

DOUGLAS COLLEGE
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QDPE
PHYSICAL EDUCATION
CONFERENCE
OCT 20-22, 2011



British Columbia
Teachers' Federation



Douglas College
Sport Science

QDPE BC 2011: Research Conference Abstract Proceedings
Physical Education Past, Present, & Future:
Perspectives from the West

Presentation Overview

Thursday, October 20, 2011

6:15-7:30 PM Invited Speaker Panel: Physical Education and School Movement Culture – the next 25 years

- Dr. Stephen Smith, Simon Fraser University
- Dr. P.J. Naylor, University of Victoria
- Dr. David Chorney, University of Alberta

Friday, October 21, 2011

8:30-10:00	Session 1A, Rm 1620, Session Chair TBD Symposium 1: Situated Ethics in Inventing Games Research for teachers and students – Year One (Butler, Hopper, Berning, McGinley, Sandher, and McKenzie)	Session 1B, Rm 1717, Session Chair TBD 1. Teachers' Understanding of Students' Attitudes & Values Toward Physical Activity in Physical Education Drop Out Rates and Adolescent Obesity (Landolfi) 2. The Role of Field Experiences: Are PE Majors Influenced by the Field? (Chorney) 3. Social Media: Shaping the physical through the virtual (Sirna)
10:10-10:40	PE in BC - 25 years in reflection panel (Organized by PEBC)	
11:00-12:30	Session 2A, Rm 1620, Session Chair TBD Symposium 2: Complexity thinking in physical education: what is it, why use it and where could it take us? (Storey, Hopper, Butler)	Session 2B Rm 1717, Session Chair TBD 1. Off to a great start? The motor skill proficiency of children in Kindergarten (Crane) 2. The Relationship between Peak Height Velocity, Motor Proficiency, and Physical Activity in Children (Sheehan) 3. Can observational learning using the GPAI improve performance? (Ireland)
1:00-2:30	Session 3A, Rm 1620 Symposium 3: Fit4School: The Physical, Academic, and Social Benefits of Daily Physical Activity at School (Le Mare, Neufeld, Vandeborn, Menzies, Lepine).	

QDPE Research Stream Abstracts

Title: Fit4School: The Physical, Academic, and Social Benefits of Daily Physical Activity at School

Presenters: Lucy Le Mare, Paul Neufeld, Elisa Vandeborn, Matthew Menzies, and Hailey Lepine (Simon Fraser University)

The purpose of this symposium is to describe the rationale for and preliminary findings from a research study comparing the impact of daily aerobic vs. non-aerobic exercise on elementary school children's executive functioning (EF) and physical fitness as well as their academic and social performance in the classroom. Four papers addressing different aspects of the study will be presented. In the first paper we will provide an overview of the theory, design, and measures used in the Fit4School study. The second paper focuses on preliminary analyses examining differences in executive functioning between high and low fit children. The third paper addresses the association between our measure of EF and school performance (academic and social) and further, addresses differences between high and low fit participants on school performance measures. The fourth and final paper examines how participation in the Fit4School project impacted children's feelings about exercise and whether that impact varied as a function of intervention group, sex, or background fitness level.

Title: Elementary School Physical Education in Slovenia and British Columbia: A Comparative Study of the Present

Presenter: Stephen Berg (University of British Columbia - Okanagan) (Cancelled)

This study examines elementary school physical education programming based on a sample from two regions of the globe, Slovenia and British Columbia. Data collection techniques included experiencing (observations and field notes), enquiring (interviews of elementary generalist teachers and principals), and examining (questionnaires, videos and photographs) (Mills, 2003). All the data collected has been transcribed and chronologically ordered to facilitate the finding of codes and themes. Analysis of the data revealed similarities and differences between Slovenia and British Columbia. Themes such as marginalization, lack of professional development, limited teaching time, activity choices, student motivation and attitudes toward physical education were revealed for both countries.

Title: Off to a great start? The motor skill proficiency of children in Kindergarten

Presenter: Jeff Crane (University of Victoria); Authors: PJ Naylor, Rick Bell, Buffy Williams, and Vivienne Temple (University of Victoria)

This study examined the motor skill proficiency of children in their first year of school. Participants were 267 Kindergarten children from eight schools. Children were videotaped performing 12 fundamental motor skills from the Test of Gross Motor Development-2 (TGMD-2). Video was scored in relation to qualitative checklists of skill components. Children's locomotor and object control standard scores were $M=7.0$, $SD=2.6$ and $M=6.2$, $SD=2.6$; respectively. Gross motor quotients ranged from 46 to 127 ($M=79.6$, $SD=13.9$). Based on TGMD-2 norms, the majority of children exhibited below average motor proficiency; with only 19% of children achieving 'average' or 'above average' scores. Approaches to help teachers and families facilitate motor skill development are needed and these approaches need to begin in the preschool years.

To view paper [click here](#)

Title: Complexity thinking in physical education: what is it, why use it and where could it take us?

Presenters: Brian Storey (Douglas College), Tim Hopper (University of Victoria), Joy Butler (University of British Columbia)

The aim of this session is to create a space to explore the use of complexity theory to frame thinking about learning and instructional practices in physical education. As noted by Mason (2008, p. 37) complexity theory has "developed principally in the fields of physics, biology, chemistry, and economics, [it] arises out of chaos theory sharing the concern with...wholes, with larger systems or environments and the relationships among their constituent elements or agents, as opposed to the often reductionist concerns of mainstream science." These concerns reduce systems into parts assuming that the parts create the whole. By way of examples, this collection of papers will discuss how complexity thinking can be applied to inventing games and creative dance in PE, and how it can inform our understanding of the disposition of teachers who teach using a complexity frame of reference.

Title: Teachers' Understanding of Students' Attitudes & Values Toward Physical Activity in Physical Education Drop Out Rates and Adolescent Obesity

Presenter: Emilio Landolfi (University of the Fraser Valley)

This study comprised a two-part investigation into adolescent obesity. An initial inquiry examined male and female 10th grade high school students' attitudes and values to physical education and physical activity as a variable in adolescent obesity. Attitudes and values were measured through the use of questionnaires which focused on behavioural, cognitive, and affective sub-domains. Questions were further categorized according to whether they referred to "school-based" physical education or "extra-curricular" physical activity, and other factors such as "skill level" and "sporting experience" were also examined. Results strongly supported the hypothesis that 10th grade students' attitudes and values toward physical education in school and physical activity (in general) influence their physical activity behaviour patterns as well as level of overweight and overfatness. However, conclusions also suggest that school-based physical education is failing to make a meaningful impact on those who are most in need of it - namely obese and poorly skilled students who eventually go on to drop physical education when it becomes optional.

Title: The Role of Field Experiences: Are PE Majors Influenced by the Field?

Presenter: David Chorney (University of Alberta)

This presentation will focus on a particular research project that is longitudinal in nature and focuses on many aspects of PETE, specifically as it relates to undergraduates growth and maturity within a teacher education program. The current data that has been analyzed includes a participant total of approximately 300. The data will highlight physical education undergraduates' responses to questions that pertain to field experience as part of their respective physical education teacher education programs at three separate post-secondary institutions. Specifically, this session will report findings as to why PE majors' opinions and attitudes change regarding teaching PE as they gain experience during their field placements and are able to synthesize their learned theory with their lived practice.

Title: The Relationship between Peak Height Velocity, Motor Proficiency, and Physical Activity in Children

Presenter: Dwayne P. Sheehan (Mount Royal University)

The purpose of this study was to examine the relationship between motor proficiency and physical activity (PA) in children as it relates to their adolescent growth spurt and peak height velocity (PHV). A determinant of PA among children and adolescents may be the level of mastery of the movement basics that are a foundation for the skills used in common forms of adult PA. Quarterly recording of standing height, sitting height, mass, and arm span can help identify the accelerated growth and PHV in a pre-adolescent developing child. Evaluating fundamental movement skills during late childhood (ages 8 -12) and comparing the results to their physiological growth spurt may provide important information about the motivation to be physically active in the early teen years.

Title: Social Media: Shaping the physical through the virtual

Presenter: Karen Sirna (Douglas College)

The purpose of this paper is to argue for the field of physical education to more closely consider the influence of social media on young people's understanding of their bodies, physicality, and physical participation. Social media has grown rapidly over the last decade to the point of ubiquity. Despite its growing importance, little is known about the impact of the knowledge and cultural norms (re)produced through this space on young people's understandings of themselves. This paper provides a conceptual analysis of social media as a multi-generative space of pedagogical work related to bodies and physicality. Preliminary research is shared regarding the relationship of social media on students' thinking along with suggestions for the field of physical education.

Title: Can observational learning using the GPAI improve performance?

Presenters: Luke Ireland & Glenn Urquhart (University of British Columbia)

Observational Learning in connection with the instructional model, Teaching Games for Understanding (TGfU), can keep PE students mentally engaged throughout the entire lesson even when students are not physically engaged. By structuring the lesson according to the six step process that TGfU advocates, opportunities for students to observe allow them to see what game strategies or movement concepts will benefit their performance.

The four phase study that was conducted tracked qualitative data that focused on how students felt about observational learning in addition to the quantitative data measuring the level of student engagement while students were not physically engaged in the activity as well as the level of student performance. The qualitative and quantitative data sources were taken at the start of the study as well as at the end with the data collected being used to make comparisons and determine the percentage of improvement in student performance and engagement as a result of observational learning.

Title: Situated Ethics in Inventing Games Research for teachers and students – Year One

Presenters: Joy Butler (UBC), Tim Hopper (Uvic), Anja Berning & Erin McGinley, Kevin Sandher, and Sarah McKenzie

The aim of this session is to report teacher experiences and research findings after one year in a three-year research project. The research study is primarily focused on an examination of situated ethics and how this influences student interaction and decision making during Inventing Games (IG) play. We are also investigating the dispositions and teaching perspectives needed to teach the IG approach. The research team (teachers and University teacher educators) has drawn upon complexity thinking to focus on three conditions that are necessary for the emergence of learning within collectives to include: i) The simultaneity of diversity and commonality amongst player; 2) Enabling interactions through decentralized control and 3) Enabling constraints—opening possibilities by limiting choices. This collection of papers will summarize the findings, surprises, challenges and insights of the research team.