

Volume 47, Number 1, 2015

# Runner:



*The Journal of the Health and Physical Education Council of The Alberta Teachers' Association*



**Orienteering:  
A Fun Way to Get  
Physically Active in an  
Outdoor Environment**

**Transforming Physical  
Education: PHE Canada  
Student Leadership  
Conference 2014**

**The Use of Eastern  
Philosophy to Human  
Movement to Promote  
Physical Literacy with  
Students**



## HPEC Mission Statement

The Health and Physical Education Council (HPEC), as a professional organization of teachers, advocates for quality health and physical education programs and provides opportunities for professional growth and development of its members. HPEC is committed to providing leadership in creating healthy active school communities.

## HPEC Vision Statement

Alberta teachers will provide quality instruction and programs in health and physical education to promote the development of healthy active lifestyles in students.

### The objectives of HPEC shall be to

- improve curriculum, instruction and assessment in health and physical education through increased knowledge, skills and understanding;
- develop, study and propose professional resources and responses to health and physical education issues;
- ensure teachers have access to meaningful professional development opportunities that meet their needs throughout all stages of their career;
- enhance the expertise of members by promoting an understanding of current research to inform professional practice;
- liaise with other organizations that seek to promote healthy active lifestyles within school communities;

- further the continuous development and evaluation of standards and guidelines within the profession for personnel, programs and facilities in health and physical education; and
- facilitate broad-based, skilful participation in the planning and implementation of effective, collaborative, ongoing professional development.

### HPEC believes that

- a well-delivered health and physical education curriculum supported by quality instruction can change health behaviours of children and youth in K–12;
- health and physical education play a valued and vital role in providing a quality, balanced education for all children and youth in Alberta schools;
- all students in all grades in Alberta schools should have the right and opportunity to experience sustained, vigorous physical activity through participation in quality daily physical education programs;
- wellness is an outcome of quality health and physical education programs that develop the knowledge, skills and attitudes to assist students to make appropriate choices to live active, healthy lives; and
- comprehensive school health is the framework for the delivery of quality health and physical education programs to promote and develop wellness in Alberta's children and youth.

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*Runner: The Journal of the Health and Physical Education Council of The Alberta Teachers' Association* is a professional journal for physical education teachers in Alberta. Authors are encouraged to submit articles of relevance in either a peer review or editorial review process. Topics may include, but are not limited to, personal explorations of significant classroom experiences; descriptions of innovative classroom and school practices; reviews or evaluations of instructional and curricular methods, programs or materials; discussions of trends, issues or policies; and scientific research.

Manuscripts on other themes will also be considered for publication and may be up to 2,500 words long. References to works cited should appear in full in a list at the end of the article using *The Chicago Manual of Style's* author-date system. Photographs, line drawings and diagrams are welcome.

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# Editor's Message

## Good at Everything, Great at Something (Maybe): The Importance of a Diverse Childhood Physical Literacy Experience

*Dwayne Sheehan*

People often ask me, "What sport did you play when you were young?" This question is asked with a presumption that all physical education teachers are elite-level athletes and that we are defined by a single activity. I certainly enjoyed playing sports as a kid, and that is why I went to the University of Calgary for a bachelor of physical education degree. But I was never an elite-level athlete who had the good fortune, skills or genetics to play at the university level or higher.

When I started high school in 1979, students were encouraged to play a variety of sports, and it was certainly possible to walk into a school tryout and battle for a position on the team. I loved playing football but left the bruising behind at the end of the season. I played hockey, badminton, wrestling, rugby, track and field, and whatever else was available. My school even had a cycling team. Today most high schools still have open tryouts, but the sports club teams and early specializations have changed the process. This editorial is not about

the evil club system. In fact, the club sports system is simply responding to a demand by parents and children. This message is about the importance of always encouraging parents to seek a wide variety of experiences for their children. This is especially true during the most critical years of development that occur prior to the adolescent growth spurt.

In the last issue of *Runner* (Volume 46, Number 2, 2014, pp 19–22), Red Deer Rebels general manager Brent Sutter expressed his opinion about rampant uber-specialization and wondered why the current generation of hockey players is not very athletic. Most Canadians think of hockey when it comes to specialization, because we all know those parents who allow their kids to play hockey every day of the year (while participating in almost nothing else). When I ask parents about their reason for doing this, the answer is always the same: "He or she loves hockey; it's all they want to do!" It's great that a child loves to play hockey (after all, we are Canadians), but I have never met a kid in my 25 years of teaching who wants to play only one sport. Children are naturally curious



*Dwayne Sheehan, professor of play.*

and capable of a variety of amazing skills. If parents provide them with a variety of physical activity experiences like snowshoeing, hiking, skiing, skateboarding, soccer, canoeing, martial arts, dance, gymnastics, swimming, tennis and ultimate, they will definitely find other things they like to do.

Let's face it, the chances of playing elite-level sports is slim at best. Those of you who have accomplished this should be proud. When it comes to the students you teach, the ultimate goal should be to provide them with a diverse and positive physical education experience that develops motor proficiency and self-confidence. The intention is that they will be intrinsically motivated to be active for life. Being good at everything is possible with a varied set of childhood physical activity experiences in school and the community. Being great at something is simply a bonus.

This journal is intended to be part of your personal lifelong learning professional development commitment. HPEC is always interested in knowing what you think and values your professional insights. If you are interested in submitting a guest editorial to this journal, please e-mail it to the editor, Dwayne Sheehan (dpsheehan@mtroyal.ca). As you can see from this submission, there is no need for fancy citations and references to current literature. Simply share your thoughts (in 500 words or less) about our profession and/or the field of health and physical education.

# President's Message

## Making a Difference Through Physical Education

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Sonia Sheehan



How do you make a difference? Physical education teachers make a difference in the lives of children and youth each and every day in schools. Physical education teachers have the power to turn students on to activity, to light a fire in students that engages them to be active and to provide a diverse range of physical activities to ensure that all students find something they enjoy and can pursue outside of school. Positive experiences in physical education at an early age can make a difference and can guide children along the path of being active for life.

I have the pleasure of working with K–4 students as they embark on their journey to become physi-

cally literate and physically active members of society. With each lesson I teach focusing on fundamental movement skills, I observe the children's increase in confidence to successfully participate in physical activities. With each activity that demonstrates that fitness can be fun, I see the children enjoying themselves while gaining health benefits. Through a diverse, well-planned and well-executed physical education program, I strongly believe that I am making a difference in students' lives.

Evidence shows that physical education teachers make a difference in the lives of children and youth in most schools; for example, students enter the gym with big smiles; students run down the hall to get to physical education class; students play games at recess that they learned in class; students are disappointed when a class is missed due to an assembly or special event; students are heard saying, "This is the best class ever" and extra-curricular activities have high participation levels. My favourite confirmation that I make a difference came in an unusual form. During class, I overheard students asking each other if they wanted to play running. This reminded me that the basic activity of running with friends, when presented in the right manner, can turn kids on to activity and make them come back for more.

I encourage HPEC members and health and physical education teachers in Alberta to contemplate how you make a difference in the lives of your students. A smile at the doorway, a high-five in the hallway, playing alongside students during class time, running an intramural program, coaching a sports team or spending a few extra minutes to just talk to a student are some of the simple things we do each and every day to make a difference. Thank you for making a difference.



# Ever Active Schools: An Update on the Healthy Active School Symposia

*Brian Torrance*

## 2013 Healthy Active School Symposia

Ever Active Schools enables knowledge exchange, communication and collaborative partnerships among the health, active living and education sectors. The Healthy Active School Symposia (HASS) events are a key piece of engagement and support to schools from across Alberta.

The purpose of HASS is to inspire, empower and engage student leadership in creating a healthy school community!

## Background

The HASS are events designed to provide Alberta school communities with the knowledge, skills and resources to enhance student wellness. HASS are a catalyst for sustained change within the participating school communities. The events focus on inspiring student leadership by developing the competencies needed to become engaged thinkers and ethical citizens with an entrepreneurial spirit, through a comprehensive school health approach. HASS empowers students to be active agents of change in building a





school community that enhances their learning and fosters their personal growth and well-being.

## 2013 Locations

The events were held in 11 communities across the province working alongside provincial and regional partners.

Calgary	High Level
Camrose	Medicine Hat
Edson	Morinville
Fort McMurray	Red Deer
Grande Prairie	Stony Plain
Grimshaw	

## Evaluations

The events involved 215 schools from 45 jurisdictions with 1,732 student and adult participants. Evaluation practices through the Alberta Centre for Active Living in 2013/14 allowed Ever Active Schools to better assess the changes in practice that occur following HASS. Participants were asked to complete evaluations immediately following the event and then again one and three months afterward. The findings showed sustained impact specific to priorities of comprehensive school health from the events and successful implementation of wellness action plans.

## Healthy School Action Plans

### Development

School health teams created healthy school action plans with clear steps to achievable goals. The healthy school action plans focused on implementing and enhancing

- healthy eating initiatives,
- physical activity opportunities and
- positive social environments.

### School Health Teams

- contributed to the development of their school's healthy school action plan,
- were confident in their ability to implement their healthy school action plan following HASS and
- intended to use the information and resources gained.

## Use

Intentions to improve healthy eating, physical activity and positive social environments were identified by most schools one month and three months following the HASS.

## Results

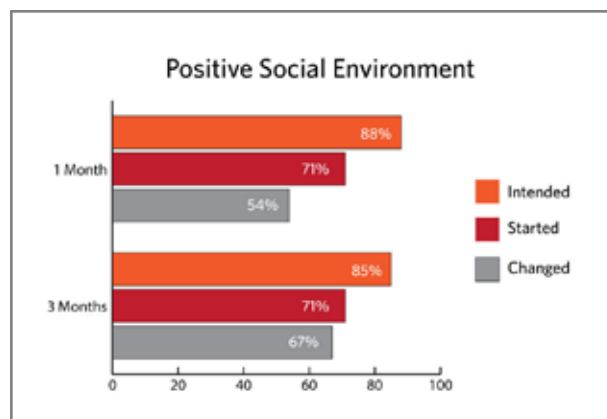
### Developing and Implementing Healthy School Action Plans

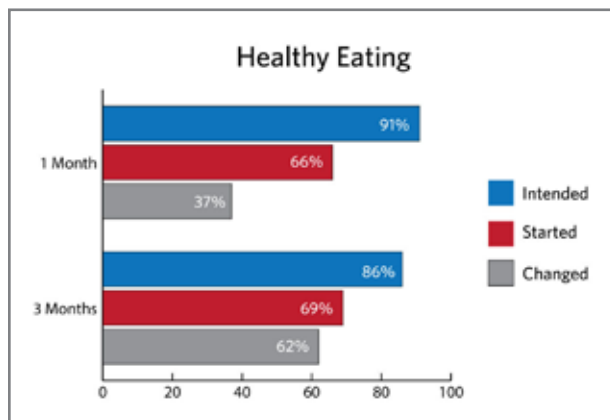
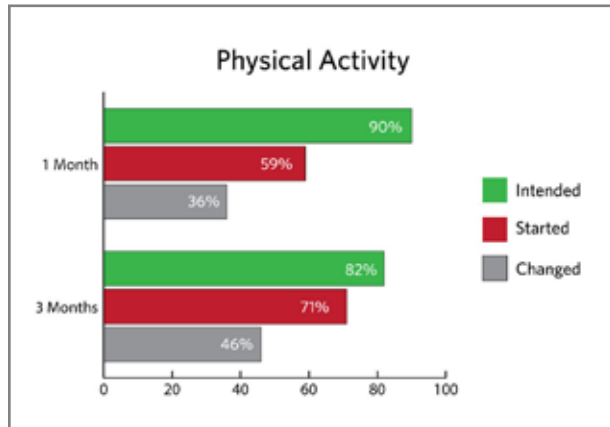
One of the main goals of the HASS events was to support schools in the development of their own healthy school action plan. The aim of the healthy school action plan is to empower student leadership in the creation of a healthy school community. Consistently across all 11 HASS locations, adults and adolescents agreed that HASS helped their school develop

- clear steps toward their action plan (adult = 89 per cent, adolescent = 97 per cent);
- an achievable action plan (adult = 91 per cent, adolescent = 96 per cent); and
- a useful action plan (adult = 91 per cent, adolescent = 98 per cent).

### Change in School Communities Following HASS

Tables below show the implementation of the wellness action plans that are created at the HASS events. Positive changes were seen in the three comprehensive school health priority areas of positive social environments, physical activity and healthy eating.





## Summary

Health and education are closely linked (Hertzman and Power 2005). In order for children and youth to achieve their optimal potential as learners, their physical, mental, intellectual and emotional health must not be compromised.

The evaluation shows the success of HASS toward sharing health and wellness knowledge and skills with Alberta school communities. The evaluation findings identify that schools learned about comprehensive school health at the HASS events. In the months

following HASS, schools reported that their school action plans were used to develop and carry out new school health and wellness initiatives and changing practice at the school level.

HASS achieved goals of “inspiring, empowering and engaging student leadership in creating a healthy school community,” which can be supported by the new health initiatives, the development of confident student leaders and improvements to skill development reported by the HASS participants.

## Acknowledgements

Ever Active Schools is a special project of the Health and Physical Education Council of the Alberta Teachers’ Association. Ever Active Schools is grateful for the ongoing Government of Alberta support and funding from Alberta Health, Alberta Education, and Culture and Tourism.

How do we ensure the child born this year can adapt to the many changes ahead?

As important, how do we help children discover and pursue their passions? How do we help them make successful transitions to adulthood? And how do we help them become lifelong learners who contribute to healthy, inclusive communities and thriving economies?

*Inspiring Education, A Dialogue with Albertans*, April 2010

Appreciation goes to all provincial and regional partners who support the events across the province.

## Reference

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# Peer-Reviewed Feature Article

## Orienteering: A Fun Way to Get Physically Active in an Outdoor Environment

Nathan Hall, Brent Bradford and Clive Hickson

### Using the Outdoors

The recent *Report Card on the Physical Activity of Children and Youth: Is Canada in the Running?* presented by Active Healthy Kids Canada (2014) indicates that 95 per cent of adults in Canada report local availability of parks and outdoor spaces. Alberta has no lack of parks and outdoor areas. In fact, with the exception of Nunavut, there are more hectares of national parkland in Alberta than any other province or territory (Parks Canada 2009). These outdoor areas present us with an overabundance of possibilities in regards to ways in which we can be physically active, and many of us take full advantage of this. However, the Canadian Fitness and Lifestyle Research Institute (CFLRI) has indicated that only a quarter to one-third of the Canadian population actually report regular use of these spaces (CFLRI 2011).

This finding could be attributed to many possible factors, such as safety concerns, lack of time (for both youth and parents to provide supervision), weather and a preference for indoor screen-based activities (ParticipACTION 2013). Nevertheless, if we want to see children and youth realize the physical activity potential of these spaces, we need to help them identify these parks and recreational facilities as fun and exciting environments where they can comfortably engage in physical activity. One possible method to introduce children and youth to physical activity in these spaces would be through the sport of orienteering.

### What Is Orienteering?

Orienteering is a sanctioned sport that requires participants to navigate through a specific environment.

This is typically done with the aid of a map and compass. Normally, the object of orienteering is to use a defined form of movement (most commonly running, but other forms of movement such as walking, biking, skiing, canoeing and so on are all possible) to locate a series of points (referred to as control points) and reach a designated finish line in the shortest amount

#### Brief History of Orienteering

- The term *orienteering* was first coined by the Swedish military near the end of the 19th century.<sup>1</sup>
- This sport was originally endorsed as a means to get youth interested in track and running activities.<sup>1</sup>
- The first international competition took place between Sweden and Norway in 1932.<sup>1</sup>
- The Canadian Orienteering Federation was founded in 1967.<sup>2</sup>
- The first Canadian National Orienteering Championship was held at Gatineau Park in Ottawa on August 10, 1968.<sup>2</sup>
- The Alberta Orienteering Association (AOA) was incorporated in Edmonton on July 26, 1974.<sup>3</sup>
- Today, the International Orienteering Federation has over 70 member countries and is recognized by the International Olympic Committee.<sup>2</sup>

1. International Orienteering Federation, retrieved October 31, 2013.

2. Canadian Orienteering Federation, retrieved October 31, 2013.

3. Alberta Orienteering Association, retrieved August 4, 2014.



of time possible (McNeill 2014). In a school setting, orienteering experiences can easily be modified to suit the developmental needs of the participants. For example, the form of movement can be altered according to the participants, group composition can be chosen to ensure heterogeneous balance and the recording of finishing times might not be required.

## Why Orienteering?

There are several reasons why orienteering is a great way to get children and youth to be active in the parks and outdoor environments that are readily available to them. First, children and youth will need to be physically active when they are completing an orienteering activity in any environment. Having been physically active in this environment once, participants in the activity are more likely to view the environment as a space where they can have fun and be physically active in the future (Ferguson and Turbyfill 2013). Orienteering is also great because it is an excellent

### Benefits of Orienteering for Children and Youth

- Gets them physically active
- Introduces participants to outdoor recreational environments and helps increase comfort and familiarity with these facilities
- Encourages problem solving (for example, figuring out *control point* locations and deciding the best route to complete the activity)
- Promotes the development of teamwork and leadership skills
- Easily adaptable for all developmental levels and provides opportunities for success
- Requires participants to use a map and learn to navigate
- Can help to build self-confidence
- Can make other physical activities more enjoyable to those who do not particularly like them
- Provides adventure because it offers participants a sense of freedom, consequences and decision making
- Fun!

way for people to familiarize themselves with a new space. Children, youth and people in general are not very likely to make full use of a particular space if they are not aware of all the things that space has to offer. By having children and youth explore an area through orienteering, you can help them to discover all of the potential places where they can be active within a specific environment; for example, playgrounds, trails, splash pads, sports and game facilities.

Many people enjoy such physical activities as running, hiking, skiing, snowshoeing and biking through outdoor spaces. However, some people do not find these activities, on their own, to be enjoyable. All of these activities could be included as part of an orienteering session, but instead of being activities onto themselves, they would now become just a means of movement between control points. This can be beneficial for children and youth. For example, those who sometimes avoid or complain about the merits of certain physical activities (for example, hiking, running and skiing) might be more willing to partake in these activities when they are part of an orienteering experience (Ferguson and Turbyfill 2013). Thus, orienteering can benefit the health of children and youth and get them physically active without even realizing it.

Orienteering is also a great activity because it is a group-based physical activity. Students must work together to complete the task. Therefore, this activity can foster positive social behaviours such as group cohesion, teamwork and respect for others (Stidder and Haasner 2007). To make the activity safer, there is no problem with having children or youth complete an orienteering activity with an adult. All members of a group must work and complete the task together and thus all will receive the benefits associated with the activity.

## Including Orienteering in Physical Education

One of the best ways for us to introduce children and youth to physical activity in parks and other outdoor environments is through school-based physical education programs. Orienteering is well suited to these programs because it fits nicely into Alberta's

### Positive Learning Outcomes of Orienteering

- Active living
- Cooperation
- Functional fitness
- Goal setting (personal and group)
- Leadership
- Motor-skill development
- Safety
- Understanding of health benefits

Physical Education Program of Studies, where Alternative Environments is listed as one of five dimensions that must be covered.

Orienteering can also be easily related to the general learning outcomes that are listed in the Alberta Physical Education Program of Studies. Activity is an inherent part of any sport and orienteering is no exception. To complete an orienteering lesson, children must execute some form of locomotor skill (for example, walking, biking, running, skiing and snowshoeing) to move from one location to another. Therefore, although participants may not be thinking that much about it, they will be practising a skill while completing this task. Furthermore, they will develop such movement-

related skills as spatial awareness through learning how objects relate to one another (for example, distance, angles and time).

The most appropriate connection between orienteering and the Benefits Health general outcome is related to the idea of functional fitness. To be able to explore the plethora of natural landscapes and outdoor environments that we have at our fingertips in Alberta, a certain level of physical fitness and knowledge of how to navigate these spaces is required. Through orienteering activities, students are provided with the opportunity to increase their understanding of what is required to safely be active in these types of environments.

With regards to the Do it Daily for Life general outcome, safety is particularly emphasized as a curriculum organizer. During an orienteering activity, children and youth are practising skills that will help them to be more comfortable with their surroundings and learn how to safely and effectively navigate their way through any environment (for example, avoid possible hazards, find important locations and so on).

The general outcome that orienteering might be most easily identifiable with is Cooperation. All of the curriculum organizers that are listed under Cooperation can have a major role in orienteering activities. Orienteering activities should be completed in partners





or small groups. Therefore, teamwork and communication between team members are involved and required for successful completion of these activities. Furthermore, because each group will only have one map or compass, one individual within the group is likely to be leading the others based on the directions they are following. Thus, communication is once again required between the person with the directions and the rest of the group, and leadership skills are developed. Finally, there are many rules involved in orienteering, and because of the large space that is used in this activity it is difficult for a teacher to keep an eye on all students at once. Consequently, fair play should be emphasized and developed while participating in an orienteering lesson.

## Summary

Trying to get children and youth to make full use of the outdoor spaces available to them is not easy. However, introducing them to novel activities in these environments (for example, orienteering) can be extremely beneficial. Stepping beyond traditional sports and physical activity environments is one possible method for increasing the number of children and youth who are physically active and will continue to live healthy active lifestyles as adults. Not only is orienteering a lifelong sport that can be enjoyed by those of all ages, it is a wonderful way to introduce children and youth to the fun of being physically active in outdoor environments. It is an activity that can easily be added to a physical education program and one that has plenty of positive physical, social and cognitive learning outcomes.

## Resources for Orienteering

- Orienteering for schools  
[www.o4schools.com](http://www.o4schools.com)
- Orienteering for the young  
<http://orienteeringusa.org/youth-leaders/materials/o-young>

## Provincial, National and International Organizations

- The Alberta Orienteering Association (AOA)  
[www.orienteeringalberta.ca](http://www.orienteeringalberta.ca)
- Canadian Orienteering Federation  
[www.orienteering.ca](http://www.orienteering.ca)
- International Orienteering Federation  
[www.orienteering.org](http://www.orienteering.org)

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Editor's note: These authors also contributed a second article in this journal with a step-by-step description of how to incorporate orienteering into a classroom setting.



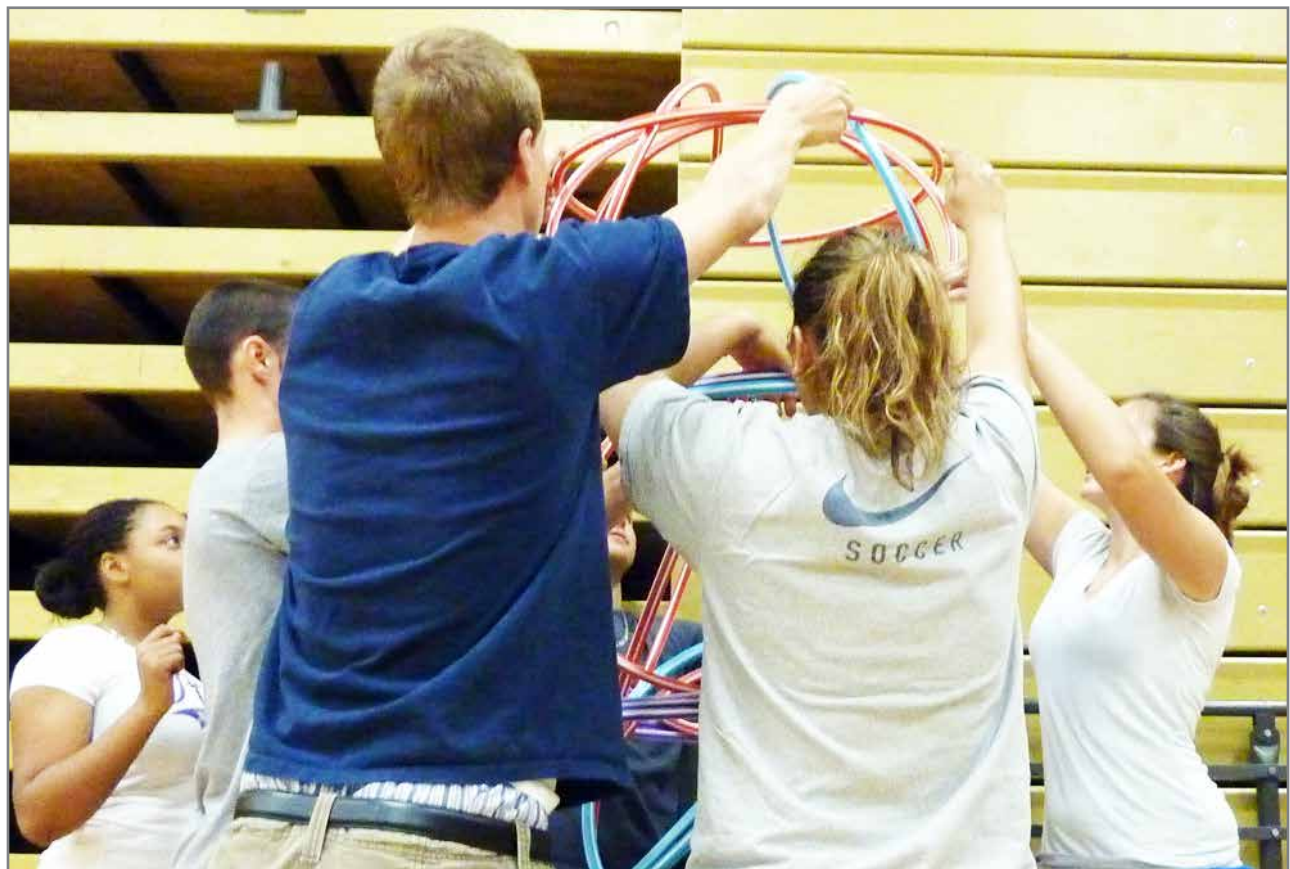
# Common Interest Articles

## Professional Development in Physical Education

*Chris Shaw*

To maximize students' learning and enjoyment in physical education (PE), teachers need professional development (PD). Armour, Makopoulou and Chambers (2012) stress that PE teachers should be supported by continued professional development (CPD) that facilitates growth across learning contexts. In a study by Armour and Duncombe (2004, 17), three primary teachers provided fascinating insights into their requirements of effective CPD: "the need for teacher

learning to be closely linked to practice (Rebecca); the need for school-based CPD with pupils (Peter); and the need for CPD providers to be realistic (Charles)." Further research suggests that effective PD is "school-based, active, collaborative, progressive, focused closely on pupils' learning" (National Partnership for Excellence and Accountability in Teaching 1998, as cited in Armour and Duncombe 2004). Therefore, the optimal mix of CPD required will vary from teacher



to teacher (Armour and Duncombe 2004). Thus, effective PD must be realistic and student centred, teacher driven and progressive, reflective and collaborative, and facilitated by an expert. These areas will be discussed throughout this paper.

A realistic, student-centred learning environment is supported by Armour, Makopoulou and Chambers (2012) as a situated perspective on learning, where learning takes place in multiple contexts and situations. This provides the “best chance for success; every component must be contextually sculpted by those generating innovations along with the participants” (Faucette et al 2002, 304). In essence, the PD facilitator, along with the teacher, would construct the PD session within the context of the teacher’s environment. This supports the constructivist-learning theory which “emphasizes a person’s active involvement in personal learning and suggests that learning will be more effective when it is active, interactive and authentic” (Armour and Duncombe 2004, 148). Preservice teachers voice the importance of realistic learning environments as well by the “need for more practicums and school-teaching experiences, in which opportunities were provided to teach PE. A number of respondents suggested that if time in physical education teacher education (PETE) remained limited, courses would be improved if time spent in theory lessons was reduced and practical exposure increased” (Morgan and Bourke 2005, 11). Hands-on learning and participation (Sherman 2008) are significant contributors to teacher professional development in PE and are viewed as essential components to their learning.

If teachers are in control of their progressive learning experience, the learning is more likely to be sustained, meaningful and comfortable. Armour, Makopoulou and Chambers (2012) and Faucette et al (2002) state that teacher learning will occur when teachers provide input into their own CPD, thus making it a more meaningful and enjoyable experience. With more meaningful learning experiences, teachers are more likely to develop a level of competence and confidence that will lead to sustained teacher change (Faucette et al 2002). “Although a wide range of learning opportunities was made available through the

programme in different content areas (breadth of provision), teachers reported that there were insufficient opportunities for them to pursue their learning in areas of interest (depth of provision)” (Armour, Makopoulou and Chambers 2012, 72). Thus, if learning progression is the goal, PD organizers and providers must listen to teachers’ needs and synchronize the experience with their needs over time.

The providers or mentors of a PD program play a vital role in facilitating the learning experience of teachers. Armour and Yelling (2007, 195) state, “professional development providers would need to tread a careful line, simultaneously being leaders (providing expert input, helping teachers to work together) and followers (supporting the specific learning needs of PLCs (Professional Learning Communities) as identified by them.” PD facilitators must provide relevant, respected knowledge in the field of learning of the teachers (Sherman 2008), and they must utilize flexible enthusiastic leadership (Morgan and Bourke 2005). These mentors must produce expertise to support teachers when required (Armour and Yelling 2007) through discussion, modelling (Faucette et al 2002) and observations. Thus, PD facilitators play an essential role in guiding the learning and reflection of the teachers toward their goals.

An essential component to being a great teacher is reflection. Tsangaridou (2005) found that PE primary school teachers found reflection a necessity in teaching. Through reflection, teachers in the current study showed improvements in making changes across lessons to make instruction more meaningful to students’ learning. As contextual knowledge progressively increased in the area of PE, the teachers showed improvements in the reflective process in the interactive and proactive phases of teaching (Tsangaridou 2005). The reflective process also allowed teachers to simultaneously adapt lessons and question students more effectively to allow a more substantial learning experience for students. “From the perspectives of these teachers, PE-CPD opportunities could only be meaningful if they allowed teachers to develop and further expand knowledge and understanding that inform—and crucially are being informed—by their practices” (Armour, Makopoulou and Chambers 2012,

71). Thus, the reflective process is vital in the teaching of PE as it is in all other subject areas.

The last and most common factor of effective PD in PE is collaboration. The challenge for professional developers and teachers is to create and engage in flexible and fluid learning opportunities that are framed around capacity building for learning and becoming a learner over time (Armour, Makopoulou and Chambers 2012). "In addition, the growth of situated learning theories has the potential to link theory and practice in ways that can extend the professional field of PE beyond where it is and where we believe it can be which, in turn, provides a focus for reflection and reflective practice. Finally, learning in communities of practice seems to offer the potential for the development of teachers as learners who can learn in and through practice, in addition to drawing upon external knowledge and developing it as required" (2012, 74–75). Duncombe and Armour (2004) illustrate that collaborative professional learning (CPL) can be defined as "any occasion where a teacher works with or talks to another teacher to improve their own or others' understanding of any pedagogical issue" (p 144). CPL can occur in numerous scenarios, such as (a) mentoring and interacting with colleagues; (b) peer coaching; (c) critical friends; (d) collegiality; and (e) a whole range of activities such as observation, working on tasks together, sharing ideas or discussing the implementation of resources (Duncombe and Armour 2004). A simple meaningful discussion with friends and colleagues is often overlooked as an effective learning opportunity. Numerous studies have also demonstrated that on-site ongoing peer modelling and support, informal network discussions and on-site support by a PE specialist are all valued sources of teacher collaboration and learning that lead to school improvement (Armour and Duncombe 2004; Armour and Yelling 2007; Duncombe and Armour 2004; Faucette et al 2002; Sherman, Tran and Alves 2010). If teachers' collaborative professional learning were to drive CPD provision, there may be the potential to generate further types of knowledge in physical education (Armour and Yelling 2004).

The result of the above recommendations for PD in PE could lead to enhanced teacher learning and

improved achievement by students. Some of the immediate and long-term benefits to the above recommendations include consistently delivered DAPE (Sherman, Tran and Alves 2010), increased confidence to teach PE (Faucette et al 2002), improvements in curriculum design and the activity of students (Sherman 2008) and changes to teachers' experiences and attitudes toward PE (Sherman, Tran and Alves 2010). All of these are positive steps toward the development of improvements in PD in PE.

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# Fear of the Unknown: Dealing with Disabilities in an Inclusive Physical Education Class

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*Brian Kooiman*

*Fear is a darkroom where negatives develop.*

—Usman B Asif

Teachers often feel a twinge of fear when they encounter or even think about a student with a disability. This fear of the unknown may not resolve itself any time soon. In a recent study, only half of undergraduate students showed complete social acceptance of students with disabilities (Kowalska and Winnicka 2013). Disability is defined as anything that puts one at a disadvantage.

When we consider the inclusion of students with special needs in a physical education class, the disability often applies to more than the student with the disability. Traditionally, teachers have not embraced students with special needs (Campbell, Gilmore and Cuskelly 2003; Southern 2010). Many teachers feel that they lack the training (Campbell, Gilmore and Cuskelly 2003) and that the rest of the class will be negatively affected (Cairns and McClatchey 2013).

This kind of thinking puts teachers at a disadvantage (Cairns and McClatchey 2013) and compromises their ability to help students learn. For teachers to overcome their fear of students with disabilities, they must understand them better (Taylor and Ringlaben 2012), which will result in greater success for all students.

One way to prepare the classroom for success is to use student-first language, which focuses on the student and not on the disability. In this way, special needs students are normalized before they are identified by their medical condition (Titchkosky 2001). Titchkosky stresses that teachers must focus on the person first to deny disability actuality in culture and society (see Figure 1). Teachers must build on this perspective to perpetuate a climate of inclusiveness

in classrooms. Teacher preparation and professional development that combine exposure to students with disabilities with relevant instruction on teaching those students would help change the fear to understanding and acceptance (Campbell, Gilmore and Cuskelly 2003; Taylor and Ringlaben 2012). Training programs targeted toward improved understanding, creating a positive school climate and increasing success for students with disabilities are needed (Horton 2013).

Another way to change the focus from fear to inclusion is to redefine the model for human disability from a physical/medical model to a social/environmental model. The physical/medical model focuses on the student's impairment as the problem, whereas a social/environmental model identifies the problem as being an issue of social understanding or environmental barriers. When educators use the physical/medical model, the student is expected to change while the social/environmental model requires changes in the social/environment setting to allow access for students with disabilities (see Figure 1). Societal and environmental barriers conferred on students with disabilities can be physical, attitudinal or social (Farkas et al 2012). Redefining student disabilities as the interaction between the environment and the impairment can help to refocus on the real problem. Such limitations as scarcity of inclusive educational programs, lack of physical activity choices suited to students with disabilities, inadequate equipment and historic prejudices must be removed to allow all students an equal opportunity to succeed (Farkas et al 2012). This simple change of models from physical/medical to social/environmental can help to ameliorate the misconceptions that lead to a fear of students with disabilities, which can help these students improve their self-image and self-confidence (Brittain 2012).

## Figure 1. Models of Inclusion in Physical Education

### Physical Model

*Students must change to access PE.*



### Social and Environmental Model

*Equipment, rules and expectations change so students can access PE.*



The educational system has also been slow to change. In Canada, students with disabilities were seen as unsuitable for education (Bennett, Dworet and Weber 2008). Only recently have they been offered inclusive education. In the mid-1800s, Canadian society did not acknowledge the needs of students with disabilities. By the late 1800s, society could no longer ignore this growing population, so segregated special schools were created for some but not all students with disabilities. Then in the 1900s, students with special needs were allowed on the same campus as their typically developed peers but were confined to segregated classrooms. Near the end of the 20th century, Canadian classrooms began the move toward full inclusion of students with disabilities (Southern 2010). In the early 1980s, the Government of Canada tasked the provinces with creating equal opportunities for all students regardless of their abilities. Since that time social justice has been equated with equal access for all students, although the implementation of inclusion can be a struggle for Canada's education leaders and school systems (Ryan 2006).

In the developed world, the treatment of people with disabilities has slightly improved. In the United Kingdom, 67 per cent of the population feel uncomfortable talking to a person with a disability, 24 per cent

of people with a disability indicate that other people expect less from them, 36 per cent of people feel persons with a disability are less productive and 85 per cent of British people feel persons with disabilities are discriminated against (Aiden and McCarthy 2014). The recent emphasis on inclusion in education seems to be making a difference as persons with a disability in the United Kingdom rated educators at 2 per cent and the general public at 29 per cent when asked whose opinions they would most like to see change (Aiden and McCarthy 2014). Because inclusion has been the model for just the past few decades, only the most recent generation of adults has experienced it and developed the change in perception that resulted in acceptance and understanding. People learn about each other from each other. A parent of two children with disabilities makes the following poignant statement: "Let's put away the fear that surrounds disability. Fear makes us turn away. Let's embrace the person. Why are we so afraid of disability (Stumbo 2014)?"

The Canadian provinces have their own objectives, standards or outcomes for school-based physical education programs. Alberta states that K-12 PE programs aspire to help students become knowledgeable, develop physical skills and foster lifelong attitudes that result in healthy active lifestyles (Alberta Learning 2000). This is accomplished by reaching interconnected outcomes that are related to each other. The four broad outcomes are the acquisition of skill or participation in physical activities, understanding the health benefits of physical activity, the value of positive interactions with other people and the self-regulation necessary for responsible lifelong movement choices (Alberta Learning 2000). To achieve these outcomes, all students must be exposed to a diverse instructional program that allows all students to participate. Educators must take continued steps to eliminate the fear of the unknown in classrooms. We need to allow typically developing students to interact with students with disabilities. We can help to change fear into understanding and create an inclusive environment that enables students to engage in the curriculum equally if we use people-first language and a model that identifies the environmental and social barriers as the problem and not the student. Changing our

thinking may not be the most important step toward inclusion because there are many logistical problems that must be addressed, but it is the first step in the move toward effective inclusion of students with disabilities in physical education.

Marie Curie, who won a Nobel Prize in physics and chemistry for her groundbreaking work with radiation that ultimately led to her death, is credited with the following quote “Nothing in life is to be feared. It is only to be understood.” Educators who work with students with disabilities and typically developing peers must take the time to ensure that understanding permeates instruction and that inclusion becomes the norm and not the exception. As this happens students will grow to become adults who will take what they have learned into the world. This will allow for a better informed populace that functions free from a fear of people who are different. People with disabilities are not disabled but differently abled. Teachers can lead the way in the fight for access to the physical education curriculum for all students by using student-first language and providing instruction that removes social and environmental barriers to inclusion. In this way educators can continue to lead the way and help to reveal the tremendous worth and contributions of the world’s largest minority, persons with a disability.

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# Sport Academies in Alberta Schools

*Daniel Balderson*

The delivery of amateur sport across Canada has changed over the past 10 years (Way, Repp and Brennan 2010). Prior to this change, sport instruction and competition were delivered by either community sport organizations (such as, minor hockey association) or school-based sport organizations (such as ASAA). Today sport instruction and competition, traditionally offered by the community, have found their way into schools during typical school hours in the form of sport academies (also called sport schools). The rise in school-based sport academies is changing the landscape of athlete development in our province.

Sports academies are not unique to Alberta. Eighty-two per cent of German athletes who won medals from 2001 to 2004 attended sport schools (Radtko and Coalter 2007). About 10 per cent of Canada's Olympic team had or were attending a sport school (Way, Repp and Brennan 2010). All provinces in Canada offer some sort of school sports academy, although they are much more popular in certain areas (Balderson 2011; Paradis 2010). As I work with pre-service physical education teachers, many are interested in teaching at schools that offer sports academies.

To gain a better understanding of what is going on in Alberta regarding sport academies, we started collecting information in multiple ways. First, a comprehensive website analysis was performed on schools in each school district in the province. This was followed by phone calls to verify the existence of the academy and to clarify information on their website. Finally, various academies were surveyed in the spring of 2011 to determine how the academy began, how it was funded and how the students received course credit. Twenty academy directors and coaches responded to the survey.

In Alberta alone, over 90 schools offer a sports academy with 120 different programs (some schools offer more than one sport) (Balderson 2012). This involves about 2,000 Alberta students. Almost half of



these academies are in rural communities. In comparison, 129 schools offer sport academies in British Columbia, 5 in Saskatchewan and 11 in Manitoba (Balderson 2011). In 2005, 2 sport academies were operating in Alberta: St Francis, in Edmonton, and Warner, in Southern Alberta.

Academies come in all shapes and sizes with emphasis in different areas. Of the 120 academies in Alberta, 25 are elite-level programs, and the rest are based on skill development for various skill levels. The elite programs typically draw athletes internationally from across Canada and all parts of Alberta. The tuition fees range from \$15,000 to \$30,000 per year, which includes room, board and travel. These teams play highly competitive schedules and a very high percentage of the athletes go on to the next level.

Skill-development programs have a much lower tuition that usually reflects the cost of facility rental. Students who attend these types of academies are usually local, and the emphasis is on skill development. Most of these programs do not include an organized team; they support the teams that the students are already playing on. Some junior high and middle schools offer option classes in a specific sport. They have not been included in this analysis, although many are not that different from some of the academies.



Hockey is by far the most popular program offered in Alberta schools. Sixty-seven programs currently operate. This is likely due to the interest for more ice time at a critical time in their development. It also could be related to Hockey Canada's support and guidance in the development of school academies (Way, Repp and Brennan 2010). Other sports include soccer, baseball, figure skating, dance, golf and lacrosse.

Schools may start a sports academy to increase enrolment, compete for pupils (Alberta Education 2006; Ohler 2006), retain and engage students (keep grades up to participate), and engage teachers. A common theme found in the development of most academies is local expertise, which included teachers who had backgrounds in particular sports. Another common theme was the availability of local facilities that were not hard to access at reasonable rates.

Students attend academies because they are looking to play at the next level, seeking an edge during an important stage of their career, and looking for better coaching, better competition and a flexible schedule, where days missed due to practice or competition are accommodated.

Most academies typically involve students taking core classes in the morning and then sport-specific classes and practise in the afternoon. Course credit through a variety of CTS (career and technological studies), physical education and other classes allow students to progress toward graduation (Alberta Learning 2003). Some schools do not offer any credit for participation in the sport academy. In some situations, students may receive up to one-third of their high school credits from academy participation. Seventy per cent of programs count academy activities to satisfy the requirements for the mandatory Physical Education 10 course.

The trend for more school-based sport academies in Alberta will likely continue. One must understand that all academies are not the same and offer many different approaches to athlete development. Academies are also primarily started at the grassroots level (for example, conversations in a staff room), which likely increases their popularity and local appeal. In the future it may be advantageous for provincial organizations (Alberta Education, ASAA, Provincial Sport)

to develop a stronger relationship with sport academies and offer opportunities for communication and support. This trend also changes the day in the life of a typical teacher (many of those involved have physical education backgrounds). Business, recruiting and financial tasks are added to a teacher's job description. As mentioned before, many preservice teachers are now interested in gaining employment with a school or school district that offers sports academies. What implications does this have for teacher education programs in preparing students successfully for a teaching career? What implications does this have for those interested in quality physical education programming? What implications does this have for our developing athletes? I think it is a good conversation to have.

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## Additional Information and Videos Highlighting Specific Academies

[http://youtu.be/9\\_2gG5qnVgk?hd=1](http://youtu.be/9_2gG5qnVgk?hd=1) (Hanna Hockey Academy)

<http://youtu.be/oAtm8egt8uA?hd=1> (Vauxhall Academy of Baseball)

[www.youtube.com/watch?v=5yngyALNnTk](http://www.youtube.com/watch?v=5yngyALNnTk) (Westwind Equine Academy)

[www.albertasportsacademies.com](http://www.albertasportsacademies.com)

# The Most Important Person: Why Youth Coaches and Teachers Need to Step Up in Concussion Prevention

*Ken King*

Concussions have been at the forefront of society for some time now as more and more professional athletes suffer from them (for example, Sydney Crosby, George Parros and a large cohort of the NFL). However, the publication of concussions to high profile athletes has also raised a lot of questions about what is being done to protect youth from similar injury.

The problem now is not that people aren't talking about it, but rather who is doing something about it. The programs are out there when it comes to awareness, prevention, return to play and so on. We all have access to them through our sport-governing body, school or, at the very least, the Internet. So why is it then that when that child gets hit and doesn't get up immediately, so often nobody around knows how to handle the situation correctly? What about when the

initial injury was handled correctly, yet so many youth were sent back into competition or training before the appropriate return-to-play procedures were followed?

In many youth sport scenarios at least two parties are responsible for the athlete's well-being in practice and competition: the parent(s) and the coach. Parents are often a great tool in recognizing a problem, as they know the child the best and can easily identify change in behaviour or mood. However, parents vary in how they deal with injury. They may exist on one end of the continuum where they want to protect their child all the time, or the other end where they want their child to excel in the sport and are concerned that sitting out will cause opportunities to be missed. Therefore, the coach often must remain unbiased in the protection of the player.



The role of the coach must be acknowledged as a very broad one. A youth coach will often have many responsibilities outside of just coaching the athletes. But many coaches agree that the primary focus of a coach is the well-being of their athletes. So why then, do youth coaches continually return athletes to play after sustaining a blow to the head? Where is the accountability of coaches to protect their players' safety? Coaches must do everything in their power to protect each athlete from the effects of multiple blows to the head.

Chronic traumatic encephalopathy (CTE) is a progressive degenerative disease of the brain found in athletes (and others) with a history of repetitive brain trauma, including symptomatic concussions and asymptomatic subconcussive hits to the head. These concussions and subconcussive hits also have short- and long-term effects. These include, but are not limited to, memory loss, confusion, impaired judgment, impulse-control problems, aggression, depression and, eventually, progressive dementia. Additionally, these issues can arise in days, months or even years following a concussion (McKee et al 2009).

These issues are not only being seen in older athletes later on in life. The Center for the Study of Traumatic Encephalopathy, at Boston University, has completed a case study on an 18-year-old ex-football player's brain that exhibited signs of CTE previously seen only in older athletes, not to mention that the above symptoms have been seen in athletes of all ages after injury. In addition, the concept of asymptomatic subconcussive hits to the head must be understood and prevented. These smaller hits may not result in a concussion immediately and may not even present any symptoms. However, if and when a concussion occurs, all those subconcussive hits will contribute to the severity of the concussion and the damage after the fact (Breedlove et al 2012; Talavage et al 2010).

A teacher or coach can change a couple of simple things when handling a concussion to drastically change the outcome:

- Ensure the athlete consults with a medical doctor.
- Follow all return-to-play procedures to completion every time.
- Work with parents and teachers to assist the athlete during recovery, not just physical activity but with things like video games, homework, classwork and so on.
- Don't rush athletes back, winning is not more important.

This article provides groundbreaking news about what concussions are, how they affect a person and how they happen. I am not a doctor, and I am not attempting to enlighten readers about concussions themselves. The reader can do that. I am a coach, a researcher and a member of the sport community. More coaches, across all sports, must be more accountable to their athletes. The best and worst players must be protected to the same degree, and the short- and long-term safety of each athlete must be put ahead of individual, team or personal goals.

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# Transforming Physical Education: PHE Canada Student Leadership Conference 2014

*Shannon Kell, Kim Bates, Ben Koch, Jennifer Le, Megan Rainford, Jacob Verhesen and Mattea Smith*

The 11th annual Student Leadership Conference (SLC) of Physical and Health Education Canada (PHE Canada) took place September 17–21, 2014, at Cedar Ridge Camp, Bancroft, Ont. The annual conference invites postsecondary students in physical education, health or sport-related fields from across Canada to take part in an inspiring, experiential and educational program. These aspiring leaders hear from keynote speakers and engage in a variety of leadership sessions, interspersed with difficult, hands-on, outdoor, experiential activities throughout the week. The program is designed to ignite mental, emotional, physical and spiritual challenges, both individually and collectively.

Mentors who demonstrate a passion for health and well-being and are recognized leaders in their fields join the students on their journey. They challenge students to grow and engage in uncomfortable

conversations while nurturing leadership values and characteristics. Throughout the week, students are encouraged to challenge their limitations, understand the value of traditional and nontraditional partnerships, think outside the box and put leadership theory into practice.

Themes from this year's conference included inclusion and First Nations' ways of knowing. Students and mentors were challenged to question what currently takes place in our fields of study and consider how we might be more inclusive in terms of culture, race, sexual orientation, gender and ability. This year's conference highlighted special presentations from Colin Higgs, professor emeritus at Memorial University, in Newfoundland, and Joannie Halas, professor in the Faculty of Kinesiology and Recreation Management, at the University of Manitoba, and recipient of 2013 PHE Canada Research Council's R Tait McKenzie Award.



*Polar bear swim off the dock at 7:30 AM on a brisk and frosty morning.*



Five outstanding student leaders from across Alberta attended the conference:



**Kim Bates**  
**BA/BEd Kinesiology/  
Physical Education—Minor  
in Mathematics Education,  
University of Lethbridge**

On September 17, 55 student leaders and I arrived at the Ottawa airport, unaware of how our understanding of leadership would soon change. Throughout the next four days, we participated in a variety of leadership tasks that helped us learn more about our leadership strengths and areas for improvement.

One of the main take-home messages was recognizing that everyone is a leader. Prior to this conference, I often tried to do it all. I learned that it is more important to lead by standing beside those you work with rather than in front. This also allows everyone to view the task or activity from a different perspective as good leaders do not always need to be at the forefront of the group but can lead by supporting those they work with. One speaker, Heather McRae, mentioned that “good intentions are not enough. An open heart and open mind are essential.” Good leaders must be receptive to change and understand that everyone has something to contribute. This creates stronger workforces and collaborative learning environments and helps the group achieve to their greatest potential.

Keeping with one of the main conference themes—inclusion—we discussed that inclusion applies to people of varying race, gender, sexual orientation, religion, ethnicity, culture and ability. We also discussed that the golden rule does not always apply, because we do not understand what it is like to feel the way they may feel. Instead of treating others the way we want to be treated, we should treat others the way they want to be treated. As a future teacher I must recognize that many of my future students may feel as though they are a minority, and they must be assured that they are included in the classroom and that they have a voice.

I encourage anyone interested in physical and health education to attend this conference. It is extremely

thought-provoking and insightful, and pushes you out of your comfort zone. It allows you to work with other like-minded people from across the country to further develop your leadership skills and vision for physical and health education.

As LeAnne Petherick quoted in her presentation: “Be the best person you can be, and when you are better, be better!” I am excited to apply these lessons to my teaching career and daily life and improve my leadership skills. I want to thank Physical and Health Education Canada for this amazing opportunity, and I want to thank HPEC for the funding I received to attend this conference.



**Ben Koch**  
**Bachelor of (Elementary)  
Education—Minor in  
Health and Physical  
Education,  
Mount Royal University**

The Student Leadership Conference organized by Physical and Health Education (PHE) Canada was a very enjoyable experience that I was incredibly lucky to attend at Cedar Ridge Camp, in Bancroft, Ontario. Throughout this section of the article, I will provide an overview of who I am and reflect on my experience.

Born and raised in Calgary, Alberta, I have had the good fortune of having many positive health and physical education experiences throughout my schooling. It is largely from these educators that I have developed a passion for being physically active and in the healthiest state I can. From working as a summer camp counsellor, I have continued to develop this passion as well as ensure that students develop positive attitudes and have positive experiences in leading active, healthy lives. This transformed into graduating from Mount Royal University (in April 2015) with a bachelor of education—elementary major and a physical health and education minor.

Mount Royal University has a high degree of focus on experiential learning and professional development. When a professor first told me about the opportunities and potential learning that would happen

at this conference, I knew I had to attend. The application process was easy and streamlined, and information was regularly sent out about logistics and what to expect.

My understanding of inclusion was continually challenged over the weekend. Having a five-time Paralympian (legally blind) mentor continually reminded me of ensuring that inclusion is meaningful for each person under your leadership. My mentor also taught me to challenge my own perspective and to look at people's strengths rather than weaknesses, as he often rose to challenges (for example, high ropes, canoeing) without much thought and met them quickly and efficiently. Therefore, when it comes to inclusion, I will ensure that I focus on my students as people and look for their capabilities rather than their weaknesses. I will ensure that all students are included in a way that is meaningful to their own experience within the overall experience of being a student within my classroom.

The second theme regarding inclusion reminded me that one must be aware of multiple perspectives as well as the particular perspective of Canadian history that often gets misrepresented. I learned more about the importance of smudging and how there are multiple perspectives of smudging from First Nations all across our nation. Therefore, it is important to respect each groups' differences as well as similarities in their own understanding and application of smudging within their particular context. At a past PHE Canada conference, I learned and got to experience a variety of Aboriginal games that I can integrate into my own future classroom.

In particular, the conference helped me define my own vision of leadership in relation to inclusion. I also had the opportunity to develop lifelong and professional friendships with students as well as faculty across Canada. This allows me to continue my learning by continually asking them questions and reflecting on various experiences related to health and physical education.

I highly recommend this conference for any person looking to further their knowledge around leadership, as well as develop a professional network of people across Canada.



**Jennifer Le**  
**Bachelor of Kinesiology—**  
**Major in Pedagogy,**  
**University of Calgary**

Great leaders stay true to the integrity of their morals and inspire others to lead by embracing their own values.

I have had the privilege of learning and growing alongside distinguished and emerging leaders from across the nation who embody the true qualities of a leader. My passion for health and physical education ultimately guided my decision to attend. Being a part of the 2014 PHE Student Leadership Conference enabled me to discover who I am at the core and embrace much more.

I came with an open mind and heart, and ready to challenge myself. I had everything to gain from this experience. This journey has been one of self-discovery. The biggest part of my growth came from self-reflection. I truly believe that we all serve a purpose in this world, and you owe it to yourself to expose it. I don't think I've ever been a part of something greater or more powerful and liberating. From the get-go, our like-minded, outgoing personalities drew us together, and right then without hesitation I knew that this was going to be an unforgettable part of my life.

Days began at the break of dawn, jam-packed with presentations, challenging adventures, thought-provoking exercises and self-exploration. Lights didn't go out until the early hours of the morning as friendships flourished and the time spent together was invaluable. These four days were captured with perpetual learning and growth, endless laughter, countless memories and a lifetime of inspiration! It's invigorating having the pleasure of meeting people stretched across the nation with the same intentions and aspirations to make a difference! A week without technology enabled me to gain respect for the true value of the genuine friendships I've made. Never have I been disconnected yet ever so connected from the world.

I write this to sincerely give thanks to PHE Canada for this opportunity of a lifetime! I would like to also extend my deepest gratitude toward the Cedar Ridge Camp staff. Without their diligence, this experience

would not have been as profound. A huge thank you goes to each and every participant at this year's conference! You each have influenced me, and it is reassuring to know that the future of health and physical education is in great hands! My phenomenal mentors, Heather McRae and Gord Sturrock, have been a tremendous part of my growth of becoming a leader and I cannot thank them enough! Last, thank you to the Faculty of Kinesiology, at the University of Calgary, and my amazing professors for encouraging and supporting my continual development. It's humbling to think of the endless possibilities that this year's Student Leadership Conference has opened up to me. Thank you all for allowing me to be a small part of something so great! Words cannot even begin to quantify the depth of gratitude that accompanies my experience. Go and explore the potential of your capabilities and all that you are. Never cease to take the opportunity to be the best you can be. A strong message delivered during one of the presentations noted that we live in a privileged society where we get to write our own stories. So go out there, take risks, fail and do it all over again until you write the story that you want to tell.



**Megan Rainford**  
**BA/BEEd Social Sciences/  
Physical Education, Minor  
in Science Education,  
University of Lethbridge**

When my plane landed in Ottawa and I joined a group of young people who looked as though they had eagerly packed for a week of adventure, I could not have imagined what I was about to experience with them, or the extent to which they would cause me to grow. While attending the 2014 PHE Canada Student Leadership Conference at Cedar Ridge, I learned the value of taking risks. I had the opportunity to listen to experienced mentors speak about endless possibilities, many of which have become successful realities because someone believed enough to pursue them.

Those same mentors believed in the fifty-some students who sat in front of them. They created a fun and supportive atmosphere for us as we learned and

were challenged. It did not take long for our group to realize that each person brought along a set of strengths and that we would be depending on one another over the next few days to complete countless tasks. Together it seemed as though not accepting a challenge was never an option.

Although I have canoed in the past, I have never paddled blindfolded or been rained on for hours, and everyone around me was constantly finding ways to keep their spirits high. Participating in activities like this made what we were learning about very real to me. As we dove into topics of inclusion and Aboriginal leadership, I understood the value of meaningful participation and removing barriers to make that possible.

The conference was a unique opportunity for an incredible exchange of ideas as students from coast to coast spent time together. There is something special about having the opportunity to come together with people who share the same passion. The learning environment is one that I will never forget because I could not help but want to learn and grow more with the people around me. I believe that this is something to strive toward in a classroom. We were encouraged to step up as leaders and team members, and to take responsibility for what we wanted to get out of the conference.

I would like to thank PHE Canada for hosting the conference and HPEC for helping to make attendance possible for students from Alberta. This experience was worth the risk because it excited me about the future of physical and health education and better equipped me to be a part of that future.



**Jacob Verhesen**  
**Bachelor of Kinesiology,  
Major in Pedagogy,  
University of Calgary**

I arrived in Ottawa on the night prior to the conference and spent the night and following day waiting for the bus. As more and more people arrived I immediately knew where they were going because they all had a sleeping bag and a big smile on their face. I met most



people for the first time at the airport and on the bus to Cedar Ridge Camp, and it was no quiet bus ride. Every person I talked to had different experiences and a different personality. As different as all of us were, we all had a passion for physical education.

Cedar Ridge Camp is a beautiful camp in a great location that takes you away from the rest of the world. This allowed me to get to know myself and the people around me on a personal level. Over the next few days we went canoeing, climbing and did a high-ropes course. It was a lot of fun, and I became very close with a lot of people as the days went by.

I am happy to say that these people have become some of my closest friends. There was a great balance between games, talks, free time and discussions that allowed things to flow together and facilitated discussions throughout the weekend. All of the events contributed toward the experience and each one gave me something different to take home, think about and apply. Every minute was well spent at this camp, and we all have in some way changed for the better. This camp was an experience of a lifetime, and I would go back every year. Since this conference, I am more relaxed, and I see everything in a new, better way.

*Ben Koch, of Mount Royal University, offering a demonstration for the paddling adventure.*



*After paddling to collect items for fire building, participants work together to combine each group's materials and experience.*



## Some Concluding Thoughts: A Mentor's Perspective

**Shannon Kell**

**Department of Physical Education and  
Recreation Studies,  
Mount Royal University**

The profound effect of the Student Leadership Conference never ceases to amaze me. I remember being in my first year of teaching after graduating with my BEd and hearing about a wonderful new opportunity for postsecondary students in the areas of health and physical education. Although I had missed the inaugural year by a hair, I heard plenty about it from my peers who were in the final years of their degrees and had attended the conference. That group of students returned home and embraced what PHE Canada stood for then (and still stands for today).

It was from this conference that the Health, Outdoor, and Physical Education (HOPE) Association was born. Embodying a spirit of mentoring, professional development and giving back to the community, students at the University of Regina began to form what is now a long-standing and successful organization built on leadership and partnerships.

Looking back on my years as a secondary physical educator and now in my role as a teacher educator and postsecondary faculty member at Mount Royal University, I can see how PHE Canada and the Student Leadership Conference has always been a part of what I do. I've been able to participate in the conference for the past two years as a mentor and now a member of the Leadership Advisory Committee. Although each year the students' faces change and some of the mentors come and go, the essence of the conference remains.

This year I sensed a powerful program under development as we worked through the summer on details and finalizing the schedule. Once the conference was under way it was refreshing to see all the energetic students and their commitment to learning, listening and creating change. I felt very connected to my mentor group and mentor partner, but larger than that, also felt a renewed commitment to our profession.

I can only imagine what amazing and truly meaningful initiatives this group of students will engage in locally, provincially and nationally. I look forward to seeing many of them at the PHE Canada/HPEC conference in Banff 2015. I also look forward to next year's conference and invite any interested students to find out more on the PHE Canada website or by e-mailing me at [skell@mtroyal.ca](mailto:skell@mtroyal.ca).

# Finding Your Way Through an Orienteering Lesson

*Brent Bradford, Nathan Hall and Clive Hickson*

## Introduction to Orienteering

Orienteering is a sport that requires participants, in heterogeneously selected groups, to navigate through a specific environment. This is typically done with the aid of a map or compass. The object of orienteering is to use a defined form of movement (for example, running, walking, biking, skiing, canoeing and so on) to locate a series of points (referred to as control points) and reach a designated finish line in the shortest amount of time possible. In school-based orienteering activities, students are sent out into a specific environment (for example, school playground) in search of solutions to predetermined tasks developed by the teacher.

## Required Equipment

- Map of the area in which the activity will take place (for example, schoolyard)
- List of control points and questions regarding these points for each group
- Pen or pencil for students to write down answers to items on the list
- Watch for each group to keep track of time
- Stopwatch for you to keep track of how long it takes each group to complete list

## Teaching Considerations for Orienteering

- The activity needs to be developmentally appropriate and safe.
- Consider completing a gymnasium/class-based orienteering activity before doing a schoolwide or off-site location.
- Plan and develop the route ahead of time.
- Go over the route the day before the orienteering activity will take place.

- Teachers should let school personnel know what the students will be doing.
- Consider students with special needs when planning the route and control points.
- When selecting the control points, consider developmental level of students and available amount of time allotted to complete the activity.
- Circulate around the area being used while students are completing the activity.
- If an off-site or schoolwide location is chosen, consider utilizing parent volunteers or buddies from an older class to assist in supervision and so on.
- Have an activity planned for groups that finish quickly.
- Set a time at which all groups must return whether they have completed the course or not.



## Possible Ways to Run an Orienteering Activity

There are many possible ways to run an orienteering activity. The following describes some common strategies that can be used either (1) with or (2) without a map.

1. When teachers run an orienteering activity with a map, it is important to
  - create routes and develop a map that has the start, finish and all control points labelled;
  - divide groups into no more than five people and provide each group with a map;
  - decide ahead of time whether all groups will start at the same time or in timed intervals (to avoid following);
  - inform groups that they may go in any direction they want to reach all the control points;
  - have something that must be retrieved at each control point (for example, a card, answer a question, a stamp or sticker and so on); and
  - record finish times as groups complete the route.
2. When teachers run an orienteering activity without a map, it is important to
  - create the route and divide groups into no more than five people;
  - inform groups to go in order to each control point;
  - decide ahead of time whether all groups will start at the same time, at different points or leave at timed intervals starting at control point one;
  - have something that must be retrieved at each control point (for example, a card, answer a question, a stamp or sticker and so on) or have the next control point location listed at each control point; and
  - record finish times as groups complete the course.

## Rules for Orienteering

The rules may change depending on the grade level or on the developmental appropriateness of the orienteering activity; however, here are some basic rules that students should become aware of when participating in an orienteering activity.

- Group members must stay together (within reach of each other).
- Groups must not walk together to the various destinations.
- Groups must not share answers (answers are sacred property).
- Questions must be answered in the order that they appear on the sheet.
- Groups must not gather answers to future questions on their travels.
- Groups must not disturb anyone working in classrooms, offices and so on throughout their travels.

## An Orienteering Example

Below are examples of simple tasks that can be created for positive orienteering experiences for students. Notice that some tasks include either returning an object, performing a physical activity or discovering an answer. It is up to the teacher to create a developmentally appropriate experience for students. It is also important to list some common reminders at the bottom of the task sheet for students to pay attention to while they are engaged in the activity.

1. Go to the physical education teacher's office. What colour is the door?
2. Go to the school cafeteria and collect a napkin.
3. Go to the soccer net located on the north end of the field. What colour is the piece of paper taped to the post and how many faces appear on it?
4. What is the answer to the question in the envelope that is taped to the monkey bars located in the playground?
5. Go to the library. What colour is the wording on the bulletin board that is behind the librarian's desk?
6. Go to the fitness room. There is an envelope behind the elliptical machine. Look inside and perform the tasks that are described on the paper.
7. How many panes of glass are there in the front entrance of the school? Write that number down and perform that many jumping jacks and push-ups.
8. Return to the gymnasium no later than 2:15 PM with all of your answers.

# The Role of Gender in School-Based Educational and Extracurricular Programming and the Spectre of Discrimination

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*Jim Silovs*

## Introduction

Long before students darken the doorways of educational institutions across the province at the beginning of each new school year, administrators, teachers and coaches must turn their minds to the task of educational and extracurricular programming and scheduling. Even the most insightful and seemingly well-thought-out decisions may result in conflict and concern when implemented in the complex context that defines today's educational environment. Although the context in which such issues and dilemmas arise may be seen as largely singular, the perspectives and identifiable interest-based concerns held by a variety of affected stakeholders are unique and diverse. The desires of parents, the needs of students and the interests of coaches, teachers and administrators are often pitted against each other based not on disconnected or misaligned goals, but on such situational and systemic limitations as time constraints, conflicting obligations, facility capacity, scheduling issues and budgetary concerns, to identify just a few. Given the potential risk that one, or more, of these interested stakeholders may take issue with a programming or scheduling decision, it is an absolute necessity that programming and scheduling decision makers consider, and fully understand the implications of, all factors relevant to their decisions. This article will focus on one of such factors and the role that it plays in the educational and extracurricular programming and scheduling

decision-making process—the role of gender in the context of discrimination.

Given the scope of this paper, the discussion will provide a general overview of the concept of discrimination, identify the general legal parameters that define discrimination and provide an example—a factual matrix or context—to illustrate how such legal principles have been practically applied.

## Discrimination

Although discrimination maintains a highly visible, and perceived to be recognizable, profile in today's society, a brief overview of the scope of what may, or may not, be discrimination is merited and useful to begin the discussion.

As a general starting point, discrimination should be considered whenever a subset of a group is treated differentially than the entire group. This does not mean that the mere presence of differential treatment will always result in a finding of discrimination, but that an analysis should, in all such instances, be conducted to assess whether discrimination is present. Furthermore, preventing discrimination does not simply mean that all affected parties must be treated equally—equal opportunity may not equate to equitable opportunity and differential treatment may be necessary to provide equitable opportunity.

Discrimination may be direct (discriminatory on its face), adverse (on its face the practice is neutral, but has



the effect of resulting in discrimination due to a disproportionate effect on the complainant because of a unique characteristic of the affected party)<sup>1</sup> or systemic (discrimination that arises from the existence of a policy such as one including height or weight restrictions).<sup>2</sup>

Determining whether or not discrimination exists is undertaken by conducting a comparative analysis between the alleged discriminatory conduct and a reference point, or points, that is used to establish norms or standards. When conducting such a comparison, the differential treatment defining the comparator group or individual must be comparable to those of the complainant, the differential treatment must be relevant to the complainant's matter (the alleged discrimination) given such characteristics (similarity of situation)<sup>3</sup> and the comparison must be made reasonably; that is, from a reasonable person perspective.<sup>4</sup> Differential treatment may be based on a myriad of reference points including vulnerability, prejudice, stereotyping, pre-existing disadvantage and so on.<sup>5</sup>

## Discrimination Reference Points

The reference points generally referred to in the context of alleged discriminatory conduct are the Canadian Charter of Rights and Freedoms,<sup>6</sup> the *Alberta Human Rights Act*<sup>7</sup> and discrimination under common law. In this article, we will examine the scope of these reference points to shed light on the concept of discrimination and discriminatory conduct.

## The Charter

When we think of discrimination, the first reference point that often comes to mind is the Charter. Although section 15 of the Charter, as illustrated below, addresses issues related to discrimination, it must be noted that the Charter extends only to actions of the government and cannot be used unless at least one party involved in the process is identified as government.<sup>8</sup>

Section 15 of the Charter provides:

15(1) Every individual is equal before and under the law and has the right to the equal protection and equal benefit of the law without discrimination and, in particular, without discrimination based on race, national or ethnic origin, colour, religion, sex, age or mental or physical disability.

(2) Subsection (1) does not preclude any law, program or activity that has as its object the amelioration of conditions of disadvantaged individuals or groups including those that are disadvantaged because of race, national or ethnic origin, colour, religion, sex, age or mental or physical disability.

The starting point for an examination of rights embodied within section 15 of the Charter is the Supreme Court of Canada (SCC) decision in *Law v Canada (Minister of Employment and Immigration)*<sup>9</sup>. Although the decision in *Law* involved a claim of discrimination in the context of survivor's benefits under the Canadian Pension Plan (a government program), the decision provides insight into how a section 15(a) analysis may be conducted by the court. An understanding of the court's perspective when dealing with claims of discrimination, sheds light on what are, and are not, key components in the analysis and provides a framework for such an analysis.

In *Law* the SCC set out a three-stage analysis for claims under section 15(1)—to be successful the claimant must show: i. the presence of differential treatment, ii. that the differential treatment is linked to one or more of the grounds enumerated in section 15(1), and iii. that the result of the treatment demeans the claimant's human dignity.<sup>10</sup> Human dignity is defined by the court by linking an individual's, or group's, self-worth and self-respect to "physical and psychological integrity and empowerment."<sup>11</sup> The third criteria in the *Law* test reveals that human dignity and not differential treatment, in and of itself, is a key component of the test for discrimination.

By considering the three-step analysis in *Law*, those people faced with having to make decisions that may spawn allegations of discriminatory conduct can ensure that their decision-making processes are more fulsome and inclusive in nature; a more fulsome preliminary discussion will decrease stakeholder complaints as it will force decision makers to address sensitive issues proactively.

Before moving on from the decision in *Law*, it must be noted that there have been several SCC cases since *Law*, that have not followed the third step in the *Law* analysis for situations involving claims of discrimination in purely private matters; that is, those matters not directly linked to government action.<sup>12</sup> Despite

the treatment of *Law* in SCC decisions subsequent to *Law*, understanding the decision will, undoubtedly, lead to more robust discussion, more thoughtful decision making and a decrease in allegations of discrimination, in all contexts.

## Provincial Human Rights Legislation—*Human Rights Act (HRA)*

The purpose of the HRA is set out in the legislation's preamble and provides, in part, that in Alberta it is recognized "as a fundamental principle and as a matter of public policy that all persons are equal in: dignity, rights and responsibilities without regard to" a number of enumerated characteristics, including gender.<sup>13</sup>

Section 4 of the HRA provides:

(4) No person shall

(a) deny to any person or class of persons any goods, services, accommodation or facilities that are customarily available to the public, or

(b) discriminate against any person or class of persons with respect to any goods, services, accommodation or facilities that are customarily available to the public,

because of the race, religious beliefs, colour, gender, physical disability, mental disability, ancestry, place of origin, marital status, source of income, family status or sexual orientation of that person or class of persons or of any other person or class of persons.

In the context of allegations of discrimination related to the grounds enumerated in the HRA, the HRA is the only source of authority that a complainant may rely on to preserve his or her rights—allegations of discrimination flowing from protected grounds set out under the HRA must be pursued under the HRA and heard by the Alberta Human Rights Commission and not by the courts; that is, discrimination is not an independent actionable wrong.<sup>14</sup>

Under the HRA, if a complainant alleges discrimination or discriminatory conduct, the onus is on the complainant to establish (on a balance of probabilities—the civil standard of proof of more likely than not) that the differential treatment on which his or her claim is based exists and is linked to a ground enumerated in the legislation.<sup>15</sup> If the complainant meets

this burden, the burden then shifts to the respondent to establish a bona fide and reasonable justification (a defence) for such conduct<sup>16</sup>—failure to establish such a defence will result in a finding of discrimination and a breach of the rights protected by the HRA.

Although applying the three-step approach set out in *Law* may not be applicable in claims under the HRA, as dignity plays a role in establishing the purpose of the HRA, the *Law* analysis provides those bound by the HRA (including educational programming and scheduling decision makers) with a broader understanding of dignity's role in the application of the HRA.

## Discrimination—A Factual Matrix

The case of the Manitoba High Schools Athletic Association v Pasternak et al<sup>17</sup> provides a context in which the principles discussed above have been applied. In this case, the Manitoba High School Athletic Association denied twin sisters of the opportunity to try out for positions on the boys' hockey team at West Kildonan Collegiate Institute, in Winnipeg. The Association held that as there was both a girls' and a boys' team, the girls could only try out for and play on the girls' team. The girls disputed the Association's decision claiming that the girls' team was developmental in nature, and as the girls were accomplished hockey players (both girls had played boys' or men's hockey for 11 years prior to the decision of the Association), they would not have the opportunity to be assessed based on merit because of their gender. The girls claimed that the Association's decision breached their rights under the Manitoba Human Rights Code.<sup>18</sup> The adjudicator appointed to hear the complaint agreed with the young women, finding that as the boys' team was more competitive and consistent with the girls' abilities, the decision not to allow them to try out for the team prevented them from being judged on their own merits and was therefore prima facie discriminatory.<sup>19</sup> Upon establishing that the Association's actions were discriminatory, the adjudicator considered the Association's argument that its actions were reasonably justified. The Association's argument justifying its actions focused on the contention that by maintaining a segregated structure in situations where teams of both genders exist, the school could

maximize student participation and opportunity—the adjudicator did not accept this argument and ruled in favour of the complainants.

The Association appealed the adjudicator’s decision and Manitoba Court of Queen’s Bench [MBQB] dismissed the appeal. On appeal to the MBQB, McKelvey, J, adopting a purposive interpretation of the Code, held: (1) the sisters were differentially treated—they were denied the opportunity to be assessed based on merit when others were not; (2) the differential treatment was based on gender; (3) gender is an enumerated ground under the Code; and (4) there was no reasonable justification for the discrimination by the Association.<sup>20</sup>

## Conclusion

Where does this leave us? Assessments of allegations of discrimination must be based on a purposive interpretation of the source of the right; in Alberta allegations of discrimination in the context of the educational and extracurricular programming and scheduling decision-making process related to gender fall under the HRA; the existence of differential treatment in and of itself does not automatically equate to a breach of the rights embodied in the HRA (defences do exist); and a broader consideration of the judicial treatment of claimed discriminatory conduct, regardless of context, will force decision makers to consider factors beyond those that are directly related and, thereby, adopt more fulsome and effective decision-making processes. At the end of the day, a more comprehensive understanding of the role that gender plays in the educational programming and scheduling process will undoubtedly lead to decreased claims of alleged discrimination and contribute to an increase in the effectiveness and efficiency of such processes.

## Notes

1 *Ontario Human Rights Commission v Simpson-Sears Ltd*, [1985] 2 SCR 536; see also *British Columbia (Public Service Employee Relations Commission) v BCGSEU*, [1999] 3 SCR 3 at 39, adverse effect discrimination is established when a fitness requirement is attached to prospective firefighters as such a requirement is harder for women to meet than men.

2 *Ayangma v Prince Edward Island (Government of)*, 2001 PESCAD 22 (CanLII) at paras 23–26.

3 *Hodge v Canada (Minister of Human Resources Development)*, [2004] 3 SCR 357.

4 Graham Garton, “The Canadian Charter of Rights Decision Digest, Justice Canada, Updated: April 2005” (CanLII) at s 15(1) analysis.

5 *Ibid.*

6 Canadian Charter of Rights and Freedoms, Part 1 of the *Constitution Act 1982*, being Schedule B to the *Canada Act 1982* (UK), 1982, c 11 [Charter].

7 *Alberta Human Rights Act*, RSA 2000, c A-25.5 [HRA].

8 *Charter*, *supra* note 6 at s 32. Section 32 of the *Charter* restricts application of the rights and entitlements embodied in the document to those actions involving the federal and provincial governments and those matters falling under the respective authorities of such levels of government.

9 [1999] 1 SCR 497 [Law].

10 *Law*, *supra* note 9 at para 51. *Iacobucci J*, links the third step in the analysis to the general purpose of the section defining such purpose as “to prevent the violation of essential human dignity and freedom through the imposition of disadvantage, stereotyping, or political or social prejudice, and to promote a society in which all persons enjoy equal recognition at law as human beings or as members of Canadian society, equally capable and equally deserving of concern, respect and consideration.” and provides that, “Human dignity is harmed when individuals and groups are marginalized, ignored, or devalued, and is enhanced when laws recognize the full place of all individuals and groups within Canadian society. ... Does the law treat him or her unfairly, taking into account all of the circumstances regarding the individuals affected and excluded by the law?”

11 *Law*, *supra* note 9 at para 53.

12 *The Manitoba High Schools Athletic Association Inc v Pasternak et al*, 2008 MBQB 24 (CanLII) at p 31 [Pasternak].

13 *HRA*, *supra* note 7 at preamble.

14 *HRA*, *supra* note 7 at s 20; see also *Honda Canada v Keays* 2008 SCC 39 (“this Court [the SCC] clearly articulated that a plaintiff is precluded from pursuing a common law remedy when human rights legislation contains a comprehensive enforcement scheme for violations of its substantive terms” at para 63).

15 *Ahmed v Edmonton Public Schools Board* 2008 ABQB 351 (CanLII) at p 15.

16 *Ontario Human Rights Commission and O’Malley v Simpson-Sears Limited*, [1985] SCR 536 at 538; see also *Pasternak*, *supra* note 12.

17 *Pasternak*, *supra* note 12.

18 CCSM c H175, ss 9(2)(f) and (13).

19 *Pasternak*, *supra* note 12 at pp 8–10.

20 *Ibid.*

## Testicular Pain: Might Be Embarrassing, But Certainly Is Worth Attention

*Peter Metcalfe*

As a pediatric urologist, I often hear families say, “Oh, I didn’t know that could happen”! Most of the time, it probably doesn’t matter, but when it comes to testicular pain, a bit of knowledge may make the difference between saving and losing a testicle.

The sudden onset of testicular pain can be due to several causes, but of utmost importance is testicular torsion. Testicles hang loosely in the scrotum through the spermatic cord (Figure 1, left side), which makes them susceptible to spinning or twisting (testicular torsion) (Figure 1, right side). This is significant, as the torsion cuts off the blood supply to the testicle and if not corrected in four to six hours, may result in the death of the testicle. Therefore, it is paramount that this is corrected with minimal delay.

Far too commonly in my practice, however, teenagers will present to the emergency room well beyond this time frame, as neither they, nor their caregivers, were aware of the potential consequences. A recent research article in the UK confirmed that 95 per cent of parents felt that more public awareness is required. Unfortunately, this lack of knowledge results in a dead testicle that needs to be removed, instead of one that is easily saved (Ubee, Hopkinson and Srirangam 2014).

It is my goal to increase the general awareness of this issue, with the hope of preventing this unwanted outcome. Unfortunately teenage boys, and their families, are often very reluctant to talk about their “privates” with others. Hopefully, by introducing this topic into the school system, we may be able to reach this

vulnerable population and prevent unnecessary embarrassment, barriers to discussion and delays to treatment.

Testicular (or scrotal) pain can be divided into three general groups: (1) Chronic pain (orchalgia) which is not common in the teenager and is defined as a constant pain present for more than three months; (2) Acute scrotal pain not due to torsion; (3) testicular torsion. Most (approximately 80 per cent) of episodes of a sudden onset of testicular pain are not due to a testicular torsion, but it is imperative to rule this out.

Although not common, about 80 to 100 patients visit the Stollery Children’s Hospital emergency department per year with a complaint of testicular pain. Of these, about 10 per cent have a testicular torsion and need immediate surgical intervention. The other 90 per cent are due to generalized inflammation (not infectious) or of an unknown (benign) etiology. Unfortunately, the average time (in our patients) from the onset of symptoms to presentation to the hospital was almost 20 hours (Liang et al 2013).

The peak age groups at risk are the 12–16-year-olds, due to the (newly) increased testicular size. Before puberty, testicles are much less likely to undergo torsion, as they are too small to generate sufficient force or their testicular cords are not long enough to place the testicle at risk.

As most would guess, the presentation can be very painful and likely hard to ignore! The onset of symptoms can be while the teen is at rest, during activity or after trauma. The pain is typically a sudden onset



of a dull ache (not unlike being kicked!) and often associated with nausea. Very often the boy is not able to attend or continue classes but is generally not screaming in pain. Occasionally, the pain may come and go, which may be a partial or intermittent torsion. In the torsed testicle, the testicle may have rotated from 270 to 720 degrees!

If this pain occurs, and lasts for at least one hour, medical attention must be sought immediately. The goal would be to get the patient to the operating room within 4–6 hours, from the onset of symptoms, as we then have a very high chance of saving the testicle. If surgery is delayed, certainly if greater than 12 hours, the chance of untwisting the testicle, restoring its blood supply and salvaging the testicle is very low. In these cases, we often have to remove the entire testicle.

Often, the patient’s history is sufficient to warrant bringing him straight to the operating room, but if the diagnosis is in question, the physician may decide to

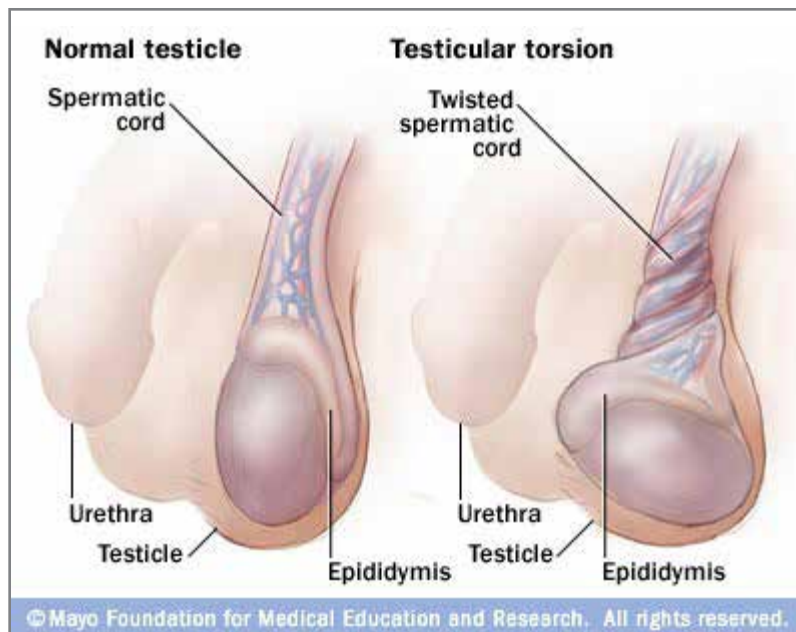
do an ultrasound. This is very accurate in determining the presence or absence of blood flow, pathognomonic for a torsion. If the ultrasound demonstrates good blood flow to the testicle, the pain is either due to another cause, or the testicle has untwisted itself.

In summary, the sudden onset of testicular pain can have significant physical and emotional consequences. Unfortunately, the emotional aspect can result in a delay to diagnosis and treatment. Hopefully this article will improve awareness of this potentially devastating problem, and we are able to see our patients sooner and save more testicles.

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**Figure 1**



(Left side) The normal anatomy of a testicle, demonstrating the blood supply coming through the spermatic cord.

(Right side) Testicular torsion; the testicle has spun or twisted around the spermatic cord which results in strangulation and a cessation of blood flow. If not untwisted expediently, the testicle will die.

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[www.mayoclinic.org/diseases-conditions/testicular-torsion/multimedia/testicular-torsion/img-20008045](http://www.mayoclinic.org/diseases-conditions/testicular-torsion/multimedia/testicular-torsion/img-20008045)

# Graduate Student Research Articles

## The Use of Eastern Philosophy to Human Movement to Promote Physical Literacy with Students

Hyun Suk Lee, Larry Katz and Dwayne Sheehan

Physical literacy is defined as moving with confidence and competence in a wide array of physical activities in various environments that benefit a person's health and development (Physical Health and Education Canada 2012). Children must develop a positive attitude toward a physically active life. Such fundamental movement skills as throwing, catching, running and jumping promote physical literacy in children. Proficiency in motor skills helps children acquire the competence and confidence necessary to undertake more complicated athletic and fitness pursuits and to enjoy physical activities.

The perspective of Eastern philosophy is one way to develop a new understanding of physical activity and ensure that children become more willing to engage in such activities. Lu (2003) discusses the value of understanding the mind–body relationship and its implications for physical education from an Eastern perspective. This article considers a number of additional aspects of Eastern philosophy and practices as they relate to learning physical skills, particularly fundamental movement skills (FMS). In a multicultural society, such new ideas may have value.

Eastern practices in the development of FMS and physical literacy are unique and distinct from Western approaches. The traditional Western practice for teaching FMS to elementary school children is to take the skill, such as throwing, break it down into components, teach the components and use lead-up games to solidify the skills.

Western cultural beliefs shape our experiences and cause us to place limitations on ourselves (Brunner

1986). However, the wholeness of Eastern concepts and attitudes has begun to attract Western practitioners. Many Westerners catch glimpses of themselves in the Eastern ideas and practices. A holistic paradigm for physical education must borrow movement forms, images, experiences and new techniques from Eastern philosophy and embrace Eastern movement forms that provide new images and ways of describing experience as well as new techniques that reveal universal principles of movement (Brunner 1986).

Eastern movement disciplines are a special gift to Western culture, because human beings are returned to their depth. The transformation is not effortless (Hanna 1986). "After spending thousands of years hopping around on one leg, it feels awkward and unnatural to walk on two," says Hanna (1986). Although the Eastern philosophy to human movement has many advantages, teachers who use the traditional Western approach may not see the value of an Eastern approach and be reluctant to change unless there is a compelling reason (Patrascu 1995).

Eastern philosophy on human movement is traditionally viewed as whole and long term: *whole* refers to the mind and body working together to create a complete and healthy person (Shahar 2008), and *long term* is the willingness to engage in physical activity throughout life (Henning 2007). A sense of well-being is typically fostered at an early age (Kim and Back 1989).

Eastern philosophy encompasses similar aspects from various Eastern Asian philosophies such as Buddhism, Tao, Ying and Yang, and martial arts.

These four aspects of Eastern philosophy to human movement are discussed in this article:

1. Mind—meditation, emptying the mind, task focus, visualization (visualizing oneself and others) and observational skills (identifying movement forms)
2. Peer-to-peer learning using a partnership model
3. Incorporation of technique, accuracy, speed and power (TASP), as a unifying principle where the order and timing of each factor is integral to the learning
4. Bilateral body development—using both sides of the body to create a sense of balance and maximize forces

## Mind

In learning martial arts as an expression of Eastern philosophy, participants are taught to visualize the technique to be learned. Students must clear their minds by listening to words and traditional Eastern music. Learning this way allows the student to focus on the task without any distractions. Much of the literature in the use of Eastern philosophy to human movement discusses this concept (Lu, Tito and Kentel 2009; Reyes 2007; Lu 2003; Mullen 2001; Kleinman and Kretchmar 1988; Lu 2012).

## Peer to Peer

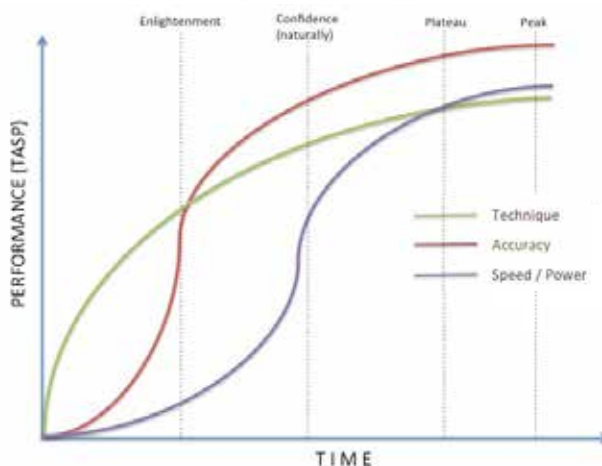
Eastern philosophy promotes a sense of community and sharing. Activity is not done in isolation. Peer-to-peer learning is encouraged and expected. "I try my hardest in order to inspire you to try your hardest." In such an environment, people are inspired to excel. In the Eastern philosophy, physical education participants can be partners and couples, not enemies. Peer-to-peer learning includes techniques and exercises that are the vehicles for two people to work for mutual improvement (Bruner 1986). Students work in pairs, helping each other learn through observation and feedback.

## TASP

From martial arts training, the authors have identified the TASP method (technique, accuracy, speed, power) as part of an Eastern approach, where the order of learning is important; that is, learn the technique,

apply accuracy and progress to faster and more powerful engagement. Precision, speed and power are progressively accomplished through repetition and slow-movement training to ensure that no mistakes are overlooked.

TASP Performance by Time Learning Curves



## Bilaterality

From the Eastern perspective, both sides of the body complement each other, and forces are applied in such a way to develop both sides of the body (bilaterality) in harmony. Therefore, equal development of both sides of the body is important for a combination and balance of both, because the body is one in the universe, and both sides must be developed to develop one side (Hanna 1986).

In terms of bilaterality, there is a lack of scientific investigation into the use of a nondominant limb in gross motor skills, particularly in sport-related research, and much of the literature on limb dominance is dated (Endresen and Olweus 2005; Lakes and Hoyt 2004). This is particularly true for children's development of FMS.

## Effectiveness of the Eastern Approach to Learning FMS

In order to determine the value of these Eastern concepts, the authors are undertaking a research project to investigate mind/focus, peer-to-peer learning, TASP and bilaterality, with young elementary school children learning a fundamental movement skill.

Throwing was chosen as the fundamental movement skill because it is used in numerous sports and activities and once mastered can be used to facilitate learning other activities (for example, playing handball, throwing stones into water, hitting a tennis ball, throwing a lacrosse ball and swinging a bat). It is also a general skill frequently taught using the traditional Western approach.

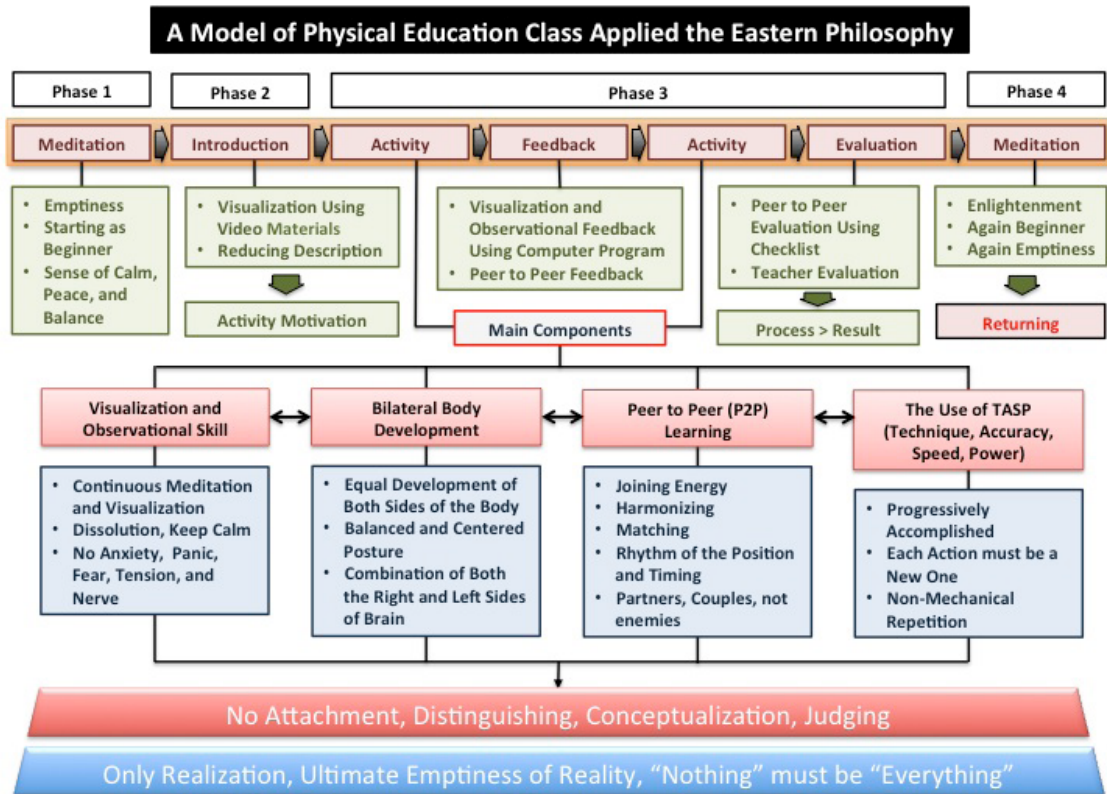
In order to effectively assess the effect of Eastern techniques compared to Western approaches, the authors are developing valid and reliable lesson plans for Western and Eastern approaches to teaching throwing using content validation and reliability of measurement.

Lesson plans for the Western approach will emphasize skill breakdown and lead-up games. The Eastern focus will include the mind (meditation, visualization and observation), bilaterality (both in technique and in dominant and nondominant handedness), the ordered TASP method and peer-to-peer learning of pairs of elementary school students through observation of skill performances, visualization of target,

focus and skill performance, and the movement as a whole by fostering natural movements rather than breaking down skills.

The study will compare Eastern and Western approaches to learning how to throw by developing valid and reliable measures of technique, accuracy, speed, power and attitude. Because the Eastern approach is qualitative in practice, all measures will, by necessity, be quantitative following Western principles of measurement.

If the Eastern approach to learning physical literacy is effective, ultimately physical education teachers need to incorporate Eastern practices with the best practices from the Western perspective, creating what Lu (2003) considers an East-West integration that would help to maintain a reciprocal dialogue, foster better understanding of body–mind and encourage a more holistic view of physical activity. Such integration could result in an improvement of students’ attitudes toward physical activity by creating engaging learning environments that encourage success and peer support.





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# An Examination of the Effect of a Comprehensive School Health Model on Academic Achievement: The Effect of Living School on EQAO Test Scores

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*Melanie Guertin*

## Introduction

Living School (LS) is a comprehensive school health (CSH) approach to school improvement. CSH refers to a multifaceted approach that includes teaching health knowledge and skills in the classroom, creating health enabling social and physical environments, and facilitating links with parents and the wider community to support optimal health and learning (CASH 2007). This paper examines the effects of the LS approach on academic achievement that was measured using EQAO (Education Quality and Accountability Office) standardized tests scores for Grades 3 and 6 students in Ontario in reading, writing and mathematics.

Research in the area of health promotion and academic achievement recognizes the relationship that exists between health and academic performance (CDC 2005). Studies have demonstrated the positive effects of daily physical activity on student performance and academic achievement in terms of memory, observation, problem solving and decision making as well as significant improvements in attitudes, discipline, behaviours and creativity (Keays and Allison 1995). In Canada, findings show enhanced mathematical performance among children participating in a daily physical education program (CFLRI 1995). Research on LS shows that working in a comprehensive way can influence the knowledge, attitudes and behaviours of students; staff from schools that participated in the LS initiative report that “students are more visibly alert and attentive, there are fewer behavioural problems in class and on the playground, and attendance has improved” (Shain 2005). An LS site was also provincially recognized for its improvement in EQAO test scores in the 2004/05 school year (EQAO 2007).

Following a CSH model, LS communities engage partners that share the responsibility to carry out a coordinated plan that results in better health for students. This theme of shared involvement can be found in major publications regarding school and student academic achievement improvement initiatives. The link between leadership and student achievement was determined more influential when the leadership came from a variety of different sources (teachers, staff teams, parents, school board, students and administrators) as opposed to exclusively from the administrator (principal) (Leithwood et al 2006).

This study examines the effect of Living School (LS) as a CSH model on student academic achievement, measured through EQAO test scores, compared to schools that were not exposed to LS.

## Methodology

The sample used for this study involved 33 schools. The sample consisted of schools that had participated in LS for two years (LS2Y) (n=11), schools that had participated in LS for one year (LS1Y) (n=15) and comparison schools that had not been exposed to the initiative (non-LS) (n=8). Each school board that had at least one school involved in the LS initiative identified comparison schools according to socioeconomic, demographic composition and school population criteria.

EQAO test results were collected from the EQAO website ([www.eqao.com](http://www.eqao.com)), which publicly posts school and school board EQAO results. For this study, average results from all schools within each group were used to calculate the mean scores for each group, by test type. The EQAO test types were Reading—Grade 3

(R3); Writing—Grade 3 (W3); Mathematics—Grade 3 (M3); Reading—Grade 6 (R6); Writing—Grade 6 (W6); Mathematics—Grade 6 (M6).

## Findings

Prior to any exposure to LS, the mean scores for EQAO tests were approximately the same for LS2Y, LS1Y and non-LS groups. For all test types, LS2Y sites scored approximately the same mean as non-LS sites (53.74 versus 54.61), and LS1Y sites scored a mean of 3.15 points lower than non-LS (54.93 versus 58.08) for all test types. Generally, the LS groups scored lower in Grade 3 tests than non-LS; for instance, prior to LS, LS2Y sites scored lower than non-LS by 10.02 points lower in the R3 test, and LS1Y scored 11.83 points lower in the M3 test.

## Effects After One Year of Exposure to Living School

Overall, after one year of exposure, LS sites improved their EQAO test scores for all test types except for M6. After one year of exposure to LS, significant improvements were noted in Grade 3 scores for LS2Y and LS1Y groups; LS2Y significantly improved R3 and W3 and LS1Y significantly improved R3, W3 and M3. The comparison groups yielded varying results, in some instances improving their Grade 3 scores and in others decreasing them. For Grade 6 EQAO test scores, LS2Y and LS1Y improved their R6 and W6 scores; however, the effect on math scores after one year of exposure yielded inconclusive findings because LS1Y scores decreased by 3.97 points whereas LS2Y M6 scores remained approximately the same (-0.16 points). For Grade 6 scores, the comparison groups' results paralleled those of LS groups.

## Effects After Two Years of Exposure to Living School

Overall, after two years of exposure, the most significant effects of LS on EQAO test scores were observed in Grade 3 test scores. For R3, LS sites significantly improved their mean score by 16.83 points, scoring 6.25 points higher than non-LS in 2005/06 (59.25 versus 53.00). LS sites also significantly improved

their average W3 score by 8.59 points, resulting in a difference of 5.61 points higher than non-LS in 2005/06. For M3, LS significantly improved their mean score by 12.83, surpassing non-LS score by 4.56. In comparison, non-LS sites' R3 and W3 scores remained approximately the same, and their M3 score decreased by 6.45 points.

From 2003/04 to 2005/06, the most significant difference in Grade 6 scores between LS2Y and non-LS was in reading, where LS improved by 5.25 points and non-LS improved by 2.88 points. The exposure to LS also showed an effect on math scores after two years where LS improved by 7.09 points whereas non-LS only improved by 1.62 points. Although there was a dip in M6 scores after one year of exposure, after two years LS improved M6 scores by 11.70 per cent, therefore scoring 12.92 points higher than non-LS in 2005/06 (67.67 versus 54.75).

The effects on EQAO scores compound beyond one year of exposure. After one year of exposure to LS, LS2Y had matched non-LS's mean EQAO score (58.06 versus 58.07) and despite the significant improvements in LS2Y's Grade 3 scores, non-LS scored higher than LS2Y in all Grade 3 test types. In 2005/06, the mean scores of LS2Y sites were greater than non-LS for all test types. On average, for all test types, LS2Y sites scored an average mean of 63.25, which is 7.13 points higher than the non-LS average (56.12). These findings suggest that there is a significant effect of LS on EQAO test scores after two years of exposure and that these improvements build on improvements already observed after one year of exposure to LS. The most significant improvements beyond the one-year results were in R3, M3 and M6 test scores for LS2Y who increased their scores by 14.87 per cent, 14.13 per cent and 12.00 per cent, respectively.

## Discussion

Evidence of significant improvements in Grade 3 and math scores as well as a compounding effect beyond one year of exposure suggests that there is an effect of LS on EQAO test scores. The evidence suggesting that LS has a significant effect on math scores reflects those observed in earlier studies that showed

an effect of physical activity on student mathematical performance (CFLRI 1995).

The number of years that schools were exposed to LS positively influenced the improvement of EQAO test scores. The exposure effect of LS on EQAO scores for R3, R6, W6, M3 and M6 amplifies by year of exposure. Schools that were exposed to LS for two years improved their EQAO scores significantly more (36.67 per cent, 8.80 per cent, 11.61 per cent, 24.13 per cent and 11.17 per cent) than schools that were exposed to LS for one year (18.39 per cent, 4.04 per cent, 6.90 per cent, 13.12 per cent and -10.13 per cent) in R3, R6, M3 and M6, respectively. The effect of LS on W3 was not linear; however, it is important to note that improvements in W3 scores were significant both after one year (21.46 per cent) and after two years of exposure (16.98 per cent).

Although this study was limited in the fact that only one improvement innovation was considered in examining the improvement of student achievement, the findings propose that focusing on improving and supporting positive health behaviours in students not only affects students' health but their academic performance and achievements as well. These findings build on current strategies implemented by Ontario school boards. Living School, as a CSH model, complements the best practices identified by the Literacy and Numeracy Secretariat for improving student academic achievements.

## Conclusion

The findings in this study demonstrate that when schools focused on students' health, positive changes were observed in their academic achievement, as measured by EQAO test scores. Most significantly, LS,

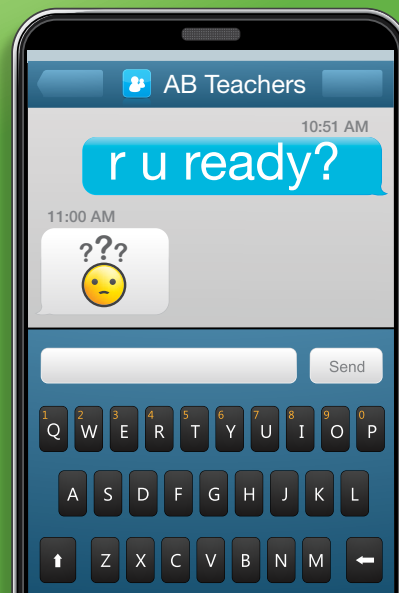
as a CSH model, showed an effect on Grade 3 EQAO test scores after one year of exposure. After two years of exposure, improvements in mean scores of LS were observed for all test types, and significant results were noted for R3, R6 and M3 compared to non-LS.

Evidently, engaging in a coordinated and comprehensive approach to school and student academic achievement by offering an environment conducive to nurturing students' bodies and minds has the greatest effect on overall learning and development. These findings highlight that the school health context must be considered when addressing factors that influence student learning.

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