Specifics for generalists: Teaching elementary physical education

Chunlei LU
Brock University, St. Catharines, Canada

Amanda DE LISIO
The University of British Columbia, Vancouver, Canada

Abstract
Quality physical education offered at the elementary school level is critical for children to understand and develop healthy living. In most countries, physical education is taught by a generalist teacher (i.e., an individual who has not undertaken extensive training in physical education) particularly at the elementary school level. Inadequate and inappropriate preparation has been identified as a major barrier for an elementary generalist to develop and implement a quality physical education program. The purpose of this paper is to identify and discuss helpful strategies used to employ each fundamental component of a quality physical education program and is intended for a generalist audience. More specifically, the paper will explore (a) the (dis)advantage of teaching physical education as a generalist teacher; (b) the ability of physical education to address the whole child; (c) the confusion surrounding physical education and physical activity; and (d) the strategies of a successful physical educator.

Keywords: elementary, physical education, generalist, teacher, physical literacy

Introduction
Physical education is crucial to the promotion of positive development in school-aged children and is particularly important today as societies within the world are plagued by the increasing occurrence of childhood obesity and illnesses linked to physical inactivity (Mandigo, 2005; Public Health Agency of Canada, 2008a; Starky, 2005; World Health Organization, 2004). Children of today are the first in history to have a shorter life expectancy.
than the current adult populace (Grantham, 2007); yet, despite the alarming deterioration to childhood health documented by research and marketed by the media, society continues to ignore the less than favourable physical education programming offered at the elementary level, which – in most countries – is all too frequently delivered by a generalist teacher (DeCorby, Halas, Dixon, Wintrup, & Janzen, 2005; Hardman & Marshall, 2005). It is critical to offer physical education the elementary school level to ensure children develop the necessary knowledge, fundamental skill set, and attitude needed to cultivate a healthy lifestyle at an early age thereby providing them with healthy practices which can later be refined and carried through to adulthood (Kirk, 2005). However, despite the increasing demand to address health within a school setting through the medium of physical education, many generalist teachers are reluctant to teach physical education courses (Hastie & Martin, 2006). As a further challenge, inadequate and inappropriate preparation has been identified as a major barrier for an elementary generalist to produce a quality physical education program as prescribed by the curriculum (CAHPERD, 2006; Deacon, 2001; Janzen, Halas, Dixon, DeCorby, Booke, & Wintrup, 2003; Tremblay, Pella, & Taylor, 1996). This paper is intended to identify and discuss the strategies of an effective physical educator in the hope that it may guide generalist teachers on their journey towards strengthening the current physical education programs they offer.

(Dis)Advantages of Teaching Physical Education as a Generalist Teacher

The first and most obvious detriment for any generalist teacher stems from their educational background, or the lack thereof. For example, an individual would not be deemed qualified to teach music based on his or her appreciation for classical music, and the same holds true for any other specialized subject such as visual arts, drama, French – or physical education. Just because a teacher may enjoy playing golf does not deem him or her qualified to teach the subject; a deeper understanding of the subject elicits more meaningful instruction (Lu & De Lisio, in press). Unlike a specialist teacher, a generalist will not have undergone intensive physical education teacher education (PETE) and, as a result of their limited training and exposure to this unique learning environment, they will likely lack a certain sense of self-assurance and embodied understanding of physical education.

The realization of this shortcoming may cause some teachers to experience a sense of anxiety toward the subject which may further reflect upon their individual experiences in a physical education environment. Not everyone is proficient at being physically active and not everyone gains a sense of enjoyment from any form of physical exertion; for those who do not, the experience of teaching physical education will be less appealing. That being said, it is important that people within the field who do identify as specialists do not foster the athletic stereotype; i.e., that in order to teach physical education you must be an athlete. Such stereotypical statements
are completely invalid, as mere physical competence does not guarantee an individual will be qualified to teach a physical education curriculum. In fact, witnessing a teacher’s struggle to become physically fit and/or the witnessing a level of unease displayed by a teacher in a physical setting can foster a sense of security amongst the class (Lu, 2004), as it levels the playing field somewhat between teacher and student. A student should never feel isolated by his or her ability or inability and a quality physical education program will endeavour to avoid this. A teacher capable of instilling a love for healthy active living, regardless of their own physical ability, will surely be a successful instructor.

Despite the lack of expertise displayed by generalist teachers in a physical education setting, it is likely that generalists will possess a more comprehensive understanding of grade-related subject material and student ability than their specialist counterparts. Since a generalist teacher is with their class for the duration of the school day, she/he is better able to gain a holistic understanding of every child in the group. Consequently, she/he can easily integrate another subject and create an interdisciplinary approach to classroom instruction. As a result, a generalist teacher may be in the best position to teach all subjects to the whole child – a situation which could not be paralleled by a specialist. Another benefit to teaching physical education as a generalist is the opportunity to observe each student in a different and unique setting, as children may become more inclined to display an alternative personality while at ease and engaged in physical activity. Thus, as stated above, a generalist teacher can still effectively administer a quality physical education program as long as the overall goal (i.e., to instil the necessary knowledge, fundamental skill set, and attitude to live healthfully) is maintained.

**Physical Education and the Connection to the Whole Child – Developing an Appreciation for the Subject**

Physical education is, quite literally, education through the physical (e.g., bodily movement). A quality physical education program will provide a variety of well-planned physical activities for all children while acknowledging the importance of developing a physically literate individual capable of sustaining an active and healthy lifestyle. There are three learning domains covered in physical education: psychomotor, cognitive, and affective. It is through a positive movement experience that a physical educator can address the development of the whole child, as proposed by Clark Hetherington nearly a century ago. The approach of educating through the physical versus education of the physical (Hetherington, 1910) did more than merely address the physical aspect of physical education: it also highlighted the need to adapt physical education and optimize the capacity of the curriculum in the development of an individual through their mind, body, and soul as one integrated whole (Lodewyk, Lu, & Kentel, in press).
Physical education is an academic subject which is formulated towards students’ learning and fostering of physical literacy (Whitehead, 2007). As part of a whole child’s literacy development, physical literacy entails not only learning about movement but also learning through movement (Kentel & Dobson, 2007). Physical literacy is acknowledged as a core element in achieving the overarching goal promoted by a quality physical education program and, while physical literacy is not reserved solely for physical education, it must represent the overall goal of every physical education class. It is important to note that the concept of physical literacy is sometimes referenced in relevant literature as “movement literacy” (despite the slight variance in definition, both terms suggest a similar concept) and the increasing popularity of physical literacy both in academia and curricular documentation provoked its inclusion in this paper. An additional benefit of physical education is that it can promote literacy across the curriculum and elicit an alternative approach to educating children as opposed to the traditional method of teaching each subject in isolation: by integrating instruction from another subject area, a generalist may play to their expertise while allowing the class to apply their learning to another setting. To suggest a few possibilities, a student could collaborate with a group to create a vocabulary term with their bodies, or classes could explore a cultural dance to add to a discussion involving cultural identity. With a little creativity, mathematics and science – or any other school subject – could also be incorporated into the development of a personal fitness plan.

In addition to the unique possibilities presented by the physical education curriculum, it also requires that the teacher instruct a class in a unique environment; i.e., in a large gymnasium or out of doors. The space employed will reflect the use of equipment (e.g., various balls, bean bags, racquets, mats, poles, nets, etc.) and the need to move safely. Another distinctive feature of physical education is that it demands immediate and open instruction and correction of students that is nearly impossible to conduct in a discreet manner; consequently, student success and failure is publicly displayed. A teacher must therefore be sensitive to a child’s self-esteem/confidence and foster a high success rate for the entire class. In addition, general feedback should largely remain positive while constructive feedback should be offered in private. The visible aspect of gender diversity also contributes to the uniqueness of teaching physical education, and the older the student, the more likely it is that differences in performance between the sexes will be observed. In conjunction with the differences in appearance and motor control, variances in activity preference will also become more prominent as students age. It is important that a teacher be open to gender diversity and invite the input of their class (e.g., freedom to choose activity/evaluation technique, etc.) wherever appropriate.

Relationship Between Physical Education and Physical Activity

The difference between physical education and physical activity is largely unclear to specialist teachers and thus, not surprisingly, it is also misused
amongst the generalist population and general public (AAHPERD, 2008; Lu & De Lisio, in press). Many people tend to think physical education is physical activity and that to teach physical education is to present no more than a cluster of physical activities. This common misconception can give rise to the inferior status of physical education within an academic domain (Fishburne & Hickson, 2005; Lu & De Lisio, in press).

From a conceptual perspective, physical education is not merely any physical activity or sport. It is an academic subject that must utilize physical activity as a vehicle or medium to achieve an educational goal (Lu & De Lisio, 2008). As an integral part of education, physical education will continue to contribute to the total growth and development of all children primarily through movement (Pangrazi & Gibbons, 2008). In contrast, physical activity refers to any bodily movement produced by skeletal muscles that can result in an expenditure of energy (Pangrazi & Gibbons, 2008), while sport is a type of activity that is usually planned, structured, and governed by a set of rules or customs, and often engaged in competitively. Physical activities may also include cleaning house (e.g., mopping the floor, vacuuming), yard and garden work (e.g., raking leaves, mowing lawns, shovelling snow, cutting wood), climbing stairs, carrying groceries, walking a dog, riding a bike, playing sports (Public Health Agency of Canada, 2008b) – none of which are necessarily considered to be educational (Lu & De Lisio, 2008).

A physical educator, regardless of their generalist or specialist status, must be certified to teach children within the public school setting. On the other hand, coaches and athletes are not eligible and must not be allowed to teach physical education as they do not have the appropriate teacher certification, regardless of the amount of sport or physical activities in which they engage. They simply do not have the accreditation required of every member within the teaching profession. Another difference between these two concepts is that teaching and learning must be assessed in physical education while neither teaching nor learning is required in physical activity. To conclude, it is impossible to teach physical education without using any physical activities whereas it is possible to conduct physical activities without any education.

Confronting the confusion between each concept is extremely important. In order to maintain an active healthy lifestyle, an individual will need the necessary foundation as fostered through a quality physical education program. Although physical activities are an important component of every physical education class, an activity or game cannot be the only (or most important) part. The term “gym teacher” does not accurately depict an individual capable of successfully fostering student learning and can further lend to the confusion surrounding physical education and physical activity. This conventional term has become a misnomer for a person that teaches a random assortment of physical activities without much consideration for the overall goal of physical education.
What to Teach? Understanding the Content of Physical Education

Over its years of development, physical education has become a solidified subject based on substantial research evidence (Rink, 2006; Siedentop & Tannehill, 2000). The curricular content of physical education has been shared across the world, particularly throughout Western countries. A simplified framework for the physical education curriculum is outlined below. It will detail the following: (1) the overall goal of physical education; (2) two types of fitness; (3) three fundamental movement skills; (4) four movement concepts; and (5) five categories of physical activity.

1. The goal of physical education is to assist every child in the development of a healthy lifestyle (Pangrazi & Gibbons, 2008; Rink, 2006). More specifically, CAHPERD (2005) highlights the importance of physical education in assisting students to: (a) acquire skills that enable them to perform a variety of physical activities; (b) acquire skills that will help them become physically fit; (c) participate regularly in physical activity because they find it enjoyable and exhilarating; (d) understand and value physical activity; (e) understand that physical activity can support self-expression and provide for social interaction with others; (f) display responsible and social behaviour during physical activity; and (g) display an understanding of and a respect for all people during physical activity.

2. Fitness in physical education usually refers to physical fitness – a set of attributes that people have or achieve relating to their ability to perform daily activities and physical activities (Ratliffe & Ratliffe, 1994; Rink, 2006). In particular, two types of fitness have been identified: health-related (e.g., cardiovascular endurance, muscular strength and endurance, flexibility, body composition) and skill-related (e.g., agility, coordination, balance, speed, power). For more than a decade, health-related fitness has been the overriding focus for physical education. However, more recently, the use of fitness testing in the assessment of physical education has been critically examined (Naughton, Carlson, & Greene, 2006). The overall goal of physical education programs is not to improve fitness but rather to instil a love for fitness (and other physical activities) which should transcend throughout a lifetime; imposing fitness testing may work against this goal and could hinder a child's love for healthy active living by exposing him/her to a potentially negative experience in physical education class. Both health-related and skill-related fitness can now more frequently be taught in relation to the five categories of physical activity (see Table 1). For example, individual physical activities (e.g., jogging, cycling, martial arts, yoga, etc.) provide an alternative venue to introduce an entire range of physical activities. While introducing a particular activity, a teacher may wish to target an overriding fitness concept; that is, the FITT (frequency, intensity, time, and type) principle. Depending on the type of activity, the frequency, intensity and time will vary. This principle is one approach by which a teacher can relate or discuss any type of physical activity with any class.
3. The development of fundamental movement skills is central at an early elementary stage, and should be refined throughout childhood in order to build a strong foundation of movement capabilities which may (or may not) be transferred to a more competitive setting (Kirchner & Fishburne, 1998). The three fundamental movement categories are:

   a) Locomotor/travelling skills involving moving the body in any direction from one point to another (e.g., walking, running, hopping, skipping, galloping/sliding, leaping, chasing, fleeing, dodging)

   b) Manipulative skills involving handling and controlling objects with an implement or body part:

      Propulsion: throwing, batting, kicking, punting, striking, dribbling
      Receipt: catching, collecting, volleying

   c) Stability skills involving the body balancing either in one place (static) or while in motion (dynamic) (e.g., bending, stretching, twisting, turning, rolling, balancing, weight transferring, curl-up, jump landing, pushing, pulling, rocking, swaying)
### Table 1 Categories of physical activity

<table>
<thead>
<tr>
<th>Alternative Environment</th>
<th>Dance</th>
<th>Gymnastics</th>
<th>Games</th>
<th>Individual PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water-oriented</td>
<td>Rhythmic</td>
<td>Thematic</td>
<td>Simple</td>
<td>Individual PA</td>
</tr>
<tr>
<td>Aquatics</td>
<td>• singing and</td>
<td>• balance</td>
<td>• schoolyard</td>
<td>Manipulative</td>
</tr>
<tr>
<td>• water adjustment</td>
<td>• clapping games</td>
<td>• shape</td>
<td>• backyard</td>
<td>juggling</td>
</tr>
<tr>
<td>• survival techniques</td>
<td>• aerobic</td>
<td>• travel</td>
<td>• chasing</td>
<td>skipping</td>
</tr>
<tr>
<td>• stroke development</td>
<td>• with/without</td>
<td>• throwing</td>
<td>• throwing</td>
<td></td>
</tr>
<tr>
<td>• water games</td>
<td>• equipment</td>
<td>• kicking</td>
<td>• cooperative</td>
<td></td>
</tr>
<tr>
<td>Water-based</td>
<td>Cultural</td>
<td>Creative</td>
<td>Creative</td>
<td>Mindfulness</td>
</tr>
<tr>
<td>• canoeing</td>
<td>• folk dance</td>
<td>• novel</td>
<td>• initiative tasks</td>
<td>• martial arts</td>
</tr>
<tr>
<td>• rowing</td>
<td>• square dance</td>
<td>• cooperative</td>
<td>• parachute activities</td>
<td>• meditative</td>
</tr>
<tr>
<td>• sailing</td>
<td>• Métis jigging</td>
<td>• activities</td>
<td>• (e.g., yoga, qigong)</td>
<td></td>
</tr>
<tr>
<td>• kayaking</td>
<td>• First Nations round dance</td>
<td>• stick</td>
<td>• eagle-chicken</td>
<td>Track and Field</td>
</tr>
<tr>
<td>Land-oriented</td>
<td>Contemporary</td>
<td>Acrobatic</td>
<td>Cultural</td>
<td>• running events</td>
</tr>
<tr>
<td>• walking</td>
<td>• line</td>
<td>• tumbling</td>
<td>• dragon boat</td>
<td>• jumping events</td>
</tr>
<tr>
<td>• cycling</td>
<td>• jive</td>
<td>• pyramids</td>
<td>• eagle-chicken</td>
<td>• throwing events</td>
</tr>
<tr>
<td>• hiking</td>
<td>• partner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• horseback riding</td>
<td>• country and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• camping</td>
<td>• western</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• orienteering</td>
<td>• percussive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• wall climbing</td>
<td>Creative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• snowshoeing</td>
<td>• interpretive dance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• skiing</td>
<td>• modern dance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• snowboarding</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• skating</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creative (Playgrounds)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• climbing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• balancing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• travelling</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. The four movement concepts are a system and language for analyzing, understanding, interpreting, and notating all forms of human movement. This framework was developed from Laban Movement Analysis (LMA). LMA has been widely used in the areas of dance, athletics, therapy, and physical education. A movement concept should be taught with a developmentally appropriate activity and progression in mind. Forming the
core of a quality physical education program for an elementary audience, each movement concept will involve the following (Buschner, 1994; Langton, 2007):

a) Body awareness (WHAT):
   - Shapes (e.g., long/short, wide/narrow, straight/twisted, stretched/curled, symmetrical/asymmetrical)
   - Balance (e.g., weight bearing): different parts of body
   - Transfer of body weight: between two body parts
   - Flight (e.g., running, jumping up or down, hanging)

b) Space awareness (WHERE):
   - General/personal
   - Direction (e.g., straight, zigzag, circular, curved, forward, backward, sideward, upward, downward)
   - Level (e.g., low, high, in between)
   - Pathway (e.g., square, diamond, triangle, circle, figure eight)
   - Plane (e.g., longitudinal, horizontal, anterior-posterior)

c) Effort (HOW):
   - Time/speed (e.g., accelerating, decelerating, constant rhythm)
   - Force (e.g., light heavy, strong, weak, rough, gentle)
   - Flow (e.g., interrupted/bound, sustained/free)

d) Relationship (WITH WHO/WHAT):
   - far-near
   - above-below
   - over-under
   - front-behind
   - on-off
   - together-apart

In teaching a movement concept, an educator should acknowledge the important role they themselves play in the process: a concept will not simply be acquired through the performance of an activity alone; rather, a movement concept will emerge from an activity only with the careful guidance and surveillance of a physical educator.

5). When selecting physical activities for teaching, there are five major categories (see Table 1) for consideration (Alberta Education, 2000; CAHPERD, n.d.). A quality physical education program should address all five categories of physical activity. By introducing a variety of physical activities in each category, a teacher will be more capable of developing an extensive activity repertoire for her/his class and fostering lifelong participation.

The current trend in physical education does not push for or support a system which will cater to a single physical activity (i.e., a tennis or volleyball); rather, every category is addressed with a varied weight distribution of each category depending upon the intended learning outcome.
(expectation or objective). The expertise of the teacher; the class dynamic; individual school traditions; season; time; facility and equipment availability; and accessibility to resources within the community all need to be considered in the development of a long-term (e.g., yearly, semester) plan. Another practice currently favoured within the physical education realm is the introduction of a non-traditional and non-competitive physical activity (e.g., taijiquan, yoga, etc.).

As indicated previously, all physical activities must be taught for specific learning purposes, and not just for fun. A detailed explanation of each category is provided in Table 1.

**Alternative environment physical activities** can be performed in water (e.g., swimming, canoeing) or on land (e.g., orienteering, hiking, skiing, wall climbing) and are primarily meant to expose a class to a physical activity in a new setting. These physical activities are usually recreational in nature and can be taught in association with another academic subject, such as biology or geography, for example.

**Dance** refers to a series of rhythmical, sequential, and expressive movement, usually with music or a beat. Unlike artistic dance, educational dance in physical education is a great way to teach each of the four movement concepts as detailed above. It may be taught in collaboration with another subject or used as a transition between classes. In fact, anyone can follow or create a series of rhythmical, sequential, and expressive movement with music, if taught using a developmentally appropriate approach (Purcell, 1994). Dance can also be taught with educational gymnastics (e.g., creative dance), and with equipment used in games (e.g., basketball stump). Generally speaking, rhythmic, folk/square, and creative dance are appropriate for elementary children but a teacher may wish to also seek the interest of her/his class when planning a dance unit, as there are likely to be people in the class with a dance background who could use the unit/lesson to develop leadership qualities.

**Gymnastics** is a type of physical activity which can develop strength, balance, agility, and coordination. Gymnastics has been traditionally conceptualized as an Olympic (or competitive and artistic) event. There are significant differences between competitive (e.g., Olympic) and educational gymnastics (See Table 2). As addressed earlier, physical activities must be taught for intended learning outcomes, and educational gymnastics contains more components than competitive gymnastics (e.g., floor, bar, beam, pommel horse, ring, and vaulting exercises) (Werner, 1994). Nonetheless, competitive or Olympic gymnastics can be modified for educational purposes, although competitiveness and risk-taking must be de-emphasized.
Table 2 Differences between educational and competitive gymnastics

<table>
<thead>
<tr>
<th></th>
<th>Educational</th>
<th>Competitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal</td>
<td>education</td>
<td>winning</td>
</tr>
<tr>
<td>Learning drive</td>
<td>for self</td>
<td>for referee and audience</td>
</tr>
<tr>
<td>Nature</td>
<td>non-competitive</td>
<td>competitive</td>
</tr>
<tr>
<td>Form</td>
<td>unlimited</td>
<td>limited</td>
</tr>
<tr>
<td>Prerequisite</td>
<td>none</td>
<td>Long-time training</td>
</tr>
<tr>
<td>Intensity</td>
<td>mild or moderate</td>
<td>strenuous</td>
</tr>
<tr>
<td>Safety</td>
<td>extremely important</td>
<td>encouraging risk-taking</td>
</tr>
<tr>
<td>Assessment</td>
<td>flexible</td>
<td>strict</td>
</tr>
</tbody>
</table>

Games (including sports) are a form of structured activities played according to a specific rule set. There are five categories of games played at the elementary level (see Table 3) (Belka, 1994). There has been a movement towards using the TGfU (Teaching Games for Understanding) approach in teaching games. In contrast to the traditional approach, the TGfU model stresses the use of tactics (instead of skills) and provides a context for learning skills and strategies in a meaningful way (see Table 4 for comparison). As a result, the TGfU model has been shown to motivate learners from the outset.

Table 3 Five categories of games

<table>
<thead>
<tr>
<th>Simple games</th>
<th>Target</th>
<th>Net/wall</th>
<th>Fielding/batting</th>
<th>Invasion/territory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partner tag, merry-go-round</td>
<td>Golf, curling, bocce, archery, horseshoes</td>
<td>Badminton, squash, tennis, pickleball, volleyball</td>
<td>Baseball, cricket, softball</td>
<td>Hockey, football, soccer, basketball, ultimate frisbee</td>
</tr>
</tbody>
</table>

Table 4 TGfU model vs. traditional technique-based models

<table>
<thead>
<tr>
<th>TGfU model</th>
<th>Traditional models</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) game form</td>
<td>1) skill execution</td>
</tr>
<tr>
<td>2) game appreciation</td>
<td>2) game form</td>
</tr>
<tr>
<td>3) tactical awareness</td>
<td>3) performance</td>
</tr>
<tr>
<td>4) making decisions (what and how to do)</td>
<td>4) making decision: what and how to do</td>
</tr>
<tr>
<td>5) skill execution</td>
<td>5) tactical awareness</td>
</tr>
<tr>
<td>6) performance</td>
<td></td>
</tr>
</tbody>
</table>

Individual activities are most likely to be practiced throughout a person’s lifetime because they do not depend on the participation of a team or partner and often do not require the use of expensive equipment, and are not restricted by a specific schedule. These activities are incorporated into the schedule of the individual wherever a fit can be found. Due to these attractive qualities and the potential for these activities to be continued throughout a lifetime, every physical educator should be encouraged to incorporate individual activities into their program design.
How to Teach? The Pedagogy of Physical Education

Planning. When planning a lesson, unit, or year for any physical education program, a teacher should remain committed to the overall goal of physical education and the activities which help to achieve this goal. Graham (2001) also recognizes the importance of teacher expertise, class interest and size, school tradition, resource availability, allocated time, climate/season, and school policies. In physical education, a teacher should not simply select the physical activities that she/he is competent in or that will strengthen the school “athletic” program. For example, in many schools, teachers are coaches and they tend to select skilled students (e.g., the class ‘jock’) to make sports teams, and they allow these students to dominate physical education classes in planning (e.g., selecting competitive team sports), implementation (e.g., frequently inviting skilled students to demonstrate in teaching), and assessment (e.g., focusing on skills). This is precisely why the traditional approach of physical education can cause many children to feel disinterested and to withdraw from the subject. The desire to reinforce the competitive mentality seen in sport will detract from the development of physically skilled/competent people, and ultimately diminish the knowledge, skill set, and attitude needed to lead an active healthy lifestyle. Indeed, this is a vital point to note in discussing the importance of planning any physical education program.

As with every academic subject, the instructional plan ought to begin with an outline for the year (however elusive that may be). From there, a unit and/or lesson sequence can be orchestrated. In drawing attention to this process, it is important to appreciate the fluidity of the process itself: the teacher should expect her/his plan to change throughout the process, and be aware that even in the middle of a lesson a plan is likely to change. However, some commitment to the process will need to be maintained, and each lesson should support the larger aim of the unit, yearly plan, and program. A general lesson in physical education can be deconstructed into each of the following: 1) a warm-up activity intended to elevate the heart rate of the class while illustrating a theme from the lesson; 2) an instructional period in which the teacher will explain and demonstrate a skill or movement concept; 3) progressive practice which will often progress from activities of least to greatest difficulty; and 4) a cool down and/or reflection period. Incorporating each of the above with a curriculum objective (or expectation, outcome) and attending to timing, differentiated instruction, group formation, equipment utilization, and assessment prior to the lesson will help a physical educator align each element with the entire unit. Lastly, and of paramount importance, is the need to consider safety both in the design and execution of every lesson.

Instruction. Explanation and demonstration will constitute a large portion of a teacher’s instruction in physical education. Every explanation should be accurate, concise, and delivered with a clear voice. A demonstration should correspond to the appropriate explanation, and should provide an
alternative viewpoint and involve students whenever possible. A learning cue should be brief and appropriate, whereas feedback should be immediate, specific, corrective, and positive. In addition, instruction should be progressive – as in, not teaching every detail at once – and teachers should offer advice that will reflect the current skill level of the students without overwhelming them.

In physical education, motor skill learning is especially important. Stanley (1977) proposed one model of motor skill acquisition in which the acquisition of a particular skill will progress from pre-control, control, utilization, and eventually, proficiency (see Box 7-1 on Page 101 in Graham, Holt/Hale, & Parker, 2004). Similarly, Fitts and Posner (1967) believe motor learning progresses from an initial (or cognitive) stage, to an intermediate (or associate) stage and ultimately, the automatic stage (see more details in Kirchner & Fishburne, 1998; Pangrazi & Gibbons, 2008). Regardless of the model chosen, instruction should evolve to inform, extend, refine, and apply (Rink, 2006) the skill targeted in the lesson.

Students' practice. Activities intended for students' practice should be meaningful, enjoyable, and developmentally appropriate (e.g., progressively as well as age and individually appropriate). In order to create an inclusive environment, every activity must be designed or modified to accommodate the individual need of the student and her/his level of development. For example, for children in elementary school, the “regular” basketball rim and volleyball net are too high, the soccer ball may be too hard to manage, or a dance may be too fast. A modification or adjustment can be made to any traditional game by altering the rules, equipment, space, or number of players. (Siedentop & Tannehill, 2000). In so doing, any kind of physical activity or sport can become more developmentally appropriate while fostering a sense of ownership. A class can take pride in a game that is created by them and is reflective of their abilities. Furthermore, these developmentally appropriate activities will usually yield a higher success rate and ultimately, cultivate intrinsic motivation and enjoyment – both of which are instrumental to the adherence of physical activities. During the practice of a particular skill or game, a learning cue (critical and brief words or phrases) can be used to highlight the key elements of the task in the lesson while feedback (the judgemental information) in line with the learning cues can help correct, motivate, reinforce, and maintain learning. If required, an additional explanation and/or demonstration may also be offered. It is the preferred practice of a teacher to express positive and specific feedback in front of an audience while delivering constructive feedback in private. Finally, the appropriateness of any game must be carefully considered by a physical educator, regardless of her/his generalist or specialist status.

Management. As with any other subject, classroom management in a physical education setting will directly relate to the organizational and behavioural structure of the class and student body. The following will
highlight some of the significant managerial issues faced by a physical educator.

1. **Discipline.** Although developmentally appropriate content and instruction will provide the best strategy to deal with discipline, co-developing (teacher and student) rules and routines can also minimize time spent on classroom management. For more than a decade, the Teaching Personal and Social Responsibility (TPSR) model, initiated by Don Hellison (2003), has proved to be most successfully when employed on students experiencing a behavioural issue in physical education (Siedentop & Tannehill, 2000).

2. **Equipment.** Distributing, collecting, and returning equipment can occupy valuable teaching time and lead to chaos during class. The following strategies will likely ease the handling of equipment: assign specific students to equipment duty; incorporate the distribution of equipment into the activity (e.g., silently roll the hula-hoop to the corner and then crab-walk back to the circle); and/or bring a collection container (e.g., large bag, rolling boxes) to the activity area. The teacher must determine the strategy for handling equipment prior to instruction (e.g., in lesson planning) to maximize student activity time and minimize managerial time.

3. **Time.** In a regular physical education class, time is divided amongst the following: instructional time (e.g., explaining/demonstrating a task, giving direction/organizational information, outlining any safety precaution); managerial time (e.g., organizing the group, handling equipment, transitioning between each activity); physical activity time (e.g., time spent physically engaged in activities); and wait time (e.g., time prior to, between, and after instructional, managerial, and any physical action). As documented by research, wait time was proven to occupy as much as 25% of the given physical education class, instructional time was between 15-30%, managerial time 20-25%, and physical activity 20-40% (Siedentop & Tannehill, 2000). In an ideal lesson, time spent engaged in physical activity should be maximized, instructional and managerial time should be optimized, and wait time should be minimized.

**Assessment and Evaluation in Physical Education**

Assessment in physical education should address the whole child in all three learning domains: psychomotor (e.g., skill performance); cognitive (e.g., knowledge of movement concepts, game strategies); and affective (e.g., attitude, social behaviour, effort). The weight distribution of each can be varied depending on the overall program goal, teaching philosophies, and/or classroom dynamic. As established earlier, there is a growing tendency to emphasize the importance of lifelong participation and a commitment to healthy active living as opposed to high performance competition. This is more likely to provide an opportunity for everyone, including those people
that do not enjoy activities such as conventional team sports, to get involved.

For further consideration, there is also an emphasis on authentic or real-world assessment as opposed to isolated skill testing/assessment. The former is more meaningful, contextualized, and situational. One way a teacher may employ a more authentic approach to their classroom assessment is through the use of teacher-student developed assessment tools. This will allow for a more diverse feedback repertoire which the student and teacher can later reflect upon. By providing greater variety in their approaches to assessment, a teacher can paint a more holistic picture of a student’s achievement. For example, a teacher can choose from a checklist, rating scale, rubric, portfolio, journal, event task, homework assignment, parent report, personalized fitness plan, presentation, research report, essay, story, poem, written test, and/or skill test throughout the school year. Furthermore, each assessment piece can be manipulated by differing the assessor (i.e., self, peer, teacher) in an attempt to document alternative perspectives – namely, authentic assessment and subjective experiences (Lu, Tito, & Kentel, in press). Last but not least, the teacher must align instruction and assessment with the overall goal of the program to ensure the intended objective is met.

Conclusion

The current trend in physical education is not to foster a skill or game oriented mentality, but rather to provide an environment that will prove to be more engaging for all children. By developing activities that are meaningful, inclusive, and enjoyable for all children, every educator regardless of status (i.e., generalist or specialist) or area of expertise will be better equipped to promote lifelong healthy active living. This new approach to physical education has more recently been referred to as the “new physical education” (Hastie & Martin, 2006, p. 18). The present paper discussed qualities which should be embodied by every generalist (and modelled by every specialist) in order to teach physical education from this “new” approach. As established throughout the paper, it is vital for a generalist to think critically as well as to question the content and manner in which it is presented in an attempt to fulfil the greater goal of physical education. It is also essential to implement a developmentally appropriate teaching practice that will intrinsically motivate children by increasing their level of success in physical education, and consequently enhance their enjoyment of physical activities. As generalists are in a unique and privileged position to teach the “whole” child using an interdisciplinary approach to the curriculum (e.g., bridging the gap between math, science, language, social studies), each one of them should aim to assist every child in his/her development of the knowledge, skills, and attitude necessary to lead an active healthy lifestyle because they are simply in the best position to do so.
Biographic Statements

Chunlei Lu is currently an Assistant Professor in the Department of Teacher Education, Faculty of Education, Brock University in Canada. He obtained a B.Ed., a M.Ed., a M.Sc, and a Ph.D in education in Canada, China, and the United States. He has been teaching curriculum and instruction in physical and health education in a number of universities in the aforementioned three countries. Based on his cross-cultural experiences, his research interests have concentrated on overlapping areas in the domains of health, education, and culture. He has published one book, and more than thirty academic and professional book chapters and papers. He has been awarded a number of internal and external research grants. E-mail: lu@brocku.ca

Amanda De Lisio has a Bachelor of Physical Education and a Bachelor of Education from Brock University, Canada. She is currently a graduate student in the School of Human Kinetics at the University of British Columbia. Her research is guided by the belief that building an appreciation for healthier living is a critical component of every learning environment. Her current research is focuss ed in understanding high school students’ perceptions of Daily Physical Activity (DPA) – a school-based physical activity policy mandated by the provincial government in Alberta, British Columbia, and Ontario in Canada. E-mail: adelisio@interchange.ubc.ca

References


Lu, C., Tito, J., & Kentel, J. (in press). Eastern movement disciplines (EMDs) and mindfulness: A new path to subjective knowledge in Western physical education. *Quest.*


**Basic References Related to Physical Education and physical activity**


Lu, C., & De Lisio, A. (in press). Forget the physical and the difference is clear! Confronting the confusion surrounding physical education and physical activity. *Physical and Health Education Journal.*