Sport International

The Global Forum for Physical Education Pedagogy 2014 (GoFPEP 2014) – Physical Education and Health: Global Perspectives and Best Practice

C. R. Edginton[1] M. K. Chin[2], J. H. de Ridder[3], & S. J. Moss[3] ([1]Cedar Falls/USA, [2]Las Vegas/USA, [3]Potchefstroom/South Africa)

1 Introduction

The third in a series of biennial international forums known as the Global Forum for Physical Education Pedagogy (GoFPEP) was hosted by the North-West University – Potchefstroom Campus in South Africa. Initially established in 2010, GoFPEP has drawn together academics, professionals, educators, businessmen and government leaders to discuss the ways in which individuals working holistically can promote reform in the areas of health and physical education (Edginton, Chin & Naul, 2012, p. 32). GoFPEP seeks to address two major elements in its process of discovery. The first is to discover and reveal "best practices" in the teaching of health and physical education and the second is to revitalize the way in which health and physical education teachers are prepared.

GoFPEP as it is currently organized has framed itself as a new social movement. Like other social movements, GoFPEP seeks change and works to promote collective or group action aimed at the challenges of obesity and overweight amongst children and youth worldwide (Tilly, 2004). As has been noted by Macionis (2009, p. 487), ". . . people commonly band together to form a social movement . . . an organized activity that encourages . . . social change." As such, GoFPEP seeks to challenge existing institutional structures and ways of practice and teaching. GoFPEP as a social movement is working to bring about social change by creating new ways of thinking as well as proposing new solutions to existing problems. As a social movement, GoFPEP seeks to network individuals on a worldwide basis to influence to bring about change.

GoFPEP 2010, the initial event, was held in Grundy Center, Iowa, USA in conjunction with the Grundy Center Community Schools and the University of

Northern Iowa. The theme of this event was "Revitalizing Health and Physical Education Through Technology." The event emphasized not only the use of technology but also the importance of linking health and physical educational programs to community life as well as the building of partnerships. Several major outcomes occurred as a result of this event including: 1) the crafting of a consensus statement ~ *Health and Physical Education Pedagogy in the 21st Century: A Statement of Consensus* ~ focused on identifying strategies to advance the teaching of health and physical education and the preparation of health and physical teachers; 2) the creation of a new journal ~ *The Global Journal of Health and Physical Education Pedagogy*; and 3) the preparation of a book entitled *Physical Education and Health: Global Perspectives and Best Practice*. This latter document features an analysis of health and physical education programs in 40 countries.

GoFPEP 2012 was held in Velen, Germany, in conjunction with the Willibald Gebhardt Research Institute and focused on the theme "*Revitalizing Health & Physical Education Through Community Based Networking*." Emerging from this forum was the establishment of a network of key individuals worldwide to assist in the identification of best practices globally. The theme of GoFPEP 2012 continued to draw attention to the concerns regarding the ongoing threats to physical activities to children and youth in both school environments and the community. Similar to GoFPEP 2010, the event featured discussion groups focusing on ways in which networks can be established. The GoFPEP 2012 program was arranged to accentuate the theme of the event and organized in several different formats and included keynote presentations; workshops; on-sight clinics emphasizing best practice in modern physical education with technology and cross-curricular physical education and nutrition education, small discussion groups and poster presentations (Edginton, Chin & Naul, 2012).

2 Physical education and health: Global perspectives and best practices

GoFPEP 2014 was focused on the theme of "*Physical Education and Health: Global Perspectives and Best Practice*." Keynote invitations, invited speakers, workshops and school visitations were included in the program as well as several discussion sessions. The program included over 80 delegates from nearly 50 countries. The program was endorsed by 111 different professional organizations, universities, agencies and institutions. Delegates were asked to prepare a poster presentation which revealed best practice in their home environment. In addition, poster presentations included research which revealed in an applied fashion evidence of best practice in schools and community settings. The program focused on examining best practice using an interdisciplinary and trans-disciplinary approach with applications in community based settings.

Of note was the opening keynote presentation by the two co-founders of GoFPEP. As these individuals emphasized, GoFPEP is not an organization. The mission and vision of the movement is one of making change in health and physical education using a multidimensional approach within school settings and community. Further, GoFPEP seeks to encourage all of those involved in the effort to serve as agents of change. The GoFPEP program itself involves visits to schools, community programs, workshops and a high degree of conversation, dialog and interaction between and among delegates in both formal and informal settings. The time allocated for poster presentations created the opportunity for participants not to only contribute toward the discussions around best-practice, but to also interact with each other on the various

specialization areas that are all related to obtaining best practice within physical education. All of these elements were addressed in an effective fashion in GoFPEP 2014.

Presentations by the invited speakers focused on the interesting and interactive approached of increasing physical activity in the different cultural contexts. Best practice physical activity in schools from Western, Asian, European and African settings was presented. From the presentations is became obvious that tradition and cultural influences cannot be ignored when physical activity and physical education changes are negotiated. Deep rooted traditions are captured within the way different groups choose to move and engage in physical activity. The application of physical activity to enhance the learning experience of children was an approach used in both Europe and Africa. Math, history and geography to name a few, are taught through various games that involve movement and physical activity.

A very special element of the program was visits to three different schools in Potchefstroom from different socio-economic environments. It was an eye opener for all the delegates, as there exists a large diversity amongst the three schools. The delegates were shown the challenges and problems experienced by the poorer populations of Africa on a daily basis during their visit to especially the school situated in the poor socio-economic environment. Challenges such as insufficient or no facilities at schools, no physical education teachers and if the subject is offered, then it is usually by a teacher that is not trained in the subject matter. Children that go to school hungry because there is not enough food at home or children not dressed warmly in winter due to lack of resources. Then there is also a lack of or no equipment at these schools to offer physical education which makes it very difficult to teach this subject. The delegates were also treated by the children of Africa on various occasions to true African dances which underscored the diversity of movement by children across the world. The children of Africa have a special way of expressing themselves through movement by making use of song and dance in their own unique African style. This is truly unique to the African continent.

3 Methods – discovering and analyzing best practice

As noted, GoFPEP 2014 focused on the identification and sharing “best practices” to advance health and physical education pedagogy, especially in its relationship with the community. A major outcome was to identify best practices throughout the world. Further, the forum sought to identify and define the concept of best practice. In order to involve and encourage the participation of each distinguished invited delegate, a process of dialog to gain greater insight has been designed. The designed process of sharing will involve receiving suggestions and recommendations from the delegates. In turn, these suggestions and recommendations were recorded and shared professionally. As Edginton, Chin, Geadelmann and Ahrabi-Fard (2011, p. 37) have offered, “… the discussion groups provide an active format for participation, providing more meaningful dialog and conversation.” Discussion groups were successfully included in GoFPEP 2010 and resulted in providing useful information in the crafting of the statement of consensus ~ a major outcome of that initial forum.

In order to achieve this end, delegates were organized into eight (8) discussion groups. The groups were arranged to include individuals from different continents across the world. For example, Group 1 included individuals from Austria, Botswana, Brazil, Croatia, Japan, Saudi Arabia, Slovakia, South Africa, The People’s Republic of China

and the United States. Each group included nine (9) to ten (10) delegates. Another discussion group, Group 5 involved delegates from Bulgaria, Germany, Hong Kong-SAR, Luxemburg, Malaysia, Mozambique, New Zealand, Poland and South Africa. As one can see in viewing these two examples, there was a great deal of diversity within the discussion groups. This provided for robust and dynamic conversation with many divergent opinions and perspectives offered by the delegates.

Each group was assigned a facilitator and, in turn, each group selected a recorder. Following the conclusion of the on-sight group discussions, group facilitators were asked to collect the key points of the discussion groups. The recorders were asked to summarize the key points and consult with the facilitator of the group discussion to insure accuracy. The key points were presented to the entire body of the forum. Following this, facilitators sent final draft of responses to questions to all members of their group for comments and revisions. Once the final document was produced including comments and revisions by group members, it was forwarded to the facilitators, Prof. Dr. Gudrun Doll-Tepper and Prof. Dr. Suzanne Lundvall, who, in turn, sent the final group reports to the authors.

Instructions provided to the facilitators of the discussion groups encouraged them to have members of the group to initially gain knowledge of each other's background. The facilitators were provided with the great latitude and freedom in conducting the discussion. They were told not to progress deeply into problems but to focus on what can be done or accomplished. The facilitators were encouraged to have delegates meet in pairs and, in turn, presented information to the entire group regarding similarities, common concerns and important differences.

Discussion questions were distributed electronically to all of the delegates before the implementation of the forum. This was done in order to familiarize them with the content to be explored. The delegates, in their discussion groups, were asked to examine the following questions: 1) what constitutes a best practice in health and physical education?; 2) what features are common among programs which can be identified as exhibiting best practice?; 3) how can colleges and universities work to identify promising practices, field test best practice and research validate best practice?; 4) what best practices are available to increase capacity and efficiency to promote learning for both small and large groups of students?; 5) what best practices are available to promote deeper learning approaches and linkages to real world settings?; 6) what best practices enhance accessibility by removing barriers?; 7) what best practices promote greater choice and convenience for students?; 8) what best practices promote a student-centered process for learning?; 9) what best practices enable a personal touch between students and the teacher?

Following a submission of findings from each of the eight (8) groups, a mixed methods research framework was utilized to analyze the data. Mixed methods can be thought of as "a type of research . . . that combines elements of qualitative and quantitative research approaches for the purposes of breadth and depth of understanding and corroboration" (Johnson, et al, 2007, p. 123). Further, Greene (2007) suggests that mixed method research "actively invites us to participate in dialog about multiple ways of seeing and hearing, multiple ways of making sense of the social world, and multiple standpoints on what is important and to be valued and cherished" (p. 20). The process involved two steps; the first was a quantitative analysis which involved identification of key terms and responses relevant to each of

the discussion questions. The second step involved a numerical analysis of the key terms and responses. This step simply provided frequency counts of the aforementioned elements. The Qualrus (University of Northern Iowa, United States of America) qualitative data analysis software package was used to sort responses into coherent themes. Codes were first assigned to key terms and concepts and then sorted.

4 Results

4.1 The dilemma of language

Is it best practice? Or, is it good practice? This question reverberated in a number of searing conversations among nearly all of the discussion groups. The discussion cut at the heart of how one would define the term of best practice or good practice. One of the most overarching concerns regarding using the term best practice is that what may constitute a program, procedure or process may, in fact, be laden with culturally-relevant factors. The issue of context in terms of practice became a focus of the conversations. Is there one or more best practices? Or, are practices good when they are culturally-relevant and applicable contextually in a given environment?

What is the difference between best and good? In many respects, they are defined in a parallel fashion. Best is often thought of as a practice which is of the highest quality or great excellence. It is a practice that is most advantageous, suitable or desirable to the individual being served or participating in an educational environment. Likewise, a good practice is one that is also excellent in quality or quantity. Thus, the dilemma is one of trying to differentiate between these two terms. One of the discussion groups offered the following definition of good practice as a "… planned or spontaneous activity that is high in quality, delivered in exceptional fashion and provides learning that leads to enhanced functional, social and psychological wellbeing as is adapted to individual needs" education (A. Mwisukanjieanje & M. Dinold, personal communication July 8, 2014). We would add that such a good practice must also be culturally-relevant. Best practices should reflect culture, values, as well as age and gender of a program's participants. Further, best practices viewed in context as time-dependent, contingent on the progression of the student as well as the education system within which the student is learning.

One discussion group offered that best or good practice must begin with a ". . . cleverly crafted and cutting edge philosophical position about the educative and social value of physical education (I. Culpan & I. Laudanska-Krzeminska, personal communication July 8, 2014). Also, one discussion group reported that best practice should be viewed on a continuum, not as binary – from worst or bad to the very best. In addition, it was suggested that a best practice program is one that is multi component with each element having varying criteria for assessment. It was also noted that best practices should be child-centered and theory driven based on research to provide objectivity. Last, many of the discussion groups emphasized the importance of the empowerment and collaboration between and among students, parents and the community.

The intention of GoFPEP 2014 was for delegates to bring to the event "best practice" from their countries with the purpose to discover international best practice. Judged by the feedback from the discussion groups, "best practice" meant something different for each region in the world. Best practice in physical education from an African region meant making the most of limited resources available. Resources rich countries tend to embrace new interactive technology, while Eastern and Asian countries relied

on their cultural heritage and traditional dances as a strong feature of physical education. Thus, there was a great challenge in not only identifying primary terminology, but identifying more specific elements that would contribute to best or good practice.

Edginton and Chin (2012, p ii) have offered that a best practice can be thought of as a program, process and/or procedure that continuously and regularly produces superior results when compared to other strategies. Further, the US Department of Health and Human Services (2003, 2011) has noted that the validation of best practices is important and involves a three-step process. The first is the identification of a *promising practice*. This can be thought of as a program, activity or strategy that has worked successfully within one organization and reveals promise during its early stage for becoming a sustainable best practice with long-term effect. Next is a *field-tested best practice*. This refers to a program, activity or strategy that has demonstrated successful outcomes and is validated to a certain extent by both subjective and objective measures. Third is *research-validated best practice*. This refers to a program, activity or strategy that has been supported by a process of objective research and validates its success at the highest degree of proven effectiveness.

In support of the above U.S. Department of Health and Human Services (2011) concept of validation of best practices is the fact that a feature referenced in nearly all discussion groups was the importance of measurement. As one group noted, "the implementation of any programs must also be accompanied by the measurement of their outcomes" (I. Culpan & I. Laudanska-Krzeminska, personal communication July 8, 2014).
Further, this same discussion group suggested that programs need to establish a monitoring system to understand the process of implementation and assessment. The call for evidence-based assessment was also emphasized.

4.2 Elements of best practice

In reviewing each of the documents summarizing the discussion offered in the eight groups, a total of nearly 50 distinct themes emerged regarding best practice. When analyzing these terms using the Qualrus software, the number of responses is found in Table 1. As one can see in viewing this table, the most frequently cited responses were as follows: 1) assessment/measurements (11); health components (9); physical activity (9); teacher excellence, passion, training, availability (8); technology (8); culturally relevant/contextually based (6); empowerment (5); inspirational/motivating (5); research (5); student centered (5); advocacy (4); parent/community involvement (4); philosophical orientation (4); and safety/risk management (4). Frequencies do not infer intensity of a given response. In other words, each of these elements may be essential as best or good practice, especially when viewed in combination with other elements.

However, it is interesting to note that elements such as accessibility, engagement, learning by doing, partnerships, peer teaching and others recorded less frequency counts and, in fact, were only mentioned once by the GoFPEP delegates in their group discussions. Other elements of best practice such as after school or out of school programming, balance/flexible curriculum design, inclusion, individualized, instruction, networking, nutrition, values driven and wellness education received

greater frequency scores and obviously captured the conversation and attention of the delegates.

Table 1

Elements of best practice

Element	Frequency
Assessment/measurements	11
Health components	9
Physical activity	9
Teacher excellence, passion, training, availability	8
Technology	8
Culturally relevant/contextually based	6
Empowerment	5
Inspirational/motivating	5
Research	5
Student centered	5
Advocacy	4
Parent/community involvement	4
Philosophical orientation	4
Safety/risk management	4
After school, out of school	3
Balanced/flexible curriculum design	3
Inclusion	3
Individualized	3
Multi-dimensional	3
Networking	3
Nutrition	3
Values driven	3
Wellness education	3
Age and stage appropriate	2
Evidence based	2
Goal driven	2
Interdisciplinary focus	2
Leisure planning	2
Physical literacy	2
Professional development	2
Real life connections	2
Theory practice interface	2
Accessibility	1
Accountability	1
Engagement	1
Holistic view of students	1
Incentives	1
Leadership	1
Learning by doing	1
Partnership	1
Pedagogical theories/models	1
Peer teaching	1
Role modelling	1
School to university affiliation	1
Schools as neighborhood centers	1
Time allocation	1
Total student whole school approach	1

5 Discussion

In reviewing the results of the GoFPEP 2014 discussion groups, it was evident there are no universally accepted elements of best or good practice in physical education. The most frequent responses focused on the need for assessment/measurement and the inclusion of health and physical activity in curricular designs of best practice (Sallis et al. 2012). Again, as was noted, "… implementation of any programs (physical education, physical activity and/or health, etc.) must also be accompanied by measurement of their outcomes" (I. Culpan & I. Laudanska-Krzeminska, personal communication July 8, 2014). This will require the establishment of a monitoring system to gain an awareness of the processes of implementation and assessment.

In reviewing the table of responses from the delegates, one might conclude that best practice in physical education appears to be a multi-dimensional construct. What works in a given setting or context may be considered good practice and may vary depending on the outcomes desired. Good practice is what works in a given situation and may depend on the availability of the curriculum design, teaching expertise, availability of equipment and other resources such as technology. For example, heart rate monitors, pedometers, accelerometers, Nintendo Wii, Dance Dance Revolution, X-Box, Eye Toy, Geocaching, and YouTube have been increasingly employed in teaching physical education and the assessment of such programs (Dale, Godinet, Kearse, & Field, 2009). Technology provides individuals greater freedom to exercise at their discretion ~ anywhere, anytime using TV's, PC, iPads and iPods (Kuczala, Lengel, and Kuczala, 2010). However, such technology is not available in all settings and there is a need to find innovative ways to teach physical education in an effective manner.

It is clear that assessment in physical education is important and needs to be incorporated into the curricular planning and implementation process. Such assessment/measurement, as well as the crafting of a given curricular design or pedagogy, should be based on solid evidence or research. Teaching excellence is also an important part of best practice and participants consistently reflected on the importance of the need for appropriately trained teachers must be held accountable for providing quality health and physical education programs. As one of the discussion groups noted, the physical education teacher has to be able to " . . . link knowledge, skills and dispositions required by 21st Century learners with program outcomes such as physical competency (skills and fitness), health literacy and leisure planning throughout all subject matter and disciplines in the school" (K. Graber & D. Novak, personal communication July 8, 2014). Another group noted that "… leadership is a critical determinant of best practice" (I. Culpan & I. Laudanska-Krzeminska, personal communication July 8, 2014).

It was evident in reviewing the summaries of the group discussions that teaching was a critical element of best practice. This position has previously been recommended and supported by Pesce, Faigenbaum, Crova, Marchetti, & Bellucci, (2012); Starc & Strel (2012); and Hardman (2008). These authors suggest that highly trained teachers and specialists are essential in promoting positive outcomes for children and youth in classroom settings. It has been noted that support from colleagues, teachers, time allocated to physical education, lesson plans, resources and facilities and equipment are all contributing factors to quality physical education programs (Dowda, Sallis, McKenzie, Rosengard, & Kohl (2005); Lee, Burgeson, Fulton, & Spain (2007); Pate et al. (2006); and Taylor et al. (2011).

All of the discussion groups called for encouraging teachers to promote deeper learning, removing barriers and promoting greater choice for students. Further, delegates encouraged the importance of student centered learning. As one discussion group noted, the physical education teacher has to be the manager of many different components including "physical education, and sometimes physical activity in the schools, physically active recess, mind breaks and after school sport and physical activities" (F. Trudeau, personal communication July 8, 2014). This same group noted that "… the intervention of the physical education teacher should be determined by setting goals, the preparation of an intervention plan, the delivering of the intervention and the evaluation and revision of the intervention" (ibid). In addition, Bevans, Fitzpatrick, Sanchez, Riley, & Forrest (2010) have offered that quality physical education programs must have adequate resources, facilities, and equipment. As professional development was identified as an element of best practice, it is to be noted that James, McCormick, and Black (2007) have suggested that there is a need for continuous and progressive education for teachers, exposing individuals to both local and global best practice.

Andersen et al. (2006) and Gutin (2008) have indicated that physical inactivity is a major factor that contributes to greater incidents of overweight and obesity. In many countries hypertension is being added as a risk factor in children with an increase in the number of diabetes type 2 diagnosed earlier in childhood than previously. The increase in obesity with the simultaneous decrease in the motor ability and skills of children is the start of the new generation lacking the motor abilities to move. As there is a need for creating opportunities in both formal and informal settings, physical activity may be enhanced outside of the school on playgrounds, parks and other areas. This is especially the case where areas and equipment are colorfully marked and designed for organizing activity (Aguilar et al., 2010; Huberty et al., 2011; and Verstraete, Cardon, De Clercq, and De Bourdeauhidl, 2006).

A third world country like South Africa has many challenges and it is also a country with extreme diversity, not only in population and ethnic groupings, but also with regard to socio-economic status (De Ridder & Coetzee, 2013). Hopefully, the personal experiences of the GoFPEP 2014 delegates during the visits to schools and community programs provided them with greater insight into the challenges and problems faced by Africa. This can be of great help in the future when the international colleagues of GoFPEP place best practice in Africa under the spotlight and also for colleagues to understand and respect each other's cultures and diversity.

6 Concluding comments

It has been reported that there are now more obese and overweight individuals in the world than ones who are malnourished (Sanders, Baum, Benos & Legge, 2011). There has been an escalation of health care costs and there is a need to provide greater preventive health care programs and strategies (Cecchini et al., 2010; Wang, McPherson, Marsh, Gortmaker, & Brown, 2011).The promotion of greater physical activity within physical education programs and non-school programs is a viable public health strategy (Jago et al., 2009). Schools will play the primary role in shaping healthy behaviors including greater physical activity, improved nutritional habits and other personal factors which contribute to threats faced by individuals to their health and wellbeing (Katz, 2009; Pate et al., 2006).

GoFPEP 2014, the third in a series of events focused on promoting dialog and conversation regarding critical issues and themes in health and physical education pedagogy, was a successful activity. The dialog drew scholars from around the world

into engaging both formal and informal conversation. Hope for the application of new and dynamic ideas and concepts was offered by Lisa Witherspoon, Co-Director of the University of South Florida (USA) Active Gaming Research Laboratory. Dr. Witherspoon offered the following … "I hope each of us will try to apply what was discussed with our children in our respective countries. Without application we cannot learn how to make GoFPEP 2016 even more beneficial than our previous gatherings" (L. Witherspoon, personal communication May 19, 2014). From India, a colleague offered "… It was really very nice and enriching experience during all scientific deliberations and discussion groups" (G. Chawla, personal communication May 20, 2014). Further, as a colleague from Brazil noted, "… GoFPEP has given a chance for all of us to review our practices, to share concerns, and to find innovative solutions (W. de Oliveira, personal communication May 21, 2014).

GoFPEP has again demonstrated the ability of individuals from throughout the world to meet and discuss common issues and concerns. The quest for dialog and conversation which leads to the sharing of ideas and solutions to common concerns is universal. Without question, GoFPEP 2014 provided a unique opportunity for individuals to build camaraderie and solidarity with their colleagues worldwide. As our colleagues from Brazil, Dr. Walter de Oliveira offered in a final reflection and testimony to the event, as a participant in the initial meeting, "… I can see how this work has evolved and how this group has become more than a team, it has become like family; a family of scholars, of brothers in hope, in collaboration, and in efficacy" W. de Oliveira, personal communication May 25, 2014)

It is evident that physical activities that enhance one's health and wellbeing, especially provided at an early age, may circumvent the future onset of non-communicable diseases such as coronary heart disease, diabetes, and high blood pressure (Ban, 2011; Matheson et al., 2013; Freedman, Mei, Srinivasan, Berenson, & Dieta, 2007). The challenge is one of making such health enhancing physical activity among children and youth routine, leading to the development of life-long habits and behaviors. Making physical activity fun and enjoyable is crucial to the success of such endeavors. In recent decades, physical education programs, along with other curricular initiatives such as art and music, have been eliminated from the school curriculum. Physical activity should be included in one's daily school schedule. Fairclough, Beighle, Erwin, and Ridgers (2012) note that high active children demonstrate more moderate (MPA) and vigorous (VPA) physical activity than low active children in before and after school settings, scheduled classes, recess, and lunch periods. These researchers have offered that structuring physical activity program timeframes may indeed be beneficial in promoting greater health and wellness benefits.

References

Aguilar, F. S., Martınez-Vizcaıno, V., Lopez, M. S., Martınez, M. S., Gutierrez, R. F., Martınez, S. S., et al. (2010). Impact of an after-school physical activity program on obesity in children. *Journal of Pediatrics, 157,* 36–42.

Andersen, L. B., Harro, M., Sardinha, L. B., Froberg, K., Ekelund, U., Brage, S., & Anderssen, S. A. (2006). Physical activity and clustered cardiovascular risk in children: A cross-sectional study (the European Youth Heart Study). *Lancet, 368*(9532), 299–304.

Ban, K. M. (2011). UN launches global campaign to curb death toll from non-communicable diseases. Retrieved from: http://www.un.org/apps/news/story.asp?NewsID=39600&Cr=non+communicable+diseases

Bevans, K. B., Fitzpatrick, L. A., Sanchez, B. M., Riley, A. W., & Forrest, C. (2010). Physical education resources, class management, and student physical activity levels: A structure-process-outcome approach to evaluating physical education effectiveness. *Journal of School Health, 80*(12), 573–780.

Cecchini, M., Sassi, F., Lauer, J. A., Lee, Y. Y., Guajardo-Barron, V., & Chisholm, D. (2010). Tackling of unhealthy diets, physical inactivity, and obesity: Health effects and cost-effectiveness. *The Lancet, 376*(9754), 1775–1784.

Dale, S., Godinet, S., Kearse, N., & Field, A. (2009). The future of fitness: A white paper. Auckland, New Zealand: Les Mills International Ltd. Retrieved August 5, 2014, from http://www.lesmills.com/files/globalcentral/docs/Future%20of%20Fitness%20White%20Paper_Nielsen%20&%20Les%20Mills_final_Jan%202010.pdf

De Ridder, J. H. & Coetzee, D. 2013. Childhood obesity in South Africa: Are we sitting on a time bomb? *The Global Journal of Health and Physical Education Pedagogy.* 2(4), p. 239-249.

Dowda, M., Sallis, J. F., McKenzie, T. L., Rosengard, P., & Kohl, H. W. (2005). Evaluating the sustainability of SPARK physical education: A case study of translating research into practice. *Research Quarterly for Exercise & Sport, 76*(1), 11–19.

Edginton, C. R. & Chin, M. K. ((2012). Promoting Best Practice. *The Global Journal of Health and Physical Education Pedagogy, 1*(4), p. i-ii.

Edginton, C. R., Chin, M. K, & Naul, R. (2012). The Global Forum for Health and Physical Education Pedagogy: A New Social Movement. *International Journal of Physical Education. 49*(3), 31–39.

Edginton, C. R., Chin, M. K, Geadelmann, P. & Ahrabi-Fard, I. (2011). Global Forum for Physical Education Pedagogy 2010 (GoFPEP 2010): Health and Physical Education Pedagogy in the 21st Century – A Statement of Consensus. *International Journal of Physical Education, 48*(2), 33–41.

Fairclough, S. J., Beighle, A., Erwin, H., & Ridgers, N. D. (2012). School day segmented physical activity patterns of high and low active children. *BMC Public Health, 12*(1), 406. Doi: 10.1186/1471-2458-12-406.

Freedman, D. S., Mei, Z., Srinivasan, S. R., Berenson, G. S., & Dieta, W. H. (2007). Cardiovascular risk factors and excess adiposity among overweight children and adolescents: The Bogalusa heart study. *Journal of Pediatrics, 150*(1), 12–17.

Greene, J. C. (2007). *Mixed methods in social inquiry*. San Francisco: Jossey-Bass.

Gutin, B. (2008). Child obesity can be reduced with vigorous activity rather than restriction of energy intake. *Obesity, 16*(10), 2193–2196.

Hardman, K. (2008). Physical education in schools: A global perspectives. *Kinesiology*, 40(1), 5–28

Huberty, J. L., Siahpush, M., Beighle, A., Fuhrmeister, E., Silva, P., & Welk, G. (2011). Ready for recess: A pilot study to increase physical activity in elementary school children. *Journal of School Health, 81*(5), 251–257.

Jago, R., McMurray, R. G., Bassin, S., Pyle, L., Bruecker, S., et al. (2009). Modifying middle school physical education: Piloting strategies to increase physical activity. *Pediatric Exercise Science, 21*(2), 171–185

James, M., McCormick, R., & Black, P. (2007). *Improving learning how to learn: Classrooms, schools and networks*. London: Routledge.

Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research, 1*(2), 112–133.

Katz, D. L. (2009). School-based intervention for health promotion and weight control: Not just waiting on the world to change. *Annual Review of Public Health*, 30(1), 253–272.

Kuczala, M. S., Lengel, T., & Kuczala, M. (2010). *The kinesthetic classroom: Teaching and learning through movement.* Thousand Oaks: Corwin Press.

Lee, S. M., Burgeson, C. R., Fulton, J. E., & Spain, C. G. (2007). Physical education and physical activity: Results from the school health policies and programs study 2006. *Journal of School Health, 77*(8), 435–463.

Macionis, J. J. (2009). *Society: The basics* (10th ed.). Upper Saddle River, NJ: Pearson.

Malik, V. S., Willett, W. C., & Hu, F. B. (2012). Global obesity: trends, risk factors and policy implications. *Nature Reviews Endocrinology, 9*(1), 13–27

Matheson, G. O., Klügl, M., Engebretsen, L., Bendiksen, F., Blair, S. N., Börjesson, M. & Ljungqvist, A. (2013). Prevention and management of non-communicable disease: the IOC consensus statement, Lausanne 2013. *British Journal of Sports Medicine, 47*(16), 1003–1011.

Nader, P. R., Bradley, R. H., Houts, R. M., McRitchie, S. L., & O'Brien, M. (2008). Moderate-to-vigorous physical activity from ages 9 to 15 years. *Journal of the American Medical Association, 300*(3), 295–305.

Pate, R. R., Davis, M. G., Robinson, T. N., Stone, E. J., McKenzie, T. L., & Young, J. C. (2006). Promoting PA in children and youth: A leadership role for schools. *Circulation, 114*(11), 1214–1224.

Pesce, C., Faigenbaum, A., Crova, C., Marchetti, R., & Bellucci, M. (2012, April 24). Benefits of multi-sports physical education in the elementary school context. *Health Education Journal*. doi: 10.1177/0017896912444176

Sallis, J. F., McKenzie, T. L., Beets, M. W., Beighle, A., Erwin, H., & Lee, S. (2012). Physical education's role in public health: Steps forward and backward over 20 years and HOPE for the future. *Research Quarterly for Exercise and Sport,* 83(2), 125–135.

Sanders, D., Baum, F. E., Benos, A., & Legge, D. (2011). Revitalizing primary healthcare requires an equitable global economic system-now more than ever. *Journal of Epidemiology & Community Health, 65*(8), 661–665.

Starc, G., & Strel, J. (2012). Influence of the quality implementation of a physical education curriculum on the physical development and physical fitness of children. *BMC Public Health, 12*, 1-7. doi:10.1186/1471-2458-12-61

Taylor, R. W., Farmer, V. L., Cameron, S. L., Jones, K. M., Williams, S. M., & Mann, J. M. (2011). School playgrounds and physical activity policies as predictors of school and home time activity. *International Journal of Behavioral Nutrition and Physical Activity, 8*(38). doi: 10.1186/1479-5868-8-38

Tilly, C. (2004). *Social movements, 1768–2004*. Boulder: Paradigm Publishers.

U.S. Department of Health and Human Services Administration for Children and Families Program Announcement (2003). *Federal Register, 68*(131).

U.S. Department of Health and Human Services (2011). National registry of evidence-based programs and practices. *Federal Register, 76*(180).

Verstraete, S. I. M., Cardon, G. M., De Clercq, D. L. R., & De Bourdeauhidl, I. M. M. (2006). Increasing children's physical activity levels during recess periods in elementary schools: The effects of providing game equipment. *European Journal of Public Health, 16*(4), 415–419.

Vidoni, C., Azevedo, L., & Eberline, A. (2012). Effects of a group contingency strategy on middle school physical education Sstudents' heart rates. *European Physical Education Review, 18*(1), 78–96.

Wang, Y. C., McPherson, K., Marsh, T., Gortmaker, S. L., & Brown, M. (2011). Health and economic burden of the projected obesity trends in the USA and the UK. *The Lancet, 378*(9793), 815–825