Teaching in Uncharted Waters: Seeking Critical Body Literacy Scripts

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Schools are places of learning, but they are also sites of struggle when fitness, obesity, and body image issues converge for students and teachers. Responding to teachers' concerns about their students on diets, a Canadian teachers' organization produced a body image program which included a training day for schools undertaking whole-school implementation. The teachers' organization commissioned research to determine program outcomes. The research team interviewed 48 participating teachers. Data include: teacher responses to a post-training survey, interview transcripts, and artefacts from school visits. Findings indicate that implementation is impacted by resources and the complex ways that students' and teachers' bodies are positioned socially. While the program intent was to provide teachers with body image lessons, findings suggest that other supports are needed such as knowledge mobilization of body image research, critical framing to respond to issues, and a theoretical map such as critical body literacy in order to navigate these uncharted waters.

Les écoles constituent des lieux d'apprentissage; pourtant, elles sont également des sites où convergent des questions portant sur l'aptitude physique, l'obésité et l'image corporelle et ce, tant pour les élèves que les enseignants. En réaction aux préoccupations des enseignants relatives aux élèves qui suivent des régimes amaigrissants, une organisation regroupant des enseignants canadiens a créé un programme portant sur l'image corporelle et qui comprend une journée de formation pour les écoles prêtent à entreprendre une mise en œuvre à l'échelle de l'école. L'organisation des enseignants a mandaté une étude pour déterminer les résultats du programme. L'équipe de recherche a interviewé 48 enseignants. Parmi les données recueillies, notons : les réponses des enseignants au sondage effectué après la formation, les transcriptions d'interviews et des artéfacts découlant des visites d'écoles. Les conclusions indiquent que la mise en œuvre est influencée par les ressources et par les façons complexes dont sont socialement reconnus les corps des élèves et les enseignants. Alors que les objectifs du programme consistaient à fournir aux enseignants des leçons sur l'image corporelle, les résultats portent à croire qu'il faut avoir d'autres appuis comme la mobilisation du savoir découlant de la recherche sur l'image corporelle, la définition du cadre critique selon lequel réagir aux questions, et une carte théorique (connaissance critique du corps, par exemple) de sorte à pouvoir naviguer ces eaux inconnues.

A Canadian teachers' organization was approached by some of its members and asked to produce a curriculum resource package for teachers that addressed body image and self-esteem for students in the elementary grades. This was prompted by teachers seeking appropriate responses to students' weight preoccupation. The teachers' organization designed a detailed, research-based body image and self-esteem program, and provided it to interested teachers and schools. The program was a grade-specific set of resources for students in Grades 1-8. There

were approximately six lessons in each document, with lessons' outcomes tied to the provincial curriculum in literacy, the arts, and science and technology. The project's designers had examined research on previous body image programs and had determined that the program would emphasize positive messages about the body and self-esteem, and that it would also challenge mediated conceptions of ideal body sizes and shapes.

Those schools that elected to undertake school-wide implementation were provided with one day of in-service training for their teachers and staff by the teachers' organization. The key components of the training were ambitious and included, (a) providing teachers with an introduction to body image and the grade-specific resource books, (b) modeling the use of group work to discuss body image issues, and (c) offering teachers an opportunity to discuss their own body image beliefs and attitudes. One of the new understandings presented to the teachers was research findings that caution against the teaching of eating disorders to all students, rather than to identified, high-risk populations (Levine & Smolak, 2001; Mann et al., 1997).

The body image program developed was based on the understanding that two key elements contribute to a healthy body image: body and weight acceptance, and a critical approach to societal norms that determine what is considered attractive. The program elements were linked to provincial curriculum expectations. For instance, a Grade 4 lesson uses famous portraits (e.g., *Mona Lisa* by Leonardo Da Vinci, *The Artist's Mother* by James Whistler) to examine different portrayals of beauty. A Grade 7/8 lesson asks students to critically examine and deconstruct media images. These images include messages that illustrate gender stereotyping as well as messages that affect self-esteem and body image, such as the pervasive media portrayal of thin and muscular bodies.

The teachers' organization commissioned research to investigate the impact of the program's implementation. Of the schools who volunteered to participate in the research, the teachers' organization selected six schools that represented four district school boards and mixed school types (rural/urban, small/large, primary/senior elementary, northern/southern). The research was designed to determine the following areas of impact: teachers' perceptions of the body image program itself, teachers' perceptions of challenges encountered in program implementation, and student responses to the program based on teacher reports. Data for the study included: 109 surveys completed by the teachers following the training, interviews with 48 teachers in six schools, and teacher and student artefacts.

Context: Body image in schools and society

In this section, body image is introduced as an issue for children, adolescents, and teachers who are helping them build understandings about health through curriculum policies. This section also addresses the socially-constructed nature of schools and the pressures on schools to address issues of public health that create complexity and contradictions for schools and teachers.

Body image is defined by Grogan (2008) as, "a person's perceptions, thoughts and feelings about his or her body" (p.3). Body image is not necessarily matched to a person's actual body size and shape, but the body that the person perceives that s/he presently has or wants to have. How students think about their body image is a significant issue for schools in society, particularly when students have negative body images and then take action to change their bodies (Hutchinson & Calland, 2011; Kehler & Atkinson, 2010; Kostanski, Fisher & Gullone, 2004; McVey, Tweed & Blackmore, 2004). In addition to a student's own body image and its ensuing implications, how students think about their peers' bodies is also significant. Children

at an early age can stigmatize others based on body size and weight (National Eating Disorder Information Centre, 2002) and children whose weight or size is not seen to be within normal limits are teased (Kostanski & Gullone, 2007). Puhl, Luedicke & Heuer (2012) report that 84% of adolescents in their study had observed overweight students being teased. For pre-adolescent girls, this body-based teasing and "social comparison" (p. 104) has been shown consistently to be a predictor for body image concerns such as restricted eating (Dohnt & Tiggemann, 2005).

When students are unhappy with their bodies, the result is more likely to be unhealthy weight behaviours rather than healthy ones (Neumark-Sztainer, Paxton, Hannan, Haines & Story, 2006). Students' anxieties about their bodies can be increased when schools encourage them to manage their weight without also recognizing the natural diversity of size and shape that exists in the classroom, particularly at puberty; this omission can lead to students engaging in practices to control their weight, such as dieting (McVey, Gusella, Tweed, & Ferrari, 2009). Teachers require support and resources to navigate this pedagogical minefield (McVey et al., 2009).

Canadian Health and Physical Education (HPE) curriculum policies fall under the jurisdiction of the individual provinces and territories. Although body image has had some recognition in provincial/territorial curriculum policies as an important component of health education, the topic is inconsistently addressed across the provinces. Body image is given significant recognition as a curriculum organizer across grades in some provincial/territorial HPE curriculum policies but is absent in others (Robertson & Thomson, 2012). Body image is also addressed in different contexts within the curriculum policies. In Ontario, for example, it is addressed under the topic of "Substance Abuse, Addictions and Related Behaviours" (Ministry of Education, Ontario, 2010, p.207). In Alberta, body image is positioned as a health benefit that results from physical activity (Ministry of Education, Alberta, 2002).

Although Canadian HPE curriculum policies are designed by the provinces, they are also influenced by society and by the national health agenda. The current national health messages connect weight, size, and individual lifestyle choices with health. Key Canadian health indicators are: rates of obesity, smoking, physical activity, and patient access and satisfaction with medical care (Human Resources and Skills Development Canada, 2012). Some public health documents also equate health with weight (e.g., Basrur, 2004) which contrasts with earlier policy pronouncements that health is determined by multiple factors: accessibility to health care, the environment, lifestyle, and biology (Lalonde, 1974). Reflecting these current national and societal pressures, individual choice around healthy eating and exercise has increasingly received more focus in current HPE curriculum policies than explanations that weight and size are determined by a complex combination of factors including heredity, the environment, socio-economic status, and lifestyle choices.

Schools find themselves in the midst of societal pressure to respond to what has been characterized as the threat of obesity. Repeated pronouncements of an obesity crisis have managed to convince many people that they should be worrying about both their own weight and others' despite a lack of critical attention to the research (Gard, 2011). Rich (2011) outlines some of the surveillance practices in British schools as a result of this pressure, including: inspections of children's lunch boxes, the regulation of food snacks, monitoring of students' lunch purchases through fingerprinting, and weighing students. In Canada, policies to regulate foods and beverages have emerged in multiple Canadian provinces, as well as individual school board policies such as the Calgary Board of Education's regulation on nutrition (Calgary Board of Education, 2012) (See Appendix for sample policy documents.)

When teachers in Canadian schools are asked to teach a body image program, they find themselves in this highly contested space. First, they are being asked to teach children to value the bodies that they are born with and to appreciate a natural diversity of body shapes and sizes. Concurrently, they are required through the formal HPE curriculum to teach students to choose healthy foods and make good lifestyle choices such as regular exercise, in order to *attain* a healthy shape or size. In simplistic terms, the first message is to accept your body and others' bodies in their natural diversity, and the second message is that you can (and should) be exercising options to monitor and improve your body size and shape.

Both the acceptance messages and the improvement messages are reflected in Canadian HPE curriculum policies, with the emphasis on the latter. Most Health curriculum policies opt for a simplistic approach to health, such as, "calories in-calories out" or a focus on daily exercise and Canada's Food Guide (Thomson & Robertson, 2012). The inherent tensions between the acceptance messages and the improvement messages, however, are not addressed. A more complex approach would help students understand, for example, why two people can eat the same foods and exercise the same way but will not look the same. A more critical approach would help students and teachers understand that the socially mediated reality of the thin, muscular body is not universally attainable, even to those who make the 'right' lifestyle choices. These complexities, tensions, and contradictions emerge when teachers are asked to teach a body image program.

Review of the literature

The literature was examined to locate research directions related to teachers and body image, as well as understandings of how health and physical education have been theorized in complex ways, such as health literacy (Anderson & Booth, 2006; Nutbeam, 2000); critical health literacy (Chinn, 2011; Nutbeam, 2000, 2009); and physical literacy (Whitehead, 2001).

The role of teachers and schools in body image programs. Teachers and their views are an important element of school-based health programming, but according to Piran (2004), the role of the teacher in body image prevention programs in schools is "often missing" (p. 1). Little is known about teachers' beliefs about implementing policies that monitor students' food, exercise or body size. At one point in time, teachers were identified as, "the forgotten influence on the success of (body image) prevention programs" (Smolak, Harris, Levine & Shisslak, 2001). More recently, researchers have begun to investigate teachers' perceptions of body image prevention programs and complex findings are emerging (Haines, Neumark-Sztainer & Thiel, 2007; Yager & O'Dea, 2005, 2009). Yager and O'Dea (2005) identify issues that affect teachers' comfort with prevention programs for obesity and eating disorders. They find that limited knowledge of nutrition and prevention science as well as the embodiment of teachers' own susceptibility to nutrition, body image, and weight control problems, make it important that body image training addresses both personal and professional needs. The concept of 'embodied self' is useful here as a term that reflects teachers' bodies as "highly prominent symbols of a range of competing values, norms and attitudes" (Kirk & Tinning, 1994, p. 619).

In a similar vein, Piran (2004) finds that Canadian teachers' responses to a survey about their attitudes toward weight and shape are reflective of societal assumptions about weight. She suggests that teachers' ability to establish non-weightist norms in their classrooms depends on their own attitudes toward weight and shape (p. 5). She advocates that teacher training in body image prevention should assist them to develop more critical perspectives around existing

stereotypes and assumptions about weight.

Some of the research focuses on teacher and school roles in the quest for health for students in the form of healthy eating or healthy lifestyles. Evans, Rich and Holroyd (2004) find that media, school cultures, and peers combine to create conditions that contribute to problems with eating. They discover that, "body perfection codes . . . pervade the cultures and structures of western societies and are reflected in schools" (Evans & Davies, 2002, cited in Evans et. al., 2004, p. 129). They also uncover a discourse of 'healthism' (p.130) in schools, which is the pursuit of health, fitness, and a thin body and has a focus on the responsibility of the individual to transform and become thin and fit. When healthism becomes a "discourse of certainty about exercise, food and weight" (p. 135) in students' informal talk, it erodes their self-esteem because the thin ideal does not occur naturally in the general population. They see that much of the current discourse around obesity is found in this framework of healthism. They find also that middle class girls in the U.K. describe a school culture, supported by family, which pressures them for perfection in ways that are not desirable and not attainable (Evans et.al., 2004).

Similarly, McDermott (2012) investigates a Canadian school fitness program and suggests that initiatives for addressing what is perceived as childhood inactivity and obesity are often presented in an overly simplistic way. She encourages a more critical examination of the effects that discourses of inactivity and obesity have on students and teachers. Yager and O'Dea (2005) note how this discourse places stigma, not only on being overweight, but on eating disorders as well, labelling them both as instances of moral failure. Teachers are caught in the middle, between initiatives that focus on the individual and moral responsibility to maintain health, and what Noddings (2005) called the "ethic of care" for all students.

In summary, research on teachers participating in both body image and obesity prevention programs indicates issues with both agendas: teacher roles and national policies. There is a need to address both the embodied self of the teacher within the schools and society, and the complex and somewhat contradictory messages of self-acceptance vs. self-improvement in the curriculum policies. Some approaches to health and physical education instruction in schools consider how both social and biological processes contribute to the lived experience, and they have theorized these understandings about the body in the form of literacies.

Health and physical education literacies. Approaches to the teaching of health education have evolved over time. Health education in Canada and other developed countries over the past fifty years has moved from a focus on direct instruction about topics such as hygiene to a focus on the prevention of non-communicable diseases by promoting healthy lifestyles. Nutbeam (2000) describes this as, "helping people to develop personal and social skills that are required to make positive health behaviour choices" (p. 264). The term *health literacy* reflects the need for basic literacy skills to be able to follow medical advice; and the focus of a health literacy framework is on the individual. This includes individual benefit, individual decision-making, and individual behaviour (Nutbeam, 2000). More recently, Nutbeam (2009) has described a "second wave" (p. 61) that considers the concept of *health literacy* within different contexts. He likens this change to the development of *new literacies* as a set of social practices that are linked to social and cultural goals (e.g., Lankshear & Knobel, 2006). Nutbeam presents a continuum of health literacy; as health literacy moves through stages from *functional* to *interactive* and to *critical health literacy*, each level is characterized by higher levels of understanding that lead to empowerment (Nutbeam, 2000).

Chinn (2011) also theorizes *critical health literacy*, but sees it as an approach to education that focuses on building individual and community capacity, as well as social action. Chinn's

conceptualization encourages a critical examination of information, policies, and practices, and focuses on change and social justice. The learner in school health programs is encouraged to be active and empowered instead of a passive recipient of information for the purpose of individual decision making (Chinn, 2011; Hagquist & Starrin, 1997). Jensen (1997) frames critical health literacy as *democratic* as opposed to *moralistic* health education.

Similarly, traditional physical education policies in Canadian schools have reflected an emphasis on individual responsibility for fitness. Early PE curriculum centered on military preparedness, self-control, and Olympic ideals, or what Constentino and Howell (1971) refer to as "muscular Christianity" (p. 114). An emphasis on fitness took a scientific approach that included body measurement and attainment of personal goals. These traditional approaches reflected a discourse of performance (Bernstein, 2000). Failure to perform was a moral issue. Performance discourse takes a relatively simplistic stance with respect to body weight, in that students are expected to achieve healthy weight and fitness through self-control and effort.

In comparison, a curriculum that uses a *physical literacy* framework (Whitehead, 2001) addresses the acquisition of skills, values and attitudes; and reflects a discourse of capacities instead of performance. Physical literacy has been described as having different areas of focus: a process or skills focus (Lu & DeLisio, 2010), a sport focus (Pritchard & McCollum, 2009), or a movement focus (Kentel & Dobson, 2007). The responsibility for being fit still belongs to the individual, with definitions of fitness arising externally from policy and from the biomedical model. Much of the curriculum responses to obesity reflect a physical literacy approach because they suggest that maintaining a healthy weight and body image are a matter of acquiring the requisite knowledge, skills and attitudes.

A more critical form of physical literacy would be aligned with the search for a more socially-just type of physical education in schools (Wright & Burrows, 2006), where there are considerations of how power in society is reflected in schools. Wright and Burrows (2006) find that the meaning of *ability* in physical education changes depending on its discursive context, because it has gender, race, and class implications which need to be further explored. For example, students who emigrate can find that that abilities considered athletic in their country of origin no longer have status in their new context.

More critical approaches to physical education would include recognition of the body as a socially constructed, political space (McDermott, 2012). The field of physical cultural studies (Rich, 2011) investigates the curriculum of the schools relative to other public pedagogies, including considerations of how bodies are organized and represented with social status. Rich finds that a key question is how to begin to, "incorporate alternative perspectives that define health more broadly than merely weight, size or shape" (p. 80).

In summary, theory that considers physical and health literacies in social contexts encourages more complex considerations of health and ability, and aligns more closely with a critical pedagogical approach (Kincheloe, 2005) that considers multiple literacies (New London Group, 1996). According to Kincheloe, a critical pedagogy would move away from a culture that blames the students and instead investigates the complexities and contradictions of schools in society. Because body image is socially constructed, the research question becomes, "How do teachers and students respond to a body image program in six schools in one Canadian province?"

Research Methodology

The teachers' organization that created the body image program commissioned a university research team to investigate the implementation of the body image program one year after its introduction. The teachers' organization selected a purposive sample of schools based on factors such as school size and school type. The six schools represented four different district school boards. The schools were a mix of primary, K-8, and senior public schools, in rural and urban areas. All six reported that they had undertaken school-wide implementation of the body image program and one day of teacher training. The research received ethical approval by the university. Individual teacher participation was voluntary and 48 elementary (K-8) educators participated in the interviews. Every effort was made to guarantee the anonymity of the participants, their schools, district school boards, and the province in the reporting of the results. The data set for this study includes the body image program materials, 109 survey responses collected after the training sessions, and transcripts of the interviews with 48 teachers.

The research team followed general principles of qualitative data collection (Lichtman, 2012) such as visiting the teachers in schools, and observing the classroom lessons when invited. The interviews were digitally recorded and the transcriptions were sent by email to individual participants for verification.

The data analysis began with a blind review by three members of the research team who undertook content analysis to determine the recurring themes evidenced in the multiple data sets which were: the open-ended surveys by teachers following the training days; the transcripts of the 48 interviews; and artefacts collected at the school sites.

Because of the large data set, the researchers met following blind review and compared analyses around the key themes in the data, working on a school-by-school analysis. At this point, each member of the research team was required to support their findings based on the words of the participants. Based on the school-by-school review, a list of broad themes or "codes" were determined (Lichtman, 2012, p. 252) as well as a cross-school analysis of the themes. This was done to determine which themes appeared across multiple schools.

The coding generally followed the "constant-comparative method" (Lichtman, 2012, p. 258). At the next stage of analysis, all of the interview data were analyzed and placed within the agreed-upon codes by the research team working together. In the process, some of the initial codes were collapsed and regrouped and some new categories were created. This was done until all the comments from the participants were coded. Next, the codes which linked together were merged into broader categories (axial coding) such as 'barriers to implementation' or 'lesson-specific comments.' Finally, the data were organized according to the strength or frequency of response within the categories (selected coding) to be reported as findings.

The constant-comparative method generated some general understandings about the teaching of body image. This led to a re-examination of the literature for more complex, theoretical approaches to the teaching of body image and health, including studies that considered how schools respond to body-based issues within the broader social culture.

Findings

Surveys. There were 109 elementary teachers who completed the post-training survey. They reported that the training met its established goals; 73% reported the goals were fully met and

15% that the goals were mostly met. In their open-ended comments, the most frequent responses indicated that the training provided teachers with an understanding of the body image project and how to begin its implementation. When teachers were asked what knowledge they had gained from the training program, 58% of the teachers said that the impact of body image concerns on young children was new learning for them. One in four of the teachers indicated also that they were not aware of the impact of body image issues on students in general, and 23% of the teachers said that they had not previously been aware of the impact of the words and actions of teachers, and others, on children's body image.

With respect to concerns raised, one in six of the teachers indicated that they had not realized that talking about anorexia and bulimia to the general population of students was not encouraged by research. A second area of concern raised in the survey was that 23% of the teachers felt that the program needed to address more issues for males and male body image. Also, one in four of the teachers wanted more time than one day of training to consider the program and reflect on it.

In general, however, the teachers' comments on the post-training survey were positive, with many teachers reporting that the resources were excellent and that the training given had increased their capacity to discuss body image. There were some similarities in the findings between the surveys and the interview transcripts, such as the need to include boys' body image issues in the program and increased teacher awareness of the impact of their words and actions. What was not present in the interview transcripts was evidence that most schools were working with parents on body image issues in any intentional way. The next section outlines the findings from the interviews and school visits.

The voices of the teacher participants. The 48 teachers interviewed were also generally positive about the body image program, finding the lessons to be helpful in addressing growing concerns in their schools around body-based bullying. The teachers indicated that the program made some impact on the culture in the schools and that students gained understandings about the harm that can come from bullying and body-based harassment. The body image program taught both teachers and students some of the key concepts associated with body-based acceptance and reiterated other previously known concepts, such as the harm that can come from making assumptions, and the media portrayal of gender stereotypes.

Across all six schools, teachers found the body image program to be "teacher friendly" and they recommended that it should be continued. They indicated that they learned from the program but they also identified areas where they experienced internal conflict while teaching the program. In the section that follows, these findings have been organized into five areas: (1) key messages that teachers identified in the body image program, (2) new learning that teachers gained from the program, (3) indications of mixed levels of teacher comfort with teaching body image, (4) indications of the perceived impact of the body image program, and (5) areas of contradiction identified.

1) Key messages of the body image program. The teachers identified that they had grasped multiple key messages about body image, including: (a) the meaning of body image, (b) the role of natural diversity and genetics in body size, (c) the concept of health at every size, (d) the mediated unattainable body, and (e) some body-positive curriculum approaches to address body-based stigma and harassment.

The teachers of both early grades (K-3) and older grades (4-8) identified the meaning of body image, even though the term 'body image' does not appear in their provincial curriculum until Grade 4. One teacher thought the overall program message was simply, "Be happy with

who you are." Another defined body image in a poignant way, stating that, "It is the history and the feeling that you carry from child to adult." For one teacher, there was a key moment when she realized that all of her own body image views were negative and on this realization, began a different approach with her class, identifying how their diverse body shapes and sizes had advantages.

The teachers began to raise and discuss the role of natural diversity and genetics with their classes. Several teachers identified the second key body image program message as, "It is okay to be different." One teacher explained:

> We talked a lot actually about that, "What if everybody was the same?" and so then every time we did another lesson somebody would always say, "Well if we were all exactly the same, that would be really boring." So they get that it is important for people to be different and that we bring different things.

A third key message that teachers identified as important was that, "Healthy individuals come in a variety of sizes." One teacher brought in sports and fitness magazines that showed female triathletes. The class thought that one of them, an Olympic speed skater, was fat, but the teacher argued that the woman was "incredibly healthy." He then showed a picture of a gymnast that the class thought was anorexic. In all, he showed three women's body types that were suited to their chosen sport. None of the pictures of the athletes conformed to the pictures in mainstream magazines. He explained:

> Another one was a picture of Mia Hamm . . . and she had incredible stamina, incredible strength and flexible and she would have all of the components that we talked about in fitness that would have been met and yet because she didn't fit the stereotypical image of women on the cover of a magazine—the children were inclined to believe that she was fat.

The fourth key message identified by multiple teachers is that the media present images of body types that are mostly not attainable. One teacher compared superhero comic figures to media stereotypes, stressing that there are not many people in the general population with body proportions that match those of either the media stereotypes or superheroes. He explained:

> So, you know body image, you look at them and they're disgusting. You know their proportions compared to what a normal person is, the same thing with the men . . . They are completely unattainable as well, without the use of steroids . . . so unless you're willing to dedicate their entire lives to doing nothing but working out, you're not going to get that kind of body. Same with the women, unless they get cosmetic surgery, they're not going to that kind body and even then, it's a long shot . . .

The teachers connected clearly with the *body positive* aspects of the program, reporting multiple instances of the use of the program and resources to offer lessons about self-esteem and appreciation of diversity to their students. One school undertook a full-school lesson based on the book *Shapesville* (Mills & Osborn, 2003), which promotes acceptance for all sizes, shapes and colours. There were multiple reports from all of the schools that students appeared to benefit from the messages of self-esteem and the positive messages about body awareness. Teachers provided the research team with artefacts created by students and reported multiple instances of children talking or writing about themselves in positive ways such as, "My arms are great and they are for hugging."

A fifth key message for the teachers was the curriculum's position against body-based bullying in two aspects: recognizing stereotyping, assumptions, and stigma; and appreciating body diversity in size, shape, visible markers, and ability. The most popular lesson with the teachers across schools was one where the teacher empties a backpack and the class forms assumptions about the owner based on what is in the backpack. The lesson focuses on how assumptions and stereotypes narrow views about a person. Although this lesson was in the grade five body image book, teachers of other grades also reported using it.

Multiple teachers reported also that the lessons about bullying were thoughtfully received and students were able to identify with the messages about body-based teasing to the point where some expressed remorse with earlier incidents of bullying. One teacher reported that because of the training, she would be much more vigilant about bullying based on stereotypes, thinking more about what was underlying the teasing and what the child was feeling.

2) New learning for teachers. Areas of new learning for teachers included: (a) refraining from teaching eating disorders as a topic, (b) understanding the contradictions in teaching models of body image and healthy food choices together, and (c) an understanding of the impact of the media.

Teachers across schools indicated that they were not aware that research cautions against the teaching of eating disorders to the general population. They had assumed that since the topic was in the health curriculum, it was appropriate to address with pre-teens. One said:

> I mean I was surprised . . . about eating disorders . . . when we were going through the training and somebody said, 'Well whatever you do, you don't teach, you don't talk about eating disorders. You don't speak of them as a preventative, kind of like you do with drugs or alcohol . . . all you are doing is giving ideas in this case.

Another new learning was the recognition that students were observing teachers on their approaches toward diet products and food choices. One stated:

> Yeah, even the other day I was out in the office doing some work, and these were Grade six girls—but I am sitting there and I had like a diet Pepsi and they are like, they look at me and they go 'Does that work?' and I say, 'What do you mean, does it work?' 'To lose weight.' 'Does that make you lose weight?' . . . You have to be very conscious of it.

One teacher discussed at length her struggles with how to talk about eating with her class. She was aware that it was not a good message to describe foods as good or bad. She found that students reacted to it, especially if the students had cake or other "bad" foods in their lunch that day. She was also aware that talking about being on a diet did not send a positive message to children. For this teacher, a self-awareness of what she was saying was "her biggest learning curve." In several schools, the teachers articulated that they needed to get together to discuss and decide on consistent, school-wide messaging about food.

Learning for individual teachers included the impact of media on children's concepts of body image. While the teachers of students in grades 4-8 seemed to take this for granted, this comment came from one of the primary teachers:

> Something that I've kind of always known but not always convinced about and that's how much the media affects kids. I wasn't all that convinced that TV, computers, computer games really have that big of an impact, and I guess it's helped convince me more that, Yes. It really does influence how kids

think . . . even when I was younger I never took it seriously. It was just pure entertainment. It made me realize that they take this seriously.

Still another teacher related that, as they completed an activity where a person is scarred by the negative comments, the teacher herself came to realize that words create scars. She said that this realization changed her. Based on these findings, it seems clear that one of the outcomes of the body image program was that teachers themselves were acquiring new knowledge along with the students.

3) Levels of teacher comfort with teaching about body image. Teachers exhibited a wide range of comfort levels with teaching the program and with needing additional support. These issues fall into three categories: (1) comfort with the program's pedagogy, (2) teachers' comfort with their own body issues, and (3) teachers' comfort with the ideology of teaching about body image, which has been categorized as: agreement; less agreement; and disagreement.

Most teachers were comfortable with the program's approach, although a few disagreed with aspects of it and one teacher disagreed that there was a need for it. The teachers who were not comfortable with the pedagogical approach of the program wanted the program to be more scripted, and their levels of independence with teaching body image seemed to be associated with the challenge of unscripted dialogue and open-ended discussion. The teachers did not appear to be concerned with losing control over the discussion, but seemed more concerned about responding to students in helpful ways.

Teachers offered examples of challenging discussions. In one grade 4 class, a student indicated that she would not likely have supper because she was "fasting." She said that it was not connected to her religion but that she said she had stopped eating dinner because she was "too fat for her clothes" and she "didn't look right." This was the teacher's reaction:

> I'm looking for kits—for guidelines. How do you react to something like that? I just said, "Well that's not right. I think you are way too young to be worrying about something like that. You look fine. You need to eat. You need nourishment." And she just looked at me and rolled her eyes, like "Whatever." That has to change.

A second issue with teacher comfort was that multiple teachers articulated ways that they brought their own body image to the teaching of the body image program. One teacher explained that after twenty years she could still recall body image comments from her childhood and that she now realized the significance of comments made to young children. A second teacher had an issue with the program because she thought that the program gave the message that being underweight was not attractive. She was an underweight child herself and she wanted recognition that underweight was beautiful. A third teacher who was not comfortable with the program had lost a parent early in life to heart disease. The teacher became committed to fitness to reduce his own risks. He said,

> I think it's wrong—I don't think it's ok to tell kids to be fat, 'cause it's not . . . It's not healthy . . . I seriously think we are sending the wrong message when we tell kids that it's ok to be fat. I mean we go to great lengths to tell kids not to smoke . . . and yet we allow McDonalds commercials during cartoons. More people are dying from fat-related disease than smoking.

Another teacher realized that when she taught nutrition, her pre-adolescent students began to associate the teacher's body size with what she was eating, assuming that, because the teacher was a "bigger size," the teacher ate junk food. As a result, the teacher resolved not to teach nutrition in combination with body image. In yet another school, a teacher reported being isolated by the staff for having a non-exercised body when the school goal was fitness. These multiple instances demonstrate that how the teachers in the study viewed their own bodies was a key consideration to be addressed in implementing the body image program.

The third category of teacher comfort was their overall agreement with the teaching of body image. Teachers in general were comfortable with the program and thought that it was not just important, but essential. One teacher stated that if you do not talk about these important issues for children, then "You might as well whistle." Another teacher thought that the body image program was essential for its empowerment aspects, stating, "For the past few years we have been inundated with back to the basics, but let's not forget the social emotional, not as it applies to homework completion but how the student relates to perception of self."

Sometimes students responded in ways that made the teachers uneasy. In one class, a ten-year old wrote, "What is that [body image] supposed to achieve? Not everyone can be thin. Think about it. Can everyone be skinny? I don't want to talk about it." Later, the same student wrote in his journal, "I feel tubby." The teacher was unsure of how to proceed because in her eyes, the student had many advantages. The teacher worried that perhaps the body image curriculum provides opportunities to point out children's differences and make them feel self-conscious. This teacher identified that what she had needed most was an opportunity to see the lesson being modelled so that she would have a script to respond to the student.

Another teacher found the curriculum's approach of size acceptance was counter-cultural because the family doctor was telling her preteen daughter to diet and his "lose weight" message contradicted the message of the body image curriculum that weight gain at puberty was expected and natural. To further complicate the issue, the teacher's own parents told their granddaughter that she needed to "lose the tummy."

One teacher found that just talking about body image and weight was an uncomfortable topic if you had large students in the class. Other teachers experienced difficulty when discussing food and weight because the students entangled them. This teacher told her class, "You do not watch what you eat so that you do not gain weight. You eat to get energy and food gives you the energy so that you can do what you want." Another teacher said that teachers at her school were trying to teach healthy eating in the context of health issues, not weight issues, but struggled because there were so many articles about childhood obesity that had influenced the teachers. When asked if teaching the body image program had helped her to get a handle on this struggle, her response was, "To be honest, I don't think so."

Another pedagogical issue was that the body image program was intended to be integrated with the language program in the schools. In order to accomplish this, schools needed to have the inclusive books designed to accompany the lessons. These books introduced social justice issues such as anti-racism, inclusion, acceptance of difference, and alternative viewpoints from more traditional books. For example, one of the activities asks the students to compare versions of a well-known fairy tale. Most schools reported that they did not have multiple versions of the same story. In one school, the teacher-librarian had systematically located and purchased the books to support the program, and reserved them for teacher use. In the other schools, however, books featuring issues outside of the mainstream literature in schools were not readily available.

Teachers who disagreed with the program were in the minority. One teacher reported that the program took too much time. Another did not participate in the program and explained that he attempted one of the lessons and found that his students "were not that receptive." His view was that the issue affected just one or two students in the class but not so much that it really made a difference. He did not see a need for the program since most of his students were "not a mess psychologically." In summary, although the program introduced new pedagogy and resources, and teachers felt challenged in the way they should address some of the issues, the teachers generally agreed that the body image program was worthwhile.

4) Program impact: evidence of student learning and transfer. Teachers' reports about student learning and transfer were mixed. The primary teachers struggled to teach some of the concepts in the body image program, such as picture books about race or birth marks because their young students did not recognize the differences in skin colour or the birthmarks in the story. They wondered whether or not they should be bringing areas of difference to children's attention if children did not see any differences. In contrast, another primary teacher found that talking about the "isms" or equity intersections helped children to make connections. She describes how she used the story, *Amazing Grace* (Hoffman, 1991):

> A really nice side effect was with Amazing Grace because she wanted to be an actress and she couldn't play the part. We have a little girl in our class and she takes dance lessons and who is . . . plump, so it was a good kind of—they could make that connection—I know she could. And shortly after we did this lesson she brought her dance shoes to school and put them on and did a little tap dance for us . . . it might not have . . . happened otherwise . . . but it could happen when we got into this—the 'isms', racism, sexism, ageism, looksism.

In general, the teachers indicated that the exposure to stories about external physical differences allowed them to focus on the theme that, "We are all similar on the inside." One teacher used the book *Being with you this way* (Nikola-Lisa & Bryant, 1994), an American playground rap about differences. The students created a list of body parts that they liked with the message that, "We are all different but there are the good things about each of us." When one student talked about how long her hair was, another student reminded everyone that what matters is what is inside a person. Another teacher commented that her students clearly made the connection that just because two people look different it does not mean that the other person cannot be as kind as you on the inside. She used the book, *Mama Zooms* (Cowen-Fletcher, 1993) and found that the class was able to articulate that the person in the wheelchair would have the same thoughts and emotions as other persons.

There was evidence of teacher learning, student learning, and transfer of the learning; it was also apparent that teachers needed on-going support to address issues as they emerged from the program.

5) Areas of contradiction in the implementation. Teachers said that they were aware from the training session that parental involvement was encouraged but for the most part, the schools did not involve the parents. One school was planning to invite parents in for the program's start and to send materials home but did neither. One teacher tried to determine parental involvement with pre-teens regarding media and asked his class how they and their parents decided which video games were appropriate. The students responded that they did not talk to their parents about video games. Some of their parents did not allow the games and other parents did not restrict them. Another barrier to parental involvement from the teachers' view

was the students themselves. One teacher explained that students in grades seven and eight, "generally do not tell their parents anything." One teacher successfully involved the families in one lesson on bully proofing; students prepared tape recordings from family members' recollections of put-down messages. The teacher reported that the lesson was productive.

A second area of contradiction for the teachers was their conflict over what they described as "pantry sitting." One teacher spoke at length about the issue of monitoring children's snacks because she was so conflicted. One day when she taught about the food groups, some students refused to display and eat their snacks from home. When she questioned them, they said they would not show their snacks because it was "cookies again" and they were embarrassed.

A third area of contradiction for teachers revolved around the concept of self-control and discipline because teachers felt that students had some control over how they looked. One teacher describes this conflict saying,

> There is a part of me that also believes that you have some control over how you look, and I do believe that the physical activity comes into play as well. So we really push the body image, accepting who you are, what you look like, but I think deep down in the back of my mind I'm also thinking that you know . . . that doesn't mean you can continue to eat all the chips and chocolate bars and candy.

Questions about the role of heredity and genetics versus the role of diet and exercise in body shape and size persisted for teachers throughout the program.

Another area of contradiction for the teachers was that they thought that the body image program and the training gave the message that, "Men don't count." Multiple teachers thought that the program should have also addressed more concerns about boys. One male teacher thought that the program should address violence in video games and body dysmorphia, a disorder associated with appearance and becoming more muscular. He felt that students should be exposed to famous cases where athletes were punished for using steroids. He states:

> I think sometimes there is too much focus put on body image as a girls' problem. It's not just a girl problem; it's a boy problem as well. I see it; I go to the gym and I see men obsessed with gaining weight—the opposite problem—guys want to get bigger, they do steroids, supplements I think it is grossly underestimated how many men suffer from this bigorexia . . . body dysmorphia.

Another teacher's comments illustrate the complexity of the issue as he wrestles with both the messages regarding level of personal responsibility and body image for boys. He says,

> I think that the message needs to be—you are not . . . you may not look like . . . the actors or actresses however you still need to be your own personal best. You still have to eat healthy—which our kids don't, and you still need to be active and our kids aren't . . . You still need to be your own personal best . . . And don't think it's any less damaging to boys than it is to girls. It's been haunting me all my life.

In summary, the teachers' voices provided many insights into their experiences and perceptions as they implemented the program. Almost all of the teachers who were interviewed attempted to implement aspects of the program to varying degrees and with varying amounts of time dedicated to the program. In addition, most of the teachers were open to more dialogue about body image and considered body image to be an important topic for schools, despite the contradictions they expressed.

Summary of results

This study demonstrates that teachers who were involved with this body image program recognized a need for body image messages and teaching strategies and found that their students responded positively to a body image program. Teachers identified that the program helped address some issues of concern such as body-based stereotyping, assumptions, stigma, and bullying.

In the younger grades, the teachers were comfortable with the concepts of appreciating difference and acknowledging diversity in body shape and size which were attributed to heredity. Teachers also used the body image program in the primary classes with varying degrees of success to address other areas of difference such as different ability levels and visible markers of body differences. There were fewer areas of conflict for the primary teachers than for the teachers of the older grades. For the primary teachers, one area of discomfort they raised was over the supervision of snacks, which was not part of the body image curriculum, but was an issue that the primary teachers connected with the topic.

This picture changed for the teachers of the pre-teen and adolescent students because teachers found that older students were more conscious of their own and others' bodies. Teachers observed that students at middle elementary grades were more interested in the media and in shopping. The teachers identified areas of significant learning for the students in these grades such as understanding how stigmas, stereotypes, and assumptions are damaging. Teachers at this level also saw that the students were looking to them to be role models and the teachers began to be much more careful about their messages regarding calorie restriction and moralizing about food and weight.

Teacher views about the program also changed at the pre-teen and teen levels because an increasing number of divergent views were emerging. Some teachers were not comfortable with a message of unconditional acceptance of the role of heredity and genetics in body size determination because they thought that the message of personal responsibility for body size and shape also needed to be recognized. As the student dialogue on the topic moved into these uncharted waters, some of the teachers embraced it and welcomed its complexity, while other teachers indicated that they needed scripts for responding appropriately.

Discussion

The results of this single study suggest that body image programs tread on contested space in schools and that teachers will need context-specific, ongoing supports to teach such a program. The findings of this study confirm earlier findings (Piran, 2004; Yager & O'Dea, 2005) that teachers' own concerns about nutrition, body image and weight management impact on their teaching in these areas. The teachers in this study asked for more support in understanding the issues, suggesting a need for increased knowledge mobilization (Levin, 2008) of the research on body image from health sciences and social science research in order to support teachers with their own body image concerns and in turn, their students.

There are multiple areas where teacher knowledge could be supported. Research indicates that there is a need for body image programming in the early grades in order to build students' resistance to pressure to be a certain size (McVey et al., 2004; Smolak, 2004). Other weight-related issues, in addition to healthy eating and physical activity which could be addressed in schools, include weight-related teasing and body dissatisfaction (Haines et al., 2007). In

addition, current research identifies that body-based dissatisfaction is also a school issue for boys as well as girls (Kehler & Atkinson, 2010; Pope, Phillips, & Olivardia, 2000). Research regarding any protective factors that teachers and parents can provide with respect to self-esteem and self-acceptance should be made available to all Canadian teachers, including recommendations from Haines and colleagues with respect to an integrated approach that addresses weight-based teasing, the development of empathy, building of self-esteem, and healthy eating and exercise, among others (Haines et al., 2007, p. 17).

There is a need for knowledge mobilization structures to make more research findings accessible to teachers, schools, and curriculum policy developers. Levin (2008) identifies two elements that need to be in place for knowledge mobilization: a disposition toward using the knowledge, and processes for knowledge exchange. Levin (2011) also recently reported that Canadian secondary schools, "have relatively limited direct knowledge of current research and rely heavily on versions of research findings that they encounter in their work from other colleagues, the media or through professional development events" (p. 12). Mechanisms for providing more research on body image to teachers and parents appear to be one way forward. Knowledge mobilization for policy discussions is also suggested by this research, with respect to any potentially harmful effects from increased body size monitoring and food surveillance in schools (Rich, 2011), as well as exercise programs (McDermott, 2012), that are simplistic in their orientations.

A second major discussion point is that teachers are seeking more pedagogical support to help them work through the complexities and contradictions associated with teaching body-based acceptance and body improvement. Although teachers in this study indicated that they understood that there were multiple determinants of health such as heredity and environment, they wanted more guidance regarding how to explain to students more precisely how heredity, diet and exercise factored into the equation of a healthy body size. In this case, knowledge mobilization could be extended to include teaching strategies. Many teachers acknowledged that simplistic responses such as 'calories in and out' do not fully address teacher and student learning needs.

Theoretical constructs such as critical health literacy (Nutbeam, 2000) and critical health literacies (Nutbeam, 2009), would help teachers see that body image issues, and weight and size issues in schools are complex and socially constructed. As Nutbeam (2009) has suggested, there may be some parallels to explore with current pedagogies of new literacies and multiliteracies (New London Group, 1996). Within a multiliteracies framework, teachers are given support through practice, explicit instruction, and critical framing to address positive change in schools and in society (New London Group, 1996). If a critical pedagogical framework such as this is applied to body literacy in health and physical education, it can help teachers unpack the body-based contradictions in the curriculum and build a more responsive form of pedagogy.

The concept of critical body literacy conflates multiple discourses which frame how the body is positioned by multiple socio-cultural systems and how the body complies with or resists these systems. Such a framework could help teachers theorize the complex roles played by heredity, environment and lifestyle in determining health. Concepts such as 'health at every size' could help teachers understand how different body sizes and shapes can be healthy. It would also address questions such as socially constructed definitions of ability (Wright & Burrows, 2006) and the uses of space in schools to support full participation and inclusion. Potentially, it could also replace the notion of fitness with concepts such as vitality and enjoyment, and include student empowerment. Empowered, informed students would be mindful enough of their

bodies to be aware that any form of disordered eating, either restrictive or overeating, endangers their health.

In summary, this research, although it is one study in one province, indicates that teacher approaches to the topic of body image in schools occur within a larger socio-cultural framework of complexity and contradiction. Addressing these issues requires an understanding that literacies about the body are socially constructed and complex. Critical body literacy offers one possible way to theorize the complexity and contradiction between agendas of self-acceptance and continual improvement. A critical body literacy framework would encourage the voices and actions of students and teachers to emerge and interrogate earlier paradigms.

Concluding Remarks

Part of the goal of any school system is to develop individuals who will lead healthy, productive lives. This research examines six schools in one province. More research is needed to examine how teaching about body image, health, and activity can either support a healthy body or perpetuate body-based stigma and body dissatisfaction. The findings suggest that more efforts toward knowledge mobilization of current research, and a critical body literacy pedagogy that recognizes complexity, appear to be ways forward that would encourage students to be healthy, without encouraging them to be perfect.

Acknowledgements

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Appendix

Sample Policy Documents

Healthier Choices in Vending Machines in B.C. Public Buildings Policy Paper (2006) Retrieved Feb. 25, 2012 from http://www.lcs.gov.bc.ca/HealthierChoices/pdf/CompletePolicy.pdf

British Columbia Ministry of Education: (2008) Guidelines for Food and Beverage Sales in Schools retrieved Feb 25, 2012 from http://www.bced.gov.bc.ca/health/2010_food_guidelines.pdf

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