas, Butcher, Lowe, & Clement, 2007; Halas, McRae, & Carpenter, 2013; Kalyn, 2006). Kalyn’s (2006) doctoral dissertation focused on how Indigenous knowledge might inform physical education curriculum and pedagogy so as to create culturally responsive physical education. Kalyn recognized that teachers who elect to include Aboriginal perspectives are often reduced to introducing “piecemeal” activities such as a single dance, game, or unit without any real understanding or infusion of Indigenous knowledge.

Halas’s (1998, 2002) research with alienated youth within an adolescent treatment centre enabled an identification of various practices that may allow students to become more engaged in physical activities and physical education. These practices were related to such things as team-picking strategies, assessment criteria, student-led decision-making, and guidance rather than interference. These also included providing meaningful choice of activities, sparing the discomfort of the locker room, and enabling connections between students and their families and communities. These concrete examples of progressive pedagogy are similar to some of those suggested Ladson-Billings (1995a). Specifically, by attending to Halas’s (2001, 2006) suggestion for a more culturally responsive physical education, all students, Aboriginal and non-Aboriginal, might benefit. In many cases, Halas (2001, 2006) has provided examples of teaching strategies that are simply good pedagogy. Moreover, Halas (2004) has also suggested a number of “unconventional” teaching strategies informed by Aboriginal scholars (Brendtro, Brockenleg, & Van Brockern, 1990) that have been positioned as having potential within many physical education contexts. These unconventional strategies include “beginning class with free play time, coaching students to choose their own teams . . . and treating students as equals” (Halas, 2004, p. 14).

The identification of Halas’s (1998, 2001, 2002) “technical” suggestions for strategies for culturally responsive physical education are not meant, in any fashion whatsoever, to diminish her contributions to the field. Without qualification, Halas has enlightened Canadian physical

education pedagogues about the shortcomings of mainstream physical education and the immediate need for cultural responsiveness more than any other. Furthermore, her experience, passion, and knowledge have resulted in more than mere suggestions for pre-service and in-service physical education teachers. For example, Halas (2006) has made it abundantly clear that a white race-consciousness is essential for physical education teachers and she continues to problematize unearned privilege for her students and her peers. Developing a white race-consciousness requires that those with unearned privilege (often at the expense of others) become acutely aware of their privilege and examine how hegemonic structures perpetuate the status quo. Most recently, Halas, McCrae, and Carpenter (2013) have provided physical education pedagogues with a model for culturally responsive physical education.⁵ It is this model that is capable of informing future teaching and research related to culturally responsive physical education.

Charting a Course

The reviewed literature provides a somewhat clear picture of “where we are” related to culturally responsive physical education. Though there has been some important work within American urban education (particularly with African-Americans) and adolescent females, the literature is relatively sparse when one considers culturally responsive physical education for Aboriginal students. Within New Zealand, Māori knowledge has been privileged so that all students within that country are to participate in physical education programs characterized by *te reo kori*. As that government requires an infusion of Indigenous knowledge into the curriculum, scholars and teachers are afforded opportunities and an impetus for continued inquiry and professional development. While New Zealand may be somewhat unique in that there is strong government support for incorporation of Māori perspectives and that the Māori are the only Indigenous population within the country, many Canadian scholars working within Aboriginal communities may look to this context for insights and strategies to decolonize education in their own communities.

Within Canada, Halas has over many years become a/the local authority in the field. Her work informs physical education teachers and scholars within Manitoba and across the country. Nonetheless, physical education teachers and scholars require further direction for culturally responsive physical education for Aboriginal students. Halas, et al.’s (2013) most recent model is capable of framing that work (see Figure 1).

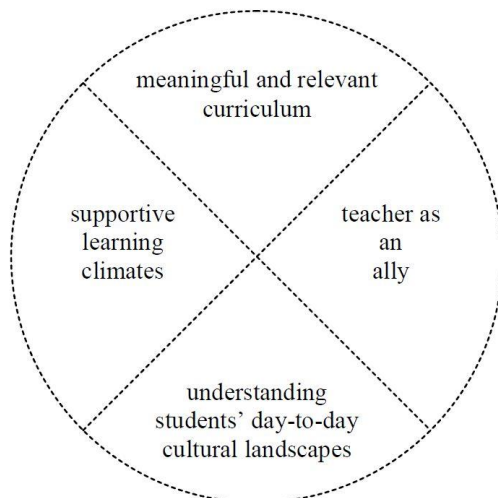


Figure 1. Culturally responsive physical education (Halas, McCrae, & Carpenter, 2013).

Meaningful and relevant curriculum, supportive learning climate, teacher as an ally, and understanding students' day-to-day cultural landscapes operate in conjunction with one other in order to affirm Aboriginal students' cultural identities. Halas et al.'s (2013) wheel-as-model is meant to suggest that all four of these aspects are interconnected and relational, consistent with other Aboriginal researchers who advocate such a holistic approach (Battiste, 1998). As Canada's colonial history has deeply influenced the experience of Aboriginal students in schools, teachers need to have a race consciousness and cultural awareness in order to transform educational experiences for their students. Halas et al. have stated "the experience of PE for Aboriginal students needs to be understood within the context of the overall school experience, which continues to be shaped by unequal relations of power and issues of race within schools" (2013, p. 185). They have argued that an awareness of some of the challenges faced by Aboriginal students, such as poverty and transience, can allow teachers to adapt curriculum to better meet the needs of their students. Halas et al. have argued that teachers need to have a white race-consciousness so that they can be effective allies to support Aboriginal students. This requires teachers to examine their own place of power and privilege within society and understand the implications of systemic racism on the lives of their students. With this awareness, teachers can act as allies and take positive action and "continue the history of the white protest against racism and work for educational and societal change" (Titone, 1998, p. 164). Halas et al. have suggested that within an Aboriginal context, these four constructs ought to be embedded within Aboriginal worldviews, perspectives, and cultural values. Moreover, this model should be conceived as one that can be applied interculturally across diverse student populations drawing from the home cultures of all students within a class, school, or immediate community.

Suggestions for Practice

Within Canada, Aboriginal students ought to be afforded authentic opportunities to be physically educated in a culturally responsive manner. Such a happening does not just naturally occur. It requires that pre-service and in-service physical education teachers be educated about culturally responsive physical education, which quite clearly requires teacher educators to be similarly educated. Such educational change necessitates a commitment on the part of in-service teachers, their school administrators, school boards, and provincial education ministries. Most importantly, an essential attitudinal, cultural, and pedagogical transformation for physical education teachers is to move beyond single Aboriginal activities, days, or units; such a surface approach offers little to all students.

Repeatedly, the literature suggests that neophyte teachers feel ill-prepared to teach Aboriginal (and other minority) students (see Burden et al., 2004, Melnychuk et al., 2011; Stroot & Whipple, 2003; Williams & Williamson, 1995). Immediate and meaningful education related to cultural responsiveness needs to be an integral part of physical education teacher education programs. Such education cannot occur through coursework alone (and it certainly cannot be accomplished through a single stand-alone 3-credit course). Pre-service teachers need authentic opportunities to engage with Aboriginal students and communities (i.e., through field experiences, tutoring, service learning, etc.) so that they may be enabled to come to understand their students' day-to-day cultural landscapes. They need to be taught about meaningful and relevant curriculum. Though some of the literature has described meaningful and relevant activities and pedagogies for various Aboriginal peoples, these ideas are very much context-

dependent. While physical education teachers disrupt traditional pedagogy they need to realize that this meaningfulness is impacted by a number of factors and that a one-size-fits-all approach for Aboriginal students is not the answer, easy or otherwise. Pre-service and in-service physical education teachers need to provide supportive learning environments and engage as an ally for their Aboriginal students. Moreover, they must be aware of the difficult task that they will rightfully encounter as their students resist their initial and possible continued attempts at this.

Perhaps, most importantly, provincial education ministries within Canada might follow New Zealand's lead. Identifying and selecting Aboriginal-informed activities, practices, and pedagogies and giving them a central role in the curriculum might afford Aboriginal students the education they deserve while their non-Aboriginal peers also enjoy the teachings and knowledges of Canada's Aboriginal peoples. Imagine a provincial physical education curriculum in which Aboriginal notions of well-being are reflected in students' learning experiences in physical education in all grade levels and where Aboriginal languages and cultural values and practices are viewed as *treasures*. While to those within Canada, such a thought might seem all-but-impossible, it is essential to recognize that this is already the case with New Zealand. When one province perhaps one with many Aboriginal students or one with few different Aboriginal groups takes a lead, others might follow.

Suggestions for Future Research

The following suggestions for future research come with the proviso that those who engage in research must first recognize their privilege and situate themselves accordingly. As Smith (1999) has suggested:

The term 'research' is inextricably linked to European imperialism and colonialism. The word itself, 'research', is probably one of the dirtiest words in the indigenous world's vocabulary. When mentioned in many indigenous contexts, it stirs up silence, it conjures up bad memories, it raises a smile that is knowing and distrustful. It is so powerful that indigenous people even write poetry about research. The ways in which scientific research is implicated in the worst excesses of colonialism remains a powerful remembered history for many of the world's colonized peoples. (p. 1)

While Kalyn (2006) has begun to investigate how Aboriginal worldviews, perspectives, and cultural values might inform physical education, continued research in this area is recommended. Without a deeper understanding of Aboriginal worldviews, especially as they relate to the body, the merits of the culturally responsive physical education model offered by Halas et al. (2013) cannot be fully appreciated and realized. This absence of understanding about Aboriginal worldviews has been recognized by others, perhaps most notably in Castagno and Brayboy's (2008) 52-page review of literature related to culturally responsive schooling. Though Indigenous epistemologies have previously been suggested to be especially holistic (Deloria & Wildcat, 2001) and relational (Klug & Whitfield, 2003), one must not assume that all Aboriginal worldviews are the same. Elders and physical education teachers of Aboriginal students might be involved in research to discover how Aboriginal worldviews might *play out in the gym*. This is not to say that Aboriginal students ought to only be educated by teachers who share, or adopt, Aboriginal worldviews. Rather, an ideal might be similar to that which Harris (1990) has introduced—the notion of “two-way learning,” suggesting that Aboriginal students (as well as non-Aboriginal students) might be introduced to both Aboriginal and non-Aboriginal worldviews within physical education. It is important to note here that while such a paradigm

suggests no superiority of one worldview over another, it has not been without criticism. For example, the separation suggested by a two-way paradigm has led to the erroneous conclusion that Aboriginal cultures and worldviews are incompatible with Western cultures and worldviews.

While learning styles and the cultural differences of Indigenous students are two of the most common themes in the literature (Castagno & Brayboy, 2008), such research is extremely limited within physical education (though physical education elements such as dance and spatial orientation have been identified as culturally appropriate). Proposed future research might investigate the suitability of various teaching styles from Mosston and Ashworth's spectrum (1986). Furthermore, given the earlier connections made by Salter (2000) and the current popularity of *Teaching Games for Understanding* (Werner et al., 1996) and Hellison's (1995) *Teaching for Personal and Social Responsibility* model, research into these areas would obviously be especially suitable.

Finally, continued research into meaningful and relevant curriculum for various Aboriginal peoples is essential. Such research should not be restricted to only the promises of traditionally meaningful and relevant activities, but should also seek to understand more-modern meaningful and relevant curriculum. When working on culturally responsive pedagogy for Aboriginal students, it is common for educators to look to the past and attempt to reclaim traditional practices and find ways to give these things modern day relevance within the prescribed curriculum. However, it is also important to look to the modern day experiences of Aboriginal students as fodder for making relevant curriculum connections. This then, will necessitate that community Elders and students themselves be given a voice, so as to inform others about culturally responsive physical education.

Final Comments

It goes without saying that pre-service and in-service physical education teachers, as well as physical education teacher educators, cannot effect required change without taking a long and thoughtful look in the mirror. Decentering whiteness requires that teachers recognize their unearned privilege. As would likely be familiar to many of our peers, we are constantly dismayed when our largely middle-class, white, heterosexual, Christian students fail to see that with these "traits" come unearned power and privilege, generally not afforded to, and at the expense of, those without these attributes. It is only when this is truly recognized that physical education teachers and pedagogues can set goals in their teaching and research that are "on target" to where we need to go.

Culturally responsive physical education requires culturally responsive curriculum and pedagogy. These require physical education teachers who can recognize the unjust conditions that have positioned them so favourably. It also requires a realization that colour blind discourses must necessarily be replaced with colour conscious ones. Only with these realizations can physical education teachers and pedagogues strive for culturally responsive physical education that enables equity and justice for their Aboriginal students.

References

- Aikenhead, G. S. (2001). Integrating western and Aboriginal sciences: Cross-cultural science teaching. *Research in Science Education*, 31(3), 337-355.
- Aikenhead, G. S. (2006). Towards decolonizing the pan-Canadian science framework. *Canadian Journal of Science, Mathematics and Technology Education*, 6(4), 387-399.
- Aoki, T. (2005). Teaching as indwelling between two curriculum worlds. In W. Pinar & R. Irwin (Eds.), *Curriculum in a new key: The collected works of Ted T. Aoki* (pp. 159-166), Mahwah, NJ: Lawrence Erlbaum.
- Au, K., & Jordan, C. (1981). Teaching reading to Hawaiian children: Finding a culturally appropriate solution. In H. Truamba, G. Guthrie, & K. Au (Eds.), *Culture and the bilingual classroom: Studies in classroom ethnography* (pp. 139-152). Rowley, MA: Newbury House.
- Banton, M. (2002). Race relations. In D. T. Goldberg & J. Solomos (Eds.), *A companion to racial and ethnic studies* (pp. 90-96). Malden, MA: Blackwell.
- Barton, B. (2008). *The language of mathematics: Telling mathematical tales*. New York, NY: Springer.
- Battiste, M. (1986). Micmac literacy and cognitive assimilation. In J. Barman, Y. Herbert, & D. McCaskell (Eds.), *Indian education in Canada, Vol. 1: The legacy* (pp. 23-44), Vancouver, Canada: UBC Press.
- Battiste, M. (1998). Enabling the autumn seed: Toward a decolonized approach to Aboriginal knowledge, language, and education. *Canadian Journal of Native Education*, 22(1), 16-27.
- Belgarde, M., Mitchell, R., & Arquero, A. (2002). What do we have to do to create culturally responsive programs? The challenge of transforming American Indian teacher education. *Action in Teacher Education*, 24(2), 42-54.
- Berger, P., & Epp, J. R. (2006). Practices against culture that “work” in Nunavut schools: Problematizing two common practices. *McGill Journal of Education*, 41(1), 9-27.
- Brendtro, L., Brockenleg, M., & Van Brockern, S. (1990). *Reclaiming youth at risk. Our hope for the future*. Bloomington, IN: National Education Service.
- Brown, S. (1998). The bush teacher as cultural thief: The politics of pedagogy in the land of Indigene. *The Review of Education, Pedagogy, and Cultural Studies*, 20(2), 121-139.
- Burden, J. W., Hodge, S. R., O’Bryant, C. P., & Harrison, L. (2004). From colorblindness to intercultural sensitivity: Infusing diversity training into PETE programs. *QUEST*, 56, 173-189.
- Castagno, A. E., & Brayboy, B. M. J. (2008). Culturally responsive schooling for Indigenous youth: A review of literature. *Review of Educational Research*, 78(4), 941-993.
- Churchill, W. (1999). *Struggle for the land: A Native North American resistance to genocide, ecocide, and colonization*. Winnipeg, Canada: Arbeiter Ring.
- Cochran-Smith, M. (1995). Color blindness and basket making are not the answers: Confronting the dilemmas of race, culture, and language diversity in teacher education. *American Educational Research Journal*, 32(3), 493-522.
- 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.
- Culp, B. (2010). Are your S’s in effect: Ensuring culturally responsive physical education environments. *Strategies: A Journal for Physical and Sport Educators*, 24(2), 10-14.
- Culp, B. O., Chepyator-Thomson, J. R., & Hsu, S. H. (2009). Pre-service teachers’ experiential perspectives based on a multicultural learning service practicum. *Physical Educator*, 66(1), 22-36.
- Dawkins, R. (2009). *The greatest show on Earth*. New York, NY: Free Press.
- Deloria, V., & Wildcat, D. (2001). *Power and place: Indian education in America*. Golden, CO: Fulcrum.
- Delpit, L. (1993). The silenced dialogue: Power and pedagogy in educating other people’s children. *Harvard Educational Review*, 53(3), 280-298.
- Delpit, L. D. (1995). *Other people’s children: Cultural conflict in the classroom*. New York, NY: New Press.
- Encyclopedia of Saskatchewan. (2010). *Aboriginal population trends*, Retrieved from, http://esask.uregina.ca/entry/aboriginal_population_trends.html

- Ermine, W. (1995). Aboriginal epistemology. In M. Batiste & J. Barman (Eds.), *First Nations education in Canada: The circle unfolds* (pp. 101-112). Vancouver, Canada: UBC Press.
- Flory, S. B., & McCaughtry, N. (2011). Culturally relevant physical education in urban schools: Reflecting cultural knowledge. *Research Quarterly for Exercise and Sport*, 82(1), 49-60.
- Fraser, D. (2004). Secular schools, spirituality and Maori values. *Journal of Moral Education*, 33(1), 87-95.
- Freire, P. (2005). *Pedagogy of the oppressed* (30th ed.). New York, NY: Continuum.
- Gay, G. (2000). *Culturally responsive teaching: Theory, research, and practice*. New York, NY: Teachers College Press.
- Goebel, T., Waters, M. R., & O'Rourke, D. H. (2008). The late Pleistocene dispersal of modern humans in the Americas. *Science*, 319(14), 1497-1502.
- Halas, J. (1998). "Runners in the gym": Tales of resistance and conversion at an adolescent treatment centre school. *Canadian Native Education Journal*, 22(2), 210-222.
- Halas, J. (2002). Engaging troubled youth in physical education: An alternative program with lessons for the traditional class. *Journal of Teaching in Physical Education*, 1 (3), 267-286.
- Halas, J. (2004). Questioning our assumptions: Unconventional lessons from the "swamp of practice." *Journal of Physical Education, Recreation & Dance*, 75(4), 14-19.
- Halas, J. (2006). Developing a white race-consciousness: A foundation for culturally relevant physical education for Aboriginal youth. In E. Singleton & A. Varpalotai (Eds.), *Stones in the Sneaker: Active theory for secondary school physical and health educators*, (155-182) London, Canada: The Althouse Press.
- Halas, J. (2011). Aboriginal youth and their experiences in physical education: "This is what you've taught me." *PHENex Journal/Revue phénEPS*, 3(2), 1-23.
- Halas, J., Butcher, J., Howe, H., & Clement, M. (2007). Toward a culturally relevant pedometer intervention for middle school students. *AVANTE*, 11(3), 47-65.
- Halas, J., McCrae, H., & Carpenter, A. (2013). The quality and cultural relevance of physical education for Aboriginal youth: Challenges and opportunities. In J. Forsythe & A. R. Giles (Eds.), *Aboriginal peoples and sport in Canada: Historical foundations and contemporary issues* (pp. 182-205). Vancouver, Canada: UBC Press.
- Hale, J. E. (2001). Culturally appropriate pedagogy. In W. H. Watkins, J. H. Lewis, & V. Chou (Eds.), *Race and education: The roles of history and society in educating African American students* (pp. 173-185). Needham Heights, MA: Allyn & Bacon.
- Harris, S. (1990). *Two-way Aboriginal schooling, education and cultural survival*. Canberra, Australia: Aboriginal Studies Press.
- Harrison, L., & Belcher, D. (2006). Race and ethnicity in physical education. In D. Kirk, D. Macdonald, & M. O'Sullivan (Eds.), *The handbook of physical education* (pp. 740-751). Thousand Oaks, CA: Sage.
- Hastie, P. A., Martin, E., & Buchanan, A. M. (2006). Stepping out of the norm: An examination of praxis for a culturally-relevant pedagogy for African-American children. *Journal of Curriculum Studies*, 38(3), 293-306.
- Hefflin, B. R. (2002). Learning to develop culturally relevant pedagogy: A lesson about cornrowed lives. *The Urban Review*, 34(3), 231-250.
- Hellison, D. (1995). *Teaching responsibility through physical activity*. Champaign, IL: Human Kinetics.
- Hokowhitu, B. (2008). Understanding the Māori and Pacific body: Towards a critical physical education pedagogy. *New Zealand Physical Educator*, 41(3), 81-91.
- Hooley, N. (2000, December). *Reconciling Indigenous and Western knowing*. Paper presented at the annual meeting of the Australian Association for Research in Education, Sydney, NSW.
- Irwin, L. H. (1999). Do rural and urban elementary teachers differ in their attitudes toward multicultural education in elementary schools? *Contemporary Education*, 70(3), 38-44.
- Ismat, A. H. (1994). Culturally responsive curriculum. *ERIC Digest*. Washington, DC: ERIC Clearinghouse on Teaching and Teacher Education.

- Kalyn, B. (2006). *A healthy journey: Indigenous teachings that direct culturally responsive curricula in physical education*. Unpublished doctoral dissertation, University of Alberta, Edmonton, Canada.
- King, S. (1994). Winning the race against racism. *Journal of Physical Education, Recreation & Dance*, 65(9), 69-74.
- Klug, B. J., & Whitfield, P. T. (2003). *Widening the circle: Culturally relevant pedagogy for American Indian children*. New York, NY: Routledge Falmer.
- Ladson-Billings, G. (1992). Reading between the lines and beyond the pages: A culturally relevant approach to literacy teaching. *Theory into Practice*, 31(4), 312-320.
- Ladson-Billings, G. (1994). *The dreamkeepers*. San Francisco, CA: Jossey-Bass.
- Ladson-Billings, G. (1995a). But that's just good teaching! The case for culturally relevant pedagogy. *Theory into Practice*, 34(3), 159-165.
- Ladson-Billings, G. (1995b). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32(3), 465-491.
- Leakey, R. (1994). *The origin of humankind*. New York, NY: Basic Books.
- Lipka, J. (1991). Toward a culturally based pedagogy: A case study of one Yup'ik Eskimo teacher. *Anthropology & Education Quarterly*, 22(3), 203-223.
- Lunney Borden, L. (2012). What's the word for...? Is there a word for...? How understanding Mi'kmaw language can help support Mi'kmaw learners in mathematics, *Mathematics Education Research Journal*. doi: 10.1007/s13394-012-0042-7
- Macdonald, D. Abbott, R., Knez, K., & Nelson, A. (2009). Taking exercise: Cultural diversity and physically active lifestyles. *Sport, Education and Society*, 14(1), 1-19.
- MacIvor, M. (1995). Redefining science education for Aboriginal students. In M. Battiste & J. Barman (Eds.), *First Nations education in Canada: The circle unfolds* (pp. 73-98) Vancouver, Canada: UBC Press.
- Maybury-Lewis, D. (2006). Indigenous peoples. In R. C. A. Maaka & C. Anderson (Eds.). *The indigenous experience: Global perspectives*, Toronto, Canada: Canadian Scholars' Press.
- McCaughtry, N., Barnard, S., Martin, J., Shen, B., & Kulinna P. M. (2006). Teachers' perspectives on the challenges of teaching physical education in urban schools: The student emotional filter. *Research Quarterly for Exercise and Sport*, 77(4), 486-497.
- Melnychuk, N., Robinson, D. B., Lu, C., Chorney, D., & Randall, L. (2011). Physical education teacher education (PETE) in Canada. *Canadian Journal of Education*, 34(2), 148-168.
- Ministry of Education. (1999). *Health and physical education in the New Zealand curriculum*. Wellington, New Zealand: Learning Media.
- Mohatt, G., & Erickson, F. (1981). Cultural differences in teaching styles in an Odawa school: A sociolinguistic approach. In H. Truamba, G. Guthrie, & K. Au (Eds.), *Culture and the bilingual classroom: Studies in classroom ethnography* (pp. 105-119) Rowley, MA: Newbury House.
- Mosston, M., & Ashworth, S. (1986). *Teaching physical education* (3rd ed.). New York, NY: Merrill/Macmillan.
- Nicol, C., Archibald, J., & Baker, J. (2012). Designing a model of culturally responsive mathematics education: Place, relationships and storywork. *Mathematics Education Research Journal*. doi: 10.1007/s13394-012-0062-3
- Ninham, D. (1992). *A developmental study of methods to reinforce American Indian thought processes, cultural behaviors, and tribal languages in physical education*. Unpublished masters thesis, Bemidji State University, Bemidji, MN.
- Ninham, D. (2002). The games of life: Integrating multicultural games in physical education. *Journal of Physical Education, Recreation & Dance*, 73(2), 12-14.
- Rovegno, I. (1994). Teaching within a curricular zone of safety: School culture and the situated nature of student teachers' pedagogical content. *Research Quarterly for Exercise and Sport*, 65(3), 269-279.
- Salter, G. (1998). Me ako ki nga tikanga Māori i te reo kori: Culture and learning through te reo kori. *Journal of Physical Education New Zealand*, 31(1), 18-21.

- Salter, G. (2000). Culturally responsive pedagogy and the renaissance of a Māori dimension in physical education: Te reo kori as cultural taonga. *Journal of Physical Education New Zealand*, 33(2), 42-63.
- Salter, G. (2002). Locating 'Māori Movement' in mainstream physical education: Curriculum, pedagogy and cultural context. *Journal of Physical Education New Zealand*, 35(1), 34-44.
- Salter, G. (2003). Māori culture and tradition in the mainstream: *Teaching Te Reo Kori in sport education*. *Journal of Physical Education New Zealand*, 36(1), 27-42.
- Siedentop, D. (2002). Sport education: A retrospective. *Journal of Teaching in Physical Education*, 21, 409-418.
- Smith, L. T. (1999). *Decolonizing methodologies: Research and indigenous peoples*. New York, NY: Zed Books.
- Sparks, W. G. (1994). Culturally responsive pedagogy: A framework for addressing multicultural issues. *Journal of Physical Education, Recreation & Dance*, 65(9), 33-36, 61.
- Statistics Canada. (2005). *Projections of the aboriginal populations, Canada, provinces and territories 2001 to 2017*. Ottawa: Statistics Canada. (Cat. No. 91-547-XIE).
- Statistics Canada. (2006). *Aboriginal identity population, 2006 counts, percentage distribution, percentage change, 2006 counts for both sexes, for Canada, provinces and territories - 20% sample data*. Retrieved from, <http://www12.statcan.ca/census-recensement/2006/dp-pd/hlt/97-558/pages/page.cfm?Lang=E&Geo=PR&Code=01&Table=3&Data=Count&Sex=1&StartRec=1&Sort=2&Display=Page>
- Stroot, S. A., & Whipple, C. E. (2003). Organizational socialization: Factors affecting beginning teachers. In S. J. Silverman & C. D. Ennis (Eds.), *Student learning in physical education: Applying research to enhance instruction* (2nd ed.). (pp. 311-328). Champaign, IL: Human Kinetics.
- Titone, C. (1998). Educating the white teacher ally. In J. L. Kincheloe, S. R. Steinberg, N. M. Rodriguez, & R. E. Chennault (Eds.), *White reign: Deploying whiteness in America* (pp. 159-174) New York, NY: St. Martin's Press.
- Torrey, C. C., & Ashy, M. (1997). Culturally responsive teaching in physical education. *The Physical Educator*, 54(3), 120-127.
- Tyler, K. M., Boykin, A. W., & Walton, T. R. (2006). Cultural considerations in teachers' perceptions of student classroom behavior and achievement. *Teaching and Teacher Education*, 22(8), 998-1005.
- United States Census. (2003). *Annual estimates by race alone*. Retrieved from, <http://www.census.gov/popest/index.html>
- University of Calgary. (2010). *Canada's First Nations*. Retrieved from, http://www.ucalgary.ca/applied_history/tutor/firstnations/myths.html
- Walker, R. (1995). Te reo kori: A new direction. *Journal of Physical Education New Zealand*, 28(4), 19-22.
- Werner, P., Thorpe, R., & Bunker, D. (1996). Teaching Games for Understanding: Evolution of a model. *Journal of Physical Education, Recreation & Dance*, 67(1), 28-33.
- Williams, J., & Williamson, K. M. (1995). *Beginning to teach physical education: The inside stories*. Dubuque, IA: Kendall/Hunt.
- Wilmer, F. (1993). *The indigenous voice in world politics: Since time immemorial*. Newbury Park, CA: Sage.
- Woodcock, G. (1990). *A social history of Canada*. Toronto, Canada: Penguin Books.
- Yazzie-Mintz, T. (2007). From a deep place inside: Culturally appropriate curriculum as the embodiment of Navajo-ness in classroom pedagogy. *Journal of American Indian Education*, 46(3), 72-93.

Notes

- ¹ The use of the term “race” by Harrison and Belcher (2006) deserves elaboration. That is, there is a general agreement within the academy that such a term should be viewed “as a *social construct* and not a biological category” (Banton, 2002, p. 94).
- ² It is recognized that this historical account is clearly a Western perspective. An Aboriginal perspective is also offered within this article.
- ³ The difference in these search limits was due to the fact the ERIC database does not allow a search for terms within abstracts.
- ⁴ Despite the “good” intentions of *taha Māori*, these initiatives have since lost momentum due to the recognition that what was deemed to be appropriate was defined largely by non-Māori people.
- ⁵ Halas, McCrae, and Carpenter (2013) label their model as “culturally *relevant* physical education.”

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