

## Models Based Practices in Physical Education: A Sociocritical Reflection

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In this paper, we reflect on models-based practices in physical education using a sociocritical lens. Drawing links between neoliberal moves in education, and critical approaches to the body and physicality, we take a view that models are useful tools that are worth integrating into physical education, but we are apprehensive to suggest they should redefine the purpose of physical education. In arguing this, we attempt to understand the particular effects of certain models on practice and students. We draw on the theoretical concepts of Deleuze, in particular his notion of 'striated' space to analyze SPARK-PE, HOPE, and Sport Education. We assert that some models can be useful tools for thinking about instruction, but models-based-practices are no substitute for a thoughtful and thorough physical education program.

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*If schools are to make some contribution toward a better social order, then the teachers who staff them must be able to conceive alternatives to current practices. (Tinning, 1988, p.82)*

The field of physical education, it seems, is caught in a continual cycle of having to justify its own existence. Both politically and socially over time, teachers and academics have to rationalize, align, defend, and explain the place and purpose of physical education in the curriculum. Over the last 30 years, a number of commentators have questioned and debated the way that such rationalizations have evolved, and reflected on how physical education might continue to be relevant in changing times (e.g., Armour, 1999; Arnold, 1979; Booth, 2009; Evans, 2003; Evans & Davies, 2015; Hawkins, 2008; Kirk & Tinning, 1990; Kirk, 2010; Pringle, 2010; Tinning, 2000; 2010). As a 'body subject' (Paechter, 2000), physical education is perhaps always under threat or in crisis (Kirk & Tinning, 1990) because "those areas of the curriculum that involve the use of the body, such as physical education (PE), while often compulsory, are given much less status in the academically focused world of the school" (Paechter, 2000, p. 49).

In a commentary on the meaning of physical education, Andrew Hawkins (2008) begins with this observation:

Physical education once again finds itself at a point of crisis. Philosophical dispositions and societal

trends are conspiring to rob our profession of its soul. The nature and meaning of kinesiology is in danger of being lost. It is the contention of this author that a philosophical pragmatism and cultural materialism, coupled with an overriding concern for health and wellness, have engendered this crisis. (p. 345)

Hawkins (2008) was concerned here with the field's lack of direction or sense of overall purpose and meaning. Instead, he suggests, we are subject to the whims of pragmatism and contemporary trends. In short, he argues that a great deal of research and teacher education practice is aligned to 'where the money is'. He goes on to observe that:

It is hard to imagine a profession or discipline that has had more difficulty defining its overriding purpose than has physical education. It is not that no one has tried, but competing interests, world views, and histories, not to mention the fragmentation of the disciplines, have led to a profession marked by considerable disintegration. (p. 346)

Kirk (2010), however, argues despite the rhetoric (and considering differing national contexts), physical education practices, as an important reflection of purpose and meaning in any discipline, are actually fairly predictable and enduring. Demonstrating that, what he calls, 'the idea of the idea of physical education' has

endured for at least the last 60 years in most places internationally. Kirk (2010) argues, “physical education-as-sport-techniques is the organising principle of contemporary practice that goes on in the name of physical education” (Kirk, 2010, p. 17). Crucially, he also observes that:

The key point to note about this teaching and learning of techniques is that these practices are typically abstracted from the whole activity; they are typically decontextualised practices. Indeed, the concept of skill acquisition this approach embodies is sometimes called whole/part/whole learning, although I am suggesting here that the whole is often omitted. (Kirk, 2010, p. 3)

These observations align with work critiquing the multiactivity approach to physical education (Kirk & Macdonald, 1998; Kirk, 2006), as well as with the earlier concerns of Locke and Siedentop (Locke, 1992; Siedentop & Locke, 1997) about the shape of the field. From different theoretical viewpoints, others have also debated the centrality of sport in physical education, at the expense of other forms of knowledge and movement practices (Gard, 2006; Kirk, 2006; Wright, Burrows, & Macdonald, 2004). There is no space to do justice to these varied and important arguments here, but suffice to say, there are ongoing debates about how physical education might continue to justify its place in the curriculum, while practice in many national contexts marches on (or, perhaps, in circles) in its commitment to ‘PE as sport techniques’ (Kirk, 2010).

## Models-Based Practices in Physical Education

In the midst of the debates noted above about the purpose and meaning of physical education, and Kirk’s (2010) analysis about practice, it is not surprising that models-based-practices are offered as a potential way to diversify teaching and to move beyond limited, repetitive, and decontextualized practices, to progress the field forward. There is not clear agreement in the field about what a model is, or what may constitute models-based practice. The terms ‘models’, ‘models-based practice’, ‘instructional models’ and ‘pedagogical models’ are all used (Dyson & Casey, 2009[AUQ1]; Hastie & Casey, 2014[AUQ2]). Hastie & Casey (2014, p. 422)[AUQ3] suggest that a model is “a blueprint which describes certain procedures for organizing content, task structures and the sequencing of learning activities” and they suggest “each model has a specific design specification that prescribes the “non- negotiable” features that make it distinctive”. Cooperative learning (Dyson & Casey, 2012; 2016), physical literacy (Kirk, 2013; Whitehead, 2010), and activist-PE (Oliver & Kirk, 2016) have all recently been suggested as potential additions to more established models, such as Sport Education, Teaching Games for Understanding (TGfU), Teaching Personal and Social Responsibility (TPSR), and adventure based learning

(ABL). Health-related models have also been introduced in response to research on obesity and related concerns about physical activity and nutrition (Metzler, McKenzie, van der Mars, Barrett-Williams, & Ellis, 2013). Many physical education models were conceptualized to address the limitations of the field. As Kirk (2010) notes, the ‘dominant model’ (Locke, 1992) of physical education, as the practice of repetitive, teacher-centered introductions to the skill techniques of various sports, has been contested by those “who have championed new pedagogical models such as TGfU, sport education, personal and social responsibility, sport for peace, girl-friendly physical education, health-related exercise, outdoor adventure activities and so on” (Kirk, 2010, p. 4). He goes on to observe that there are also excellent examples of “alternative notions of physical education requiring study and integration of theoretical subject matter with practical physical activities in courses that lead to high-stakes examinations” (Kirk, 2010, p. 4; see also Kirk, 2013).

The Sport Education Model (Siedentop, 1994; see also Kirk, 2006), as one example, was developed with very the intention of moving beyond decontextualized approaches and aimed to, in Siedentop’s words “involve students in ways that are not common to traditional approaches in physical education” (Siedentop, Hastie, & van der Mars, 2011, p. vii). Sport Education has been researched across, and between, a range of national contexts and, one might argue, thoroughly ‘tested’, critiqued and adapted to a variety of milieus (Kirk, 2013; Wallhead & O’Sullivan, 2005). Although perhaps not to the same extent, other models have, likewise, garnered significant attention, application, and research (e.g., Griffin & Butler, 2005).

Given this sustained focus, and the enduring issues in the field with student engagement (Dagkas & Armour, 2012; Evans, Davies, & Wright, 2004), and the status of physical education more broadly (Armour, 1999; Fitzpatrick, 2013a; Paechter, 2000), it is easy to see what is appealing about models-based approaches. Models present a framework around which to structure practice. Some models offer highly detailed, recipe-like, approaches to implementation, coupled with extensive resources that are appealing to teachers (many of whom are over worked and time poor). As evident in the uptake of models internationally, it is clear that models have value and connect with practitioners (e.g., Grant, 1992; Hellison, 2003; Perlman, 2012; Silverman & Robertson, 1999). Some recent studies, however, also highlight the tendency for models to reinforce power relations, hierarchies and dominant forms of masculinity (Brock, Rovegno, & Oliver, 2009; Parker & Curtner-Smith, 2012).

Given all of these issues with justifying and practicing physical education, it may seem logical (and appealing) to redefine the field via models based practices. Indeed, Metzler (2005) claimed models are “designed to be used for an entire unit of instruction and includes all of the planning, design, implementation, and assessment functions for that unit” (p. 13). He goes on to

compare instructional models to an architect's 'blueprint' that:

provides a detailed set of written and drawn plans, including instructions, measurements, locations, and materials that help both the architect and the builder understand that the structure will look like when completed, and it allows for efficient and correct decisions to be made during the building process. (p. 24)

Using Metzler's understanding of models as blueprints, physical educators should be cognizant that each model "makes assumptions about human beings, the role of education in society, and the nature of the subject matter of physical education" (Jewett & Bain, 1985, p. 81). Given this, there are (at least) two striking assumptions in Metzler's conceptualization of models. The first assumption is the dichotomy between the architect (model designer) and the builder (the teacher). He claims that the "teacher...takes the blueprint (a model) and follows it to promote certain standards and other learning outcomes" (Metzler, 2005, p. 24). Therefore, the teacher's role in the instructional process is to reproduce particular benchmarks that have been previously designed without knowledge of the school, students, or context. Second is the role of the students, or lack thereof. By claiming that a blueprints approach 'allows for efficient and correct decisions', students are positioned as individuals incapable of knowing what outcomes are relevant for their own lives.

Given the above assertions, the notion that the field might be redefined according to models is of concern. Such a statement goes far beyond the intention of many models-advocates, and certainly the authors of most models visible in the field. Alternatively, we contend that this is a very real concern and one that should be resisted. We argue that models are not the solution to the legitimate questions about the purpose of physical education. Models are useful pedagogical tools and they have, no doubt, helped shift practice away from the 'dominant model' of physical education in some contexts.

Indeed, we live and work in a context where models have been common practice in teaching and research for over 40 years (see, for example, Cosgriff, 2000; Dyson & Casey, 2012; Gordon, Thevenard, & Hodis, 2011; Grant, 1992; Martin & Gaskin, 2004; Ovens, Dyson, & Smith, 2012; Pope, 2005; Pope, 2007; Slade, 2011). There are some models, like TGfU, TPSR, Sport Education, Adventure based learning, and cooperative learning, that are an accepted and common part of physical education programs in schools, universities, and other physical activity settings. Models are certainly useful, however, the field needs to keep models in their place and resist attempts to replace the greater meanings and philosophies of physical education with the seductive appeal of models. Nor should the field allow models to determine or limit the range of content and experiences on offer in physical education.

To this end, in the following sections we consider the limitations and benefits of models-based-practices, and reflect on how specific models structure physical education practices, and students, in particular ways. In this sense, we are particularly concerned with models focused on health-based outcomes, which we argue are anathema to the progressive intentions of both other models and attempts to advance the field. Like others in the field, we insist that theory can enable us to see practice in new ways (Wright et al., 2004) and is useful as a framework for thinking. Zygmunt Bauman suggests that theory enables us to 'shine a light in darkness' and highlight the unseen and taken for granted (Gane, 2004). In so doing, we draw on DeleuzoGuattarian (Deleuze & Guattari, 1987) concepts as a framework for thinking about the limits of particular physical education models. We have chosen this particular framework as it provides a fresh and innovative perspective to analyze models-based practice in physical education. We begin by briefly outlining the theoretical framework before applying that framework to two health-based models (SPARK-PE and HOPE) and the Sport Education Model. Space precludes us from dealing with the wide range of specific models here thus we have chosen these three models because, by comparison, they highlight the problems with health-based models and the limits of models-based practice more generally. We end with some comments about how models might productively align with wider programmatic approaches to physical education (without consuming them) and why we need to keep models in their place.

## Theoretical Framework: Thinking About Models With Deleuze

Deleuze and Guattari (e.g., 1983; 1987) and Deleuze (e.g., 1990; 1994) have influenced the way scholars think about practices in a diverse range of fields (Pringle & Landi, 2016). Their innovative thinking, however, has not yet influenced the field of physical education. DeleuzoGuattarian theorizing is primarily concerned with provoking new thoughts and movements to be innovative instead of reproductive. Deleuze and Guattari may have been abstract philosophers, but they often stressed the importance of using theoretical concepts in relation to lived experiences. They claim "there is no longer a tripartite division between a field of reality (the world) and a field of representation (the book) and a field of subjectivity (the author)" (Deleuze & Guattari, 1987, p. 23). Therefore, they often encouraged plugging conceptual ideas into real life situations, to provoke innovative ways of thinking and knowing about experience.

Given that Deleuze and Guattari (1987) are concerned with inducing creative movements and thoughts, their theorizing is uniquely positioned for our reflection on models, which are a reproductive practice. Deleuze and Guattari (1987) claim that all spaces are more or less 'striated'. Striated spaces are organized sites that aid in the restriction of movements and thinking in

bodies to reproduce the function of that milieu. Striated spaces tend to be proscriptive, regulated, and restrictive. Therefore, bodies within striated spaces tend to be limited in thinking and behavior to restrictive pathways of normalized movements and knowledge. The bodies that follow these pathways (by choice or force) tend to reproduce habitual behaviors that reinforce the function and privileged knowledge of the field.

We all experience the striation of spaces in the wide range of contexts we inhabit. There are certain movements, bodily positions, dress codes and actions that are, more or less, socially acceptable in any given time and place. Physical education spaces are striated according to rules, uniforms, and expectations that regulate the movement of students when they are participating in particular games, moving between classes, or in the gymnasium. Schools regulate these spaces in a variety of ways according to protocols, actual game rules, and school expectations. Young people also regulate space according to cultural and social norms (Youdell, 2011). Within physical education classes, students may, for example, be taught routines that reinforce particular performances and discourage other performances.

Striated spaces tend to be reproductive spaces that prevent innovative movement or thinking. If students are restricted to playing a game of basketball as part of a physical education class, for example, their bodies (both physically and mentally) will tend to reproduce the rules, strategies, and techniques of basketball. Unless the striations of the space are loosened, or if the bodies within that space induce different pathways, then students will continually reinforce the function of basketball. This is not necessarily a problem, but it will also reproduce particular power relations and movements consistent with basketball and the cultural context of that place. If the striations are loosened, however, the students have the potential to be innovative, and produce new knowledge in the form of innovative skills, games, or alternative ways to play.

Physical education curricular spaces are striated according to (among other things) traditional concepts of physical fitness, sport, and healthism. In 1980, Robert Crawford coined the term healthism to describe “the preoccupation with personal health as a primary- often the primary- focus for the definition and achievement of well-being” (Crawford, 1980, p. 368). Healthism has structured practice in physical education over, at least, the last 30 years (according to some commentators for much longer). Relatedly, physical education has also been striated according to the logics of neoliberalism (Evans & Davies, 2015; Macdonald, 2011; Powell, 2015; Williams & Macdonald, 2015). Neoliberal ideologies have shaped, and continue to shape, policy and practice in physical education, consistent with those of wider education.

Neoliberalism is an economic movement based on several ideologies linked to neoclassical fundamentalism, supply-side economics, free trade, and moral authoritarianism (Moody, 1997[AUQ4]). At the crux of neoliberalism is a belief that unregulated markets produce

competitive and open atmospheres that aid in capital development (Harvey, 2007). Therefore, a lynchpin for neoliberalism is the shifting of wellbeing (both human and economic) from the State to the private market (individual citizens). Overtly, State and private markets seem to be dichotomous, but this is misleading. In fact, neoliberal policies rely on the State to provide public finance and regulation to ensure that new markets are created (Massey, 1995). Since local governments have a role in the regulation of markets, neoliberal practices manifest in highly contextual ways (Brenner & Theodore, 2002) that perpetuate the dominant discourses of that place.

In physical education, neoliberalism reinforces a consumer-based system that requires people to ‘buy into’ and be personally responsible for their own health (Fitzpatrick & Tinning, 2014; Powell, 2014). Gard and Leahy claim that, in this neoliberal policy-driven milieu, health education and health promotion get conflated. This leads to contradictions and tensions because “we fail to differentiate between teaching about health and trying to make children ‘healthy’” (Gard & Leahy, 2009, p. 183). According to Macdonald (2011) “Physical Education... carries the stamp of neoliberalism and as a field we are keen, it seems, to accept and accrue more of the vestiges of this ideology as a way of buying into the dominant policy agendas (e.g., accountability; reducing health costs; supporting choice)” (p. 36). Neoliberalism relieves the responsibility of government to serve citizens and shifts this responsibility onto the individual (Harvey, 2007), while simultaneously neglecting sociocritical and economic factors in favor of discourses of ‘choice’. Macdonald (2015) argues that, in today’s global economy there are a plethora of for-profit and not-for-profit products that schools can select to consume. Resources then “available to HPE are less bounded and hierarchical and more prolific, networked and entrepreneurial” (p. 34). Teachers, she insists, must now be ‘knowledge brokers’ in this environment and assume the roles of “intermediaries undertaking significant intellectual... responsibilities” (p. 38) for building curricula.

Returning to Deleuze, we can view neoliberalism and healthism as elements that striate physical education spaces in ways that both restrict, and open up possibilities, for the movements and knowledges of bodies. Deleuze and Guattari (1987) claim striated spaces are sites of more insidious practices that attempt to control desire. When a body’s desire is organized in a space, its movements and thoughts are restricted to reproducing the ethos of that space. Like other kinds of pedagogical approaches within neoliberal environments, models striate the space of physical education in particular ways that reflect neoliberal discourse. Depending on the model, these may be highly restrictive and reinforce problematic practices, behaviors, and views of the body and movement. In the sections that follow, we consider how particular models taken up by physical educators striate practices at the intersection of neoliberalism and healthism.

## The Limitations and Possibilities of Models

### SPARK-PE and HOPE: The Problems With Healthism

#### SPARK-PE.

The Sports, play, and active recreation for kids (SPARK-PE) model began as a research project with a focus on public health for elementary school physical education (McKenzie, Sallis, & Rosengard, 2009). SPARK-PE was designed as a response to societal concerns regarding children's physical activity and fitness levels (Sallis et al., 1997). SPARK-PE has been investigated in a variety of approaches. Most notably, it has been shown to increase student moderate to vigorous physical activity- MVPA (McKenzie, Sallis, Kolody, & Faucette, 1997), motor skill development (McKenzie, Alcaraz, Sallis, & Faucette, 1998), physical fitness levels (Sallis et al., 1997), and remain a sustained practice in schools, resulting in institutionalization (Dowda, Sallis, McKenzie, Rosengard, & Kohl III, 2005).

The SPARK-PE model has come to be "one of the most notable and widely used curriculum models for increasing physical activity" in the United States (Marttinen, 2015, p. 33). SPARK-PE has expanded into a whole school program that includes four curriculum models (K-2 Physical Education, 3-6 Physical Education, Middle School Physical Education, and High School Physical Education) that span years K-12. Each model contains multiple unit plans, devised of a variety of lesson activities, music, assessments, and additional resources (posters, task cards, and fitness logs) that cover a variety of content areas (over 65 total units). Therefore, what is unique about SPARK-PE is that it assembles to form an entire physical education program that prescribes recipe-like instructions for all teachers and students from primary to secondary school. In addition, SPARK-PE has recently published two SPARK university models that include syllabi, assignments, peer-teaching guidelines, assessment rubrics, and formal tests for both Elementary and Secondary methods courses (SPARKuniversity-elementary.2016; SPARKuniversity-secondary.2016). Given this recent development, it seems that SPARK-PE is not only attempting to redefine K-12 physical education, but also physical education teacher education. Below we provide examples of how SPARK-PE striates physical education spaces.

The SPARK-PE Middle School curriculum model (Baranowski et al., 2010) comprises of 18 instructional units that contain highly prescriptive lesson plans outlining objectives, tasks, and assessments for each unit. Each activity plan has word-for-word prescribed series of procedures and steps that are carried out for both student and teacher as the lesson progresses (Baranowski et al., 2010). In addition, SPARK-PE provides a plethora of assessments that evaluate students in (a) psychomotor skill, (b) pedometer tracking, (c) heart rate, (d) cognitive knowledge, and (e) health-based fitness knowledge

(Baranowski et al., 2010). These assessments come in several forms, for example, one is a self-assessment that has students rank their own skill performance in one of three categories: 'rookie', 'semipro', or 'professional' (Baranowski et al., 2010). The SPARK-PE model also prescribes personal fitness logs so students can track their steps and heart rate. Therefore, students are constantly evaluated by health-related symbols (e.g., heart rate) and traditional sport skills (e.g., skill assessments). In SparkFIT (Hart & Hart, 2010), students take prefitness tests and are required to reflect on their bodies through questions like: "Describe what you'd look like" (p. 10) if you were at optimal fitness levels. Furthermore, the fitness manual (Hart & Hart, 2010) teaches students 'correct' decisions regarding nutrition and exercise. One slogan, as an example, is "Eat Right- Be Fit- Work Hard- Never Quit" (p. 35). The manual also prescribes fitness and nutrition plans for students to adhere to as a way to gain 'optimal health' (Hart & Hart, 2010).

The SPARK-PE models are highly striated by neoliberal and healthism concepts. We will illustrate how this is done, primarily in three ways: (a) by constructing students as deficit, (b) by shifting responsibility for well-being from the State to private markets (students), and (c) by creating new markets for consumption. Drawing from the previous examples of SPARK-PE assessments, by asking students to 'describe what they would look like' when they are healthy makes two assumptions. To start, it assumes that students are unhealthy and in need of remediation. Second, it creates an inextricable link between body image and health, a link that is unsubstantiated and dangerous (Fitzpatrick, 2013b; Gard & Wright, 2005; Markula, 2001). Therefore, the abstract values collected via psychomotor (skills test), cognitive (health-related knowledge tests), and fitness assessments (pedometer, heart-rate, and fitness tests) in the SPARK-PE program (e.g., Baranowski et al., 2010; Hart & Hart, 2010) are meant to inform students that they are 'at-risk' by constructing the students as deficit. Notably, the assessments are grounded in healthism (Crawford, 1980) and scientized concepts of bodily movement (Pronger, 2002). Therefore, students are informed that they are in need of remediation, to which SPARK-PE offers prescriptions through fitness and nutrition plans. This, however, also has the ability to shift health from a social responsibility (State) to a personal responsibility (private markets through consumption).

In neoliberal terms, a person's health is directly correlated with personal choice. Since choice is the driver of privilege, exogenous factors (e.g., socioeconomic status, race, sexuality) are often neglected (Harvey, 2007). By informing students they are 'at-risk' (as illustrated above) according to scientized standards and providing remediation plans, SPARK-PE promotes a view that personal health is an individual responsibility. SPARK-PE, however, does not address the social mechanisms that make health more difficult for some (e.g., socioeconomic status, ethnicity, sexuality, etc.). When this happens, improving physical health and well-being is proposed as

an individual problem (Crawford, 1980) that neglects exogenous factors (Harvey, 2007), and in so doing, makes students individual consumers of their own health (Fitzpatrick & Tinning, 2014). Therefore, *students are constructed as healthy consumers, not students of health and physical activity.*

Lastly, access to SPARK-PE (which was developed using government research funds) comes at a cost. Each model is sold for \$399 USD. Therefore, for a school district to purchase one curriculum set for each grade band (assuming they only need one), the school would need to spend \$1,596 USD. Larger school districts with multiple schools would have to purchase even more. Furthermore, specific training and sporting equipment are recommended with the purchase of the models. In fact, some equipment is explicitly required to teach individual activities, and therefore, is required for instruction. Aligning with neoliberalism, SPARK-PE was a government funded research grant that has proliferated into a private for-profit business. In so doing, public schools that want access to these models must use their limited funds to purchase models that were originally developed using public funding. Therefore, the government actively created this market and continually sustains its operations (Massey, 1995).

All of the above issues are highly problematic when we consider the positioning of students and teachers. To start, SPARK-PE is a highly striated space that constructs students in 'deficit' terms and in need of improvement. Teachers, on the other hand, are striated by the prescribed activities that restrict innovation in practice. Therefore, SPARK-PE discounts the bodies, knowledges, experiences, and cultures of students and teachers, in favor of a scientized and healthist perspective. Second, since the focus is on MVPA and skill development, the teacher's goals are striated by aims to *make* students healthy, rather than teach *about* health or physical activity (Gard & Leahy, 2009). Furthermore, both students and teachers are striated into consumerism: students as consumers of personal health (Fitzpatrick & Tinning, 2014) and teachers as consumers of physical education models (Macdonald, 2015).

#### H.O.P.E.

The second health-focused model we consider here is, what Metzler et al. (2013) call, "Health optimizing physical education" or H.O.P.E. They describe this model as "a new curriculum for school programs" (p. 41). Indeed, they define the curriculum model as "the overall plan that guides a school or district physical education program" (p. 41). It is interesting to note, that like SPARK-PE, this is quite a different definition for a model than that upheld by the proponents of other models used in physical education programs. This got us thinking about how we were conceptualizing models in relation to physical education programs. We certainly agreed with Metzler's (2005) original assertion that models are designed for a unit of instruction, where the unit is often determined by the content. Kirk (2013) agrees stating, "a

models-based approach suggests the need for a number of forms of physical education...[and] each of these forms might require...different types of justificatory argument" (p. 978). Kirk and Metzler's explanation here suggests that including models in physical education practice might make for much richer, and more diverse programs. Kirk (2013) attests that models can have "multiple educational benefits across a range of domains" (p. 978). The idea then that a health-optimizing approach to physical education might, in itself, be a whole program for physical education is contestable. According to the writers, the HOPE model can be described as follows:

The overarching goal of the HOPE curriculum model is to help P-12 students acquire knowledge and skills for lifelong participation in physical activity for optimal health benefits. All components of HOPE described in parts 1 and 2 of this article are in strong alignment to achieve that primary goal. It should be acknowledged that some other main-theme curriculum models in physical education mention similar outcomes, but HOPE is unique in its prioritization of this overarching goal and makes direct attempts to achieve it, by not promoting other kinds of learning that are thought to indirectly lead to increased participation in physical activity and other healthy behaviors. (Metzler et al., 2013, p. 42, emphasis added)

Two elements of this statement are worth dwelling on. First, this model is proposed as an entire program focus. This means that the authors are reimagining physical education experiences as solely for the purposes of 'lifelong participation in physical activity for optimal health benefits'. Such a singular focus would potentially exclude at least: physical activity for pleasure and enjoyment, aesthetic movement, learning about competition, movement as a means to enhance motor skill, coordination, balance, interpersonal skills, and the plethora of other possibilities that are included as a basis for learning in physical education. Second, this claim is reinforced when the authors state that prioritizing this goal means "not promoting other kinds of learning that are thought to indirectly lead to increased participation in physical activity and other healthy behaviours". They seem to suggest that physical educators should exclude all other forms of physical activity and learning experiences that have 'indirect' effects on health. Leaving aside debates about what behaviors might even constitute 'health', this is a very bold claim, which proposes that physical education dispossess itself of all content, concepts, physical activities, and sporting experiences we hold dear. Indeed, other models currently used in the field (such as cooperative learning, Sport Education and TGfU as a beginning point) do not meet this criterion.

The HOPE model, of course, also rests on the assumption that there is certainty that particular behaviors will (or will not) lead to certain health outcomes. These assumptions include the following learning outcomes:

- “Promote high rates of MVPA [moderate to vigorous physical activity] and health-related knowledge to supplement the scheduled PE program”
- “To teach parents, guardians, and other family members to promote PA and a better diet at home” (p. 45).

Advocacy for programs of this kind is not new. As Tinning (2010) observes: “since the early 1970s PE has been strongly influenced by a ‘new health consciousness’ that...was the impetus for an increased emphasis on the element of health related physical activities within the PE curriculum” (p. 169). He refers to this health-driven approach as “Health Oriented Physical Education (HOPE)” and explains that:

The acronym HOPE is meant to be a pun, for my argument is that these programmes and initiatives are based on hope rather than a sound understanding of the significance of context in all educational endeavours. (Tinning, 2010, p. 169).

The notion of health-orientated physical education (HOPE) was actually first coined by Tinning in the 1990s as a device for critiquing the ever-expanding focus on health outcomes in physical education, and the tendency for physical education to be justified according to healthy lifestyles. At that time, Tinning (1994, p. 16)[AUQ5] argued that:

HOPE in all its various forms is a specific response by the physical education profession to a perceived problem or cluster of problems. It is considered to be part of a solution to a problem. But where did the problem come from? Who defined or set the problem as a problem? Whose interests were served by defining the problem this way? Whose are marginalised?

These questions are important to consider in terms of how health-optimizing or health-oriented physical education striates practice, and the bodies of both teachers and students along healthism lines. In 1989, Kirk and Colquhoun (1989) observed that:

health-based physical education programmes, which project and celebrate corporeal and individualistic notions of health, take on enormous significance since they explicitly evoke the moral order of what Crawford (1980) has called “healthism”, a belief that health can be achieved unproblematically through individual effort and discipline, directed mainly at regulating the size and shape of the body. (p. 419)

Health oriented physical education models are actually a complete reconceptualization of physical education as a practice only concerned with physical fitness and narrowly conceptualized health outcomes. These types of health oriented models work against the arguments of those mentioned in the introduction to this article, that physical education needs diversity. Health-

based physical education approaches do not, in our view, belong in the list of models that aim to expand the field. They rather seek to narrow and limit practice by striating physical education spaces according to discourses of healthism and neoliberalism. These practices are positioned as a response to obesity discourses, which, as Kirk (2006), Gard and Wright (e.g., Gard & Wright, 2001; Gard & Wright, 2005; Gard, 2011) point out, is a highly questionable platform from which to practice. In Kirk’s (2006) terms:

...the obesity crisis is a social construct, and a highly complex phenomenon. The careers of some researchers are being built on the belief that there exists an obesity crisis affecting young people. Political agendas have been produced and large sums of money are being spent on interventions and initiatives. In this context, there are growing numbers of institutions and individuals who have a strong vested interest in maintaining the appearance of an obesity crisis. (p. 127)

Replacing the diverse array of physical education practices with a narrow focus on physical ‘health benefits’, not only takes the field backward, but also undermines the progress made by other models.

## The Sport Education Model: Restrictions and Possibilities

The Sport Education model was developed in the early 1990s to provide students with an authentic sport experience in physical education (Siedentop et al., 2011). The model was created as an alternative to the traditional multiactivity model by providing students a “deeper coverage of content and an expanded set of content goals” (Siedentop et al., 2011, p.13). Traditional goals of physical education are inherent in the model, which include, according to the writers, the development of techniques, fitness, and strategy. The model also includes objectives related to sport administration, student autonomy, teamwork, and understanding sport culture.

The model is structured around ‘authentic’ sporting experiences; activities are split into seasons and multiple teams compete. The seasons are longer than typical physical education units and are split into sections such as: preseason, regular season, or training camps (Siedentop et al., 2011). Each team assigns roles to their teammates that fulfill particular functions like referee, captain, fitness instructor, or statistician. Students, then, are striated by the positions to fulfill the responsibilities connected to their position. The assigning of roles has two major functions that are aligned to neoliberal ideologies. First, it striates the students’ bodies to perform a particular role. This aids in controlling students actions, what some would refer to as ‘classroom management’. Second, it places a strong focus on personal responsibility onto the students. By doing this, personal responsibility becomes a major theme where students are made to feel guilty (or shamed) if they do not complete these roles on behalf of the team. Those who perform their roles well are rewarded

points for their team, and those who do not do well, fail to receive points.

The allocation of roles and the abstract point value in Sport Education reflects a neoliberal agenda. Individual students are assessed on skill development and teams are ascribed points based on a multitude of activities (e.g., physical activity points, encouraging teammates, etc.) in Sport Education (Siedentop et al., 2011). Therefore, and once again, students are signified as ‘deficit’ or ‘lack’ through abstract symbols (e.g., points, assessments, etc.), and are given opportunities to increase their value; a very neoliberal perspective. These roles, however, could be conceived in another way. For example, “team coaches... learn to develop their own team practice plans” and “team’s fitness trainers... design brief conditioning bouts that become part of team practices” (Siedentop et al., 2011, p. 70). Therefore, personal responsibility is also aligned to a collective or social responsibility. The totality of a practice plan is designed via multiple members of the group. In addition, and unlike the previously discussed models, Sport Education does not dictate every move, thought, and action of teachers and students. Therefore, by having a ‘smoother’ space to experiment within the model, there is potential for transformation or production of new knowledge.

To illustrate the ‘smoother’ (less striated) space of Sport Education, we turn to New Zealand. In New Zealand, the curriculum (Ministry of Education, 2007) takes a sociocritical perspective that can be interwoven into the Sport Education Model. One teacher, as an example, combined the two effectively. The teacher developed teams based on the Olympic games, assigning the class countries. Each team (or country) was also assigned a budget that reflected the discrepancies of funding in the Olympic games. In other words, team USA received a hefty budget and was able to ‘purchase’ newer equipment and resources. Other countries, like Samoa, were assigned a minimal budget and were forced to make difficult decisions about team operations. This style of lesson not only addresses economic inequities of sport, but also expands into health inequalities among people of color or from low socioeconomic neighborhoods (Russell, personal communication, 2016). Such practices, which involve the adaption of models to address political and critical issues in physical education, might enable students to reflect on issues of power, and engage them with social justice issues that surround sport and health. The striations of Sport Education are apparent, but they are not as rigid as those of SPARK-PE or HOPE. Therefore, Sport Education is adaptable to meet the needs of a variety of contexts and can act as a space where teachers and students can experiment with its organization. This experimentation may lead to new knowledge that could transform the field.

## The Effects of ‘Physical Education as Models’

Considering the models discussed above, we remain concerned about the dislocation between models and the purpose of physical education. It is problematic to simply employ models in physical education without thought for the underlying principles, values, and orientations of any given model, and how these align (or not) with wider programmatic aims. Indeed, it might be tempting (and no doubt this happens in some programs) to simply string models together one after the other, so that the sequence then becomes a default program. In the case of SPARK-PE and HOPE, writers seem to be suggesting that no other content or even any other model has a place at all in physical education. This is evident by HOPE’s statement, ‘not promoting other kinds of learning that are thought to indirectly lead to increased participation in physical activity and other healthy behaviors’. This is also apparent in SPARK-PE, as their curriculum models span all ages, including teacher preparation programs.

There are several reasons why this is problematic. First, individuals conceptualize models on an ad-hoc basis in very different social, historical, and geographical locations. These models were articulated without particular concern for the (differing) contingencies of place, context, or shifting cultures. The Sport Education model, as one example, was conceptualized and developed in an epoch very different to the one we are currently experiencing. Sport Education was ‘invented’ pre-internet, pre-the diversification of sport and physical activity contexts, pre-mass globalization, and in a time period unrecognizable culturally to the youth of today. This is not to suggest that it no longer has relevance, but it is inconceivable that it would not need altering for the contingencies of youth culture, globalization, the internet age, and the diversity of cultural and social contexts within which it is now used. As Parker and Curtner-Smith (2012) and Brock et al. (2009) show, issues of gender, status, and power articulate as much in the practice of Sport Education as they do in any other activity. It might be timely then, given the extensive work in the field on issues of discrimination and exclusion (Dagkas & Armour, 2012; Evans et al., 2004; Wright et al., 2004), to adapt and use models in innovative ways. It is questionable whether models developed in specific places and time periods can, or should, be wholeheartedly imported into other cultural, geographic, and temporal contexts, without a thought for how, or even if, such approaches are culturally relevant to the young people they are used with.

Second, putting models together into a program is a very neoliberal approach to education. It (arguably) requires little professional or academic input from teachers but, rather, deprofessionalizes practice. The teacher implementing such a program need not give consideration to the debates we canvassed in our introduction; nor do they need to consider the overall purpose, goals, values, content, or philosophy of physical education. In this case, the teacher becomes striated



through neoliberal and healthism-aligned agendas. Such an approach does not countenance how individual models striate practice and reproduce particular forms of physical education, to the detriment of other forms. There is no model we know of, for example, that directly addresses dance education, racism in sport, gender equity, sexuality, the corporatization of the body and movement, sustainability issues for physical activity, or the politics of sporting participation (to name just a few possible topics of study).

The models currently on offer in physical education have been developed on a completely 'ad hoc' basis. Some have drawn from existing practices and aligned fields (such as Sport Education), some have come out of a specific social need in a particular place (such as TPSR), while others have been developed or borrowed from aligned disciplines (such as coaching in the case of play practice or TGFU; or from the broader field of education as in the case of cooperative learning, or from outdoor education in the case of ABL). Some models have been developed as a response to a perceived health need (as in HOPE and SPARK-PE). None of these are of themselves a physical education program that offers the complexity, diversity, cross-disciplinary commitments that the field is known for. In addition, none of the above offers sociological, critical, or social-justice aligned approaches to the field. Neither do the authors of most models ever offer them as an answer to physical education or as a complete program.

Models then need to be adopted in physical education programs with care and with a thought for context. Models can make a valuable contribution to changing practices in physical education, as an addition to programs that have clearly articulated purposes, aims, and philosophies. Models should not, in our view, replace these philosophies, nor simply be strung together in an ad hoc fashion. Physical education professionals might analyze the underlying assumptions of curricular models before adopting them into their programs. If models are ill aligned to the theoretical values that underpin the local curriculum (Jewett & Bain, 1985), they will not be contextually appropriate. If models are employed, then aspects can be altered and contextualized within a wider program and within a broader sociocultural framework. Cliff, Wright, and Clarke (2009) define a sociocultural perspective as:

a way of examining health and physical activity issues that highlights social (power relations, political and economic factors, and dominant and subordinate groups) and cultural (shared ways of thinking and acting such as ideas, beliefs, values and behaviours) aspects and influences. A critical sociocultural perspective is also likely to involve questioning the taken for granted. (Cliff et al., 2009, p. 167)

A program based on such an approach will include conceptualizations of health and physical activity that challenge individualistic and neoliberal approaches.

## Conclusions

We have raised a range of issues in this article about the use of models in physical education. We contend that practitioners, and those advocating models-based practices, need to consider wider debates in the field about the overall purpose of physical education, and how the field might continue to justify its position in the curriculum. We began with Hawkins' (2008) observation that physical education is again in crisis and his assertion that "a philosophical pragmatism and cultural materialism, coupled with an overriding concern for health and wellness" are robbing the profession of its soul. We share these concerns and argue that the current enthusiasm for models-based practices reflects deep tensions and confusions about the purpose of physical education. Indeed, the move to models may be distracting from a much-needed continuation of debates about purpose.

There are some in the field who may feel defensive while reading this article, as they may perceive it to be an 'attack' on models-based practices. Tinning (2015) argues, "conventions of agonistic discourse, critique and rhetoric are also central to scholarly writing" (p. 717). He goes on to claim, "in the academic world, people become socialized by their training in particular discipline areas (e.g. as sociologists, as physiologists or whatever)" (p. 717). Tinning argues this socialization also influences the identity and value formation of researchers. In so doing, any 'critique', which is a natural part of academia, is perceived as a personal threat. Lawson (2009) has documented such practices in his own experiences as a nonmainstream physical education scholar. He argued that some researchers are so invested in maintaining their privilege that they label any critique "as 'the wrong path to follow' and, even more poignantly, as potentially counter-productive, risky and even dangerous" (Lawson, 2009, p. 106). In either case, whether to preserve privilege (Lawson, 2009) or being personally affronted (Tinning, 2015), when particular arguments are shut out of discussion by academic gatekeeping, it "impacts PE's knowledge production, dissemination, and utilization" (Lawson, 2009, p. 106). We argue this is certainly the case with neoliberal-informed and health-oriented practices in physical education. Our position in this article is that debate is needed, especially in relation to normative practices, such as models.

Health-oriented models, such as SPARK-PE and HOPE, reflect a direct rearticulation of the purpose of physical education as a solution to health. To make this move would ignore extensive work in the field arguing that approaches to teaching focusing solely on health-based outcomes are exclusionary and damaging to students' perceptions of their bodies (e.g., Burrows, 2005; Burrows & McCormack, 2012; Gard, 2004; Powell & Fitzpatrick, 2013). Furthermore, these approaches tend to neglect other goals of physical education, for example, addressing issues of social justice (e.g., sexism, homophobia, racism, etc.). Therefore, the sole adoption of SPARK-PE or HOPE is problematic, not least because

they are framed as entire programs, which aim to rearticulate physical education around narrow, and highly contested, health outcomes. These approaches do not align with other more progressive approaches to the field and tend to reproduce highly contested modes of thinking about health and physical activity. They are also highly striated along neoliberal lines, framing physical education according to individualism and capitalist markets. Furthermore, these two models construct students in deficit terms and reinscribe narrow and highly striated notions of health and the body. We are not claiming that some activities cannot be adapted from these models. We are claiming, that the background, underlying philosophies, and funding structures of these models seem anathema to the commitments of education.

Physical educators might well choose to use models within their programs. Leaving aside health oriented programs, other models (e.g., cooperative learning, Sport Education, TPSR, etc.) might well enrich programs and shift practice in positive ways, if they are customized for the contexts and students for which they are employed. We contend, however, that models should not replace thoughtful, well-planned, and contextually based physical education programs that address a variety of curricular aims. If health oriented models become the new ‘dominant model’ (Locke, 1992) of physical education, they will inevitably reproduce the neoliberal striations that perpetuate social inequities rather than challenge them.

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### Author Queries

[AUQ1] The in-text citation "Dyson & Casey, 2009" is not in the reference list. Please correct the citation, add the reference to the list, or delete the citation.

[AUQ2] The in-text citation "Hastie & Casey, 2014" is not in the reference list. Please correct the citation, add the reference to the list, or delete the citation.

[AUQ3] The in-text citation "Hastie & Casey (2014, p. 422)" is not in the reference list. Please correct the citation, add the reference to the list, or delete the citation.

[AUQ4] The in-text citation "Moody, 1997" is not in the reference list. Please correct the citation, add the reference to the list, or delete the citation.

[AUQ5] The in-text citation "Tinning (1994, p. 16)" is not in the reference list. Please correct the citation, add the reference to the list, or delete the citation.

[AUQ6] Reference "Deleuze, Guattari, 1983" is not cited in the text. Please add an in-text citation or delete the reference.

[AUQ7] Reference "Deleuze, 1990" is not cited in the text. Please add an in-text citation or delete the reference.

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