Future trends and challenges in physical education and sports sciences

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Abstract
The purpose of this study is to recognize the present trends and challenges in physical education and sports and based on these present challenges, future trends and challenges would be examined. There are different factors which are diminishing the attention of students in physical education activities. Even though the physical education is being taught as a part of programme in all the schools but lack of sufficient time and trained teachers, good facilities are accountable for little concentration in this field. The future challenges to make this field interesting involves an sufficient programme, sufficient funds allotment for holding various competitions and function of technology to generate awareness about the importance of physical activities and sports in our daily life. All these issues have been discussed in the present study.

Keywords: Physical education, sports, curriculum, technology.

Introduction
Physical education should be individualized. One size does not fit all. This is extremely challenging, but with creative tools like Physical Best, Fitness for Life, and Fitnessgram, physical educators are becoming more like personal trainers than coaches. We should focus on activity and nutrition leading to good health and wellness. If we can’t do everything, we need to at least do this.

Therefore, while playing age appropriate games is important, our emphasis needs to be on building lifelong skills and attitudes. Being active and eating well is vital at any age, but it becomes a matter of life or death as we get older. We can’t put fitness in the bank and use it later; we have to keep active and eating well to maintain the benefits.

We also need to emphasize participation and stop the trend toward becoming a nation of spectators, with a few highly skilled athletes playing and everyone else watching. All students should be provided opportunities to both cooperate and compete in physical activities. Both are important life skills, and both can be fun.

Our students should graduate with an understanding of the key principles of fitness and nutrition. They should be informed consumers of activity, nutrition, and wellness and be ready to assume self-responsibility for their own health through prevention.

And, please, let’s make sure our K-12 schools provide a logical scope and sequence let’s teach articulated curriculums and not just bump the volleyball for 13 straight years.

Finally, we have to embrace technology to effectively communicate our message and get people moving. New innovations can help kids become physically active while playing video games and provide motivation for those who otherwise wouldn’t be active.

However, from a personal perspective, I hope technology only plays a supporting role in the future. I think we’re going to rob kids of something special if we only promote their participation in a virtual world. I grew up outdoors, in the wind and rain and snow and mud. And as I approach 55, I’d still rather play tennis or basketball or hike with my dog than play a video game or watch TV. I hope physical education in the future can help kids enjoy activity in the real world, not just the virtual one.

His words dodge ball still can cause some adults to shudder, even though it might have been
Lack of energy

Like. Picture yourself as an active person. Start by going for a walk around the block, or taking the stairs instead of the elevator. Start slowly and keep at it. You may not like something the first time you do it but really enjoy yourself once you get better at it. Ask your friends and family how they got started.

Lack of motivation

Try different types of activity until you find something you like. Picture yourself as an active person. Start by going for a walk around the block, or taking the stairs instead of the elevator. Start slowly and keep at it. You may not like something the first time you do it but really enjoy yourself once you get better at it. Ask your friends and family how they got started.

I feel fine, I don't need to exercise

You may not be ill, but that's not the same as being fit and well. Your heart, lungs and circulatory system need a workout to keep you in top form for the rest of your life.

Future in physical education and sports science

Over fifty academics and educators from Australia and New Zealand attended the lecture held at the Faculty of Education's Epsom Campus in June.

Professor Tinning's address illuminated some of the key issues and influences on the field of health and physical education in New Zealand.

Professor Tinning is the first to admit that physical education makes friends and enemies of people. In his opening speech at the Dean's Lecture on Wednesday, Richard said that physical education is an almost universal experience for children and youth in schools in countries all across the world. Moreover, in all these countries there is physical education as a field of study in university.

Richard shares his time between Auckland where he is Professor of Physical Education in the School of Curriculum and Pedagogy at the Faculty of Education and Brisbane where he is Professor of Pedagogy and Physical Education in the School of Human Movement Studies at the University of Queensland.

Internationally known for his research and focus on issues related to the knowledge, identity and professional development of health and physical education teachers, Richard has long standing interests in the purposes of school physical education and how the subject has changed in response to educational trends and government initiatives.

However, a degree in exercise science does not provide prospective health and physical education teacher with the necessary background knowledge for teaching the subject says Richard. Teachers work in schools with children and youth who are both biological and social beings, who live in both nature and culture simultaneously, and for whom the most pressing issues often relate to the personal and the social.

"In this context, while bio-scientific knowledge is important, it is insufficient for teachers to fully understand such complex bio-social phenomena as health or complex socio-cultural activities such as sport.

Role of Technology

Technology is a double-edged sword. Computers, for example, contribute to sedentary leisure-time behaviors (e.g., playing sedentary computer games). On the other hand, technology has been used to promote physical activity and change exercise behavior. For years, pedometers, accelerometers, and heart rate monitors have been used as motivational tools. Newer technologies and approaches being used to promote physical activity include global positioning system (GPS), geographic information systems (GIS), interactive video games, and persuasive technology. Also, experts suggest that Internet-based physical activity interventions should be used by clinicians to promote and change exercise behavior (Marcus, Ciccolo, and Sciamanna 2009).

Pedometers

Pedometers count and monitor the number of steps taken throughout the day. Most pedometers provide a fairly accurate count of steps taken during ambulatory activities such as walking, jogging, and running. Estimates of the distance walked and caloric expenditure are less accurate. Some newer devices also provide an estimate of the total time spent during continuous walking at a moderate pace.
pressure (Bravata et al. 2007). These devices are especially useful for monitoring exercise intensity of individuals in cardiac rehabilitation programs and highly-trained, competitive athletes. Because heart rate is linearly related to oxygen uptake, it can be used to estimate the individual’s exercise energy expenditure. However, estimates of energy expenditure from heart rate may be affected by factors such as temperature, humidity, hydration, and emotional stress.

Combined Heart Rate Monitoring and Accelerometry

The prediction of energy expenditure during physical activity is improved by 20% when data from heart rate monitors are used in conjunction with accelerometer measures of physical activity (Strath, Brage, and Ekelund 2005). New devices that simultaneously monitor heart rate and body motion provide valid and reliable measures of physical activity of children, adolescents, and adults in free-living conditions (Barreira et al. 2009; Crouter, Churilla, and Bassett 2008; Zakeri et al. 2008).

Global Positioning System and Geographic Information System

Global positioning system (GPS) uses 24 satellites and ground stations as reference points to calculate geographic locations and accurately track a specific activity. For example, using a portable GPS unit provides information about altitude, distance, time, and average velocity during hiking. A graph depicting the uphill and downhill portions of the terrain is also provided. Global positioning system can be used in conjunction with accelerometers to assess and monitor physical activity (Rodriguez, Brown, and Troped 2005; Schutz and Herren 2000; Troped et al. 2008). As small receivers become more affordable and accessible to the general public (e.g., in laptop computers and mobile telephones), GPS may be more widely used to assess and to promote physical activity.

The geographic information system (GIS) is a computer system that stores information about location and the surrounding environment. With use of GIS, the impact of the environment (i.e., its form and design) on physical activity can be assessed (Zhu 2008). Detailed information about using GIS to assess environmental supports for physical activity is available (Porter et al. 2004).

Persuasive Technology

Persuasive technology is defined as a computer system, device, or application that is intentionally designed to change a person’s attitude or behavior (Fogg 2003). This technology uses tools (e.g., pedometer or balance board), media (e.g., video, audio, or both), and social interaction (e.g., playing with another person) to persuade individuals to adopt the behavior without their actually knowing it. Although the DDR was not developed specifically to promote physical activity, it has changed exercise attitudes and behavior of children and youth using principles of persuasive technology. Dance Dance Revolution uses video, music, and a dance platform to capture interest and engage children in the activity without their being fully aware that they are exercising. The emerging field of persuasive technology has enormous potential for promoting physical activity and healthy behaviors (Fogg and Eckles 2007; Zhu 2008).
Conclusion
The present practices and current course needs to be modified to produce attention of students in physical education and sports activities. The expectations and challenges will mainly be the proper curriculum to be made and followed and to make accessible sufficient funds from various organizations in order to maintain the needy but intelligent children so that they can only focus on their game without worrying about the funds. The expertise will also play an important role in expanding and creating the interest in physical activities. The importance of physical education and sports activities are being identified in today’s world and efforts are being made to progress the situations so that more and more endowment can be accepted.

References
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