



**The Role of Physical Education Teacher Preparation and its Potential for  
Social Change in El Salvador**

*Impact de la formation d'enseignants d'éducation physique  
sur le changement social au Salvador*

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*El Salvador is a country with a combination of poverty, guns, and gangs which has resulted in one of the highest homicide rates amongst adolescent males in the world (World Health Organization, 2002). The United Nations' Secretary-General (2006) Study on Violence Against Children reported that quality education is one of the best development investments with which to reduce violence due to its link to strengthened human capacity that supports development across all sectors. Quality Physical Education (PE) in particular can play a prominent role within schools to help foster the critical life skills needed to solve conflict peacefully. As a result, the Salud Escolar Integral program was created in El Salvador as a way to address the prevention of youth violence and the promotion of peace. A key component of this program was the creation of a new undergraduate PE program at one of El Salvador's largest teacher development universities. The purpose of this study was to report on the confidence level of faculty and students in a new PE undergraduate program focused upon reducing youth violence through more humanistic approaches to PE during their first year in the program. Results from a mixed-method longitudinal design suggested that students and faculty felt that through the PE program, they had a significant role in helping to create societal changes related to the prevention of youth violence, that students felt more confident and competent in their ability to deliver quality PE programs and they felt more connected to their community and more socially responsible through opportunities to apply their skills in schools across the country. Results are*

*discussed in relation to their potential long-term impact within El Salvador and as a model for educational reform in other countries.*

*Au fil des ans, le Salvador est devenu un dangereux carrefour de pauvreté, d'armes à feu et de bandes de rue. De fait, le pays affiche aujourd'hui l'un des taux d'homicide les plus élevés au monde chez le groupe des jeunes hommes (Organisation mondiale de la Santé, 2002). Une étude du secrétaire général des Nations Unies (2006) sur la violence à l'endroit des enfants révèle que 'une des meilleures façons de faire obstacle à la violence consiste à investir dans un enseignement de qualité, de manière à renforcer la capacité humaine qui sous-tend le développement dans tous les secteurs. L'éducation physique de qualité dans les écoles, en particulier, peut grandement aider les jeunes à acquérir des habiletés fondamentales et utiles pour régler pacifiquement les conflits. Le programme salvadorien Salud Escolar Integral a pour objet de prévenir la violence chez les jeunes et de promouvoir la paix. L'une de ses composantes clés tient à l'établissement d'un nouveau programme de premier cycle en éducation physique offert dans l'une des plus grosses universités salvadoriennes. Cette étude s'est aussi penchée sur le taux de confiance des professeurs et des étudiants participant à un nouveau programme de premier cycle en éducation physique visant à réduire le taux de violence chez les jeunes en adoptant des approches plus humanistes vis-à-vis l'éducation physique dès la première année d'université. Selon les résultats d'une étude longitudinale multi-méthodes, les étudiants et les professeurs sont d'avis que le programme d'éducation physique leur permet de jouer un rôle clé en vue d'instaurer des changements sociétaux axés sur la prévention de la violence chez les jeunes. En outre, les étudiants semblent avoir plus confiance en leur aptitude à offrir des programmes d'éducation physique de qualité. En outre, ils se sentent mieux branchés sur leurs collectifs et plus socialement responsables, ce qui les incite à mettre leurs connaissances à profit dans nombre d'écoles à travers le Salvador. Le document examine les résultats en fonction de leurs effets à long terme sur le Salvador et en tant que modèle utile susceptible d'appuyer les efforts de réforme de l'enseignement en cours dans d'autres pays.*

The Constitution of the Republic of El Salvador states this as a central organizing principle that defines the role of government in the lives of the Salvadorans it serves:

*El Salvador reconoce a la persona humana como el origen y el fin de la actividad del Estado, que está organizado para la consecución de la justicia, de la seguridad jurídica y del bien común. (Government of El Salvador, Artículo I, Constitución del la República, 1983)*

A successful state, this tells us, is built upon the well-being of its people: they are the beginning and end of the state's purpose, and the future of a nation depends upon the future of its people. What, then, defines the future of a nation's people? It can be reasonably argued that in the 21<sup>st</sup> century, wherever one might live, education is a key factor determining an individual's opportunities. Access to education for all is one of the United Nations' (2000) Millennium Development Goals. The form, content, and purpose of that education will surely depend on local circumstances, but education either affords or constrains individual achievement and success and, therefore, either affords or constrains

national development. When implemented effectively, education can form the foundation for positive human development. However, when implemented ineffectively through poor pedagogy or a lack of attention to student learning or through antiquated techniques which have been demonstrated to be ineffective and at times counter-productive, it can often perpetuate the barriers that hold a society back in terms of their development. Within Salvadoran schools, the latter is often the case due to "... rigid discipline, rote learning and absence of proper training for teachers" (Salas, 1997, p. 114). The result is often that schools only serve to perpetuate the youth violence that pervades much of the country.

Ticas (2007) has discussed the interplay between culture and education in El Salvador and how the state integrates, or fails to integrate, the educational needs of the state with the educational needs of the individuals it serves. Whatever the dynamic, it is the responsibility of the state to provide relevant and effective educational opportunities through its public school system. And, just as a nation's success depends on the success of its people, so too does the success of a public school system depend in large measure on the ability and willingness of its teachers to motivate and inspire students to learn in culturally meaningful ways. A National educational plan, such as El Salvador's ambitious Plan 2021 (Ministerio de Educación, 2005), can only ever be as effective as those who work each day in a nation's classrooms to reach the hearts and minds of children and youth and to nurture their learning process. What they teach and, equally important how they teach it, is foundational to the achievement of the goals of the plan. And so, the structure of teacher preparation and the way in which it functions is fundamental to the success of public education and ultimately to national development.

This is especially true in the case of Physical Education (PE), whose history has often reflected more directly in its content and method of instruction the philosophical and political underpinnings of society. For example, the increased emphasis on fitness for North American children during the 1950's and 1960's was in direct response to the Soviet Union's claims to superior fitness levels during the Cold War (Richards, 2008). President John F. Kennedy became the first President-Elect in the United States to publish a policy document in the mainstream media about how "soft" America had become and the dangers this posed to national security (Kennedy, 1960). North American children were soon engaged in rigorous fitness programs and fitness testing to ensure they were playing their part to fight the "global threat" of Communism.

The consequence of such militaristic approaches to PE is that they often turn more kids off of physical activity, and result in unmotivated and unfit students. However, a well-crafted and delivered PE program that resonates with children's interests and developmental needs can have a powerful influence on the healthy development of children as they prepare themselves to make choices in their lives (Mandigo, Corlett & Anderson, 2008). These choices are not simply ones about exercise and nutrition, but also about the many social determinants of health including the ways in which they relate to others, and the ways in which students resolve disputes and conflicts. In El Salvador, this is of extreme importance.

El Salvador is a small Central American nation on the Pacific Ocean nestled between Guatemala and Honduras. And while the name of its neighbouring ocean speaks of peace, the country's history does not. From 1980 to 1992, Salvadorans were engaged in a civil war that left more than 70,000 of its citizens dead and

created a legacy of violence, firearms, and aggressive confrontation as a perceived legitimate means of conflict resolution (Mandigo et al., 2008). The origins of this conflict were long and deeply rooted in disputes among those of wealth and power and privilege and those living in poverty with the consequent denial of opportunity it brings. The history of the 20<sup>th</sup> century in El Salvador was one of almost intractable struggle that brought into sharp relief issues of land ownership, economic repression of an almost-feudal nature, and social and political oppression leading ultimately to authoritarian military control. When all hope of democratic reform was abandoned in 1979 following the taking of power by the Revolutionary Government Junta (supported by the United States), an opposition insurgency united as the Farabundo Marti National Liberation Front developed (supported by Cuba and other Latin American states). A full civil war began that did not end until the Chapultepec Peace Accord of 1992 (Grenier, 1999). However, even as war ended, conflict (and weapons) remained. This conflict has persisted into the 21<sup>st</sup> century.

The violent cultural messages portrayed by local media and the media of its affluent North American neighbours, mixed with a gang culture imported from the United States, have greatly exacerbated the pre-existing crisis that history has bestowed. Children and youth pay a particularly heavy price for the culture of violence. In El Salvador, 32% of adolescents report having engaged in a physical fight while 20% have been threatened with a weapon (Springer, Selwyn, & Kelder, 2006). Homicide amongst youth (especially adolescent males) is one of the leading causes of death for adolescents and El Salvador has one of the highest youth homicide rates (50.2 per 100,000 aged 10 – 29 years) in the world (World Health Organization, 2002). It is estimated that in El Salvador, the health care costs attributed to violence throughout the country is 4.3% of the country's total gross domestic product each year (World Health Organization, 2004) and that the El Salvador government spends almost 2% of its gross domestic product on the number of days lost to premature death or years lost due to disability as a consequence of violence (Butchart et al., 2008). Prisons overflow, police take on greater and greater powers, yet the public safety does not improve (Waiselfisz, 2008).

In light of this, in 2005 as a legacy development of the United Nations Year of Sport and PE, a novel approach within El Salvador to addressing the issue of child and youth violence took root in the form of a program called Salud Escolar Integral, very roughly translated as the Whole, Healthy Student. Building upon recommendations that multi-sectoral and collaborative approaches that integrate prevention into social and educational policies are critical to the prevention of violence (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002), the program is a collaborative effort of partners working across a broad range of Salvadoran government ministries and agencies, with the international cooperation of the Salvadoran and Canadian universities and governments, and with the support of corporate sponsors within El Salvador<sup>1</sup>. This program aspired to re-formulate the role of PE in the public school system as an essential means to promote peace across the curriculum and teach the values and life skills needed to resolve conflict in a non-violent way (Galtung & Jacobsen, 2000).

Rooted in humanistic PE, Salud Escolar Integral is a highly targeted attempt to support existing teachers and train new teachers in theories and techniques of active play and games specifically designed as vehicles to accomplish the key

goal of reducing violence by promoting peaceful conflict resolution and, more generally, peace itself. This strategy is consistent with key thinking in the area of integrative peace education (e.g., Danesh, 2006). Peace, in this model, is simultaneously dependent upon a broad spectrum of social and psychological influences that are expressed in inter- and intrapersonal ways as individuals and groups interact. Danesh argues that the success of educating for peace is determined by the worldview our experiences create, something that is affected deeply by the nature of school life (e.g., the presence or absence of bullying or the emphasis on competitive or conflict based explanations of the world); by the presence or absence of peace in our communities; by the presence or absence of a healing process to bind the wounds that violence create in the fabric of lives lived in places of conflict (like El Salvador); and, by the cross-cutting presence of peace themes within the total framework of the educational system.

Successful peace education relies on addressing the reality of life as it exists, human nature as it drives behaviour including human relationships, and the purpose of life as we give meaning to it. Thus, the kinds of activities that express peace education and conflict resolution are those that: encourage unity of worldview; foster a critical approach to how the world (and the school itself) could be different than one based on conflict; nurture an atmosphere of trust and, therefore, cooperation; build hope and optimism on a foundation of security, identity, and meaning; and, replace anger and resentment with lively but positive and thoughtful interaction with others.

Peace education is closely aligned with humanistic approaches to PE. Humanistic PE involves "... a concern for man above all else behaviourally and concern for man's social and emotional well-being" (Hellison, 1973, p. 3) and fosters the development of self-esteem, self-actualization, self-understanding, and positive interpersonal relations with others. These in turn help students to make their own self-body-world connection, provide a sense of community, and facilitate a playful spirit (Jewett & Bain, 1985). However, in order for such creative approaches places to be implemented, teacher education is critical for real change to take place (Gutierrez, 2007).

This is especially true in El Salvador. In order for PE to have the kind of impact that *Salud Escolar Integral* is designed to have, and to link its overarching strategy to the fundamental tenets of peace education through humanistic approaches to PE, major changes to existing infrastructure need to first take place. In particular, more teachers with professional PE training are needed. Currently in El Salvador, there are ~5,000 schools and only ~450 PE teachers. A major reason for the lack of PE teachers is the closing of PE training schools in 1979 due to the outbreak of unrest leading to the civil war. These training schools were never reopened. This has resulted in a 25-year gap of professional development and training opportunities for PE teachers across El Salvador. At the National University which has a five year *licenciatura* PE degree program, very few complete the program due to its length and the need to obtain employment as well as a thesis requirement that serves as the capstone requirement to graduate from the program (A. S. Magaña, personal communication, February 14, 2005). In addition, this program is very focussed upon the role of PE for the development of sport for elite athletes as opposed to PE for more educational purposes. Between 1979 and 2006, this was the only PE teacher preparation opportunity offered by a University in El Salvador. As a result of the lack of

infrastructure to train qualified teachers, PE sometimes is not taught in Salvadoran schools (despite the fact that students are required to receive one hour per week of PE), or it is taught by individuals with little to no formal training in PE, or it is taught from a highly competitive perspective that perpetuates the violence many children and youth experience in their communities. In addition, many PE teachers teach at more than one school for economic reasons. This results in teachers who are left on the periphery of each school community feeling excluded and disconnected to the school ethos, and unable to make a contribution. Consequently, the majority of children and youth across El Salvador leave the education system without the physical, social or cognitive skills necessary to make healthy choices particularly with respect to non-violent conflict resolution (Salas, 1997). Developing university degree programs that prepare competent and confident PE teachers is vital for educational reform to occur within the schools and a key strategy to support national development efforts to reduce violence (Sport for Development and Peace International Working Group, 2008).

The development of a three-year PE profesorado degree program at Universidad Pedagógica de El Salvador (UPES) was launched in January 2007. A three-year program was chosen to increase the likelihood of graduation from the program. It was founded on Salud Escolar Integral principles, with the dual purposes of training future teachers to use PE to promote physical health and to play a critical role in providing children and youth with the skills, knowledge, and attitudes to solve conflict peacefully. A summary of the profesorado curriculum at UPES is provided in Figure 1. A university program has been identified as a major “change agent” due to the positive influence that universities can have upon the social fabric of countries and local communities (Hellison et al., 2000; Lawson, 1997). The development of this novel PE undergraduate program was founded upon the development of the pedagogical and professional knowledge needed to deliver quality PE programs in schools, and upon humanistic principles which support the type of social reform sought by so many across El Salvador.

The purpose of the following research was to develop a better understanding of the skills, knowledge, and attitudes that the next generation of teachers in this new PE profesorado program (and faculty associated with this new program) developed during the critical first year of the program’s existence. The study also examined changes in how participants perceived the potential of physical education to create social change as it related to the country’s largest area of concern; youth violence prevention. Specifically, a multi-method research design was developed to address the following research objectives:

- i. to gain a better understanding of newly-engaged university faculty and students’ thoughts on the importance of PE in El Salvador;
- ii. to examine the impact of a PE profesorado degree program on perceived student competencies after one year in the program; and,
- iii. to gain an understanding of the challenges and successes that students faced in their first year of a unique undergraduate PE program.

### **Methods**

A mixed-methods design was used to capture a comprehensive description of the importance of PE and the impact the PE degree program had on

participants' evolving perceptions of the benefits of physical education during the first year of the three year program.

### *Participants.*

Participants in this study included Salvadoran faculty (n=6) and students (n=64, 52 males, 12 females) in the first cohort of the degree program located at Universidad de Pedagógica (UPES) in the capital of El Salvador, San Salvador. All participants provided informed consent prior to their participation in the study. The study received ethical approval from the Brock Research Ethics Board and permission to conduct the study was granted by the proper authorities at UPES.

### *Data Collection and Analysis*

Three sources of data collection were used throughout the study to answer each of the research questions: questionnaire, interviews, and a reflection template.

*Questionnaire.* Students in the PE profesorado degree program were asked to complete a questionnaire<sup>2</sup> outlining their confidence and competence across a number of areas of interest at the start of the degree program (February, 2007) and one year later at the start of the second year of the degree program (February 2008). The questionnaire consisted of a series of seven-point Likert-type questions (1 = low; 7 = high) that were developed by the authors after consulting the literature. Students' perceptions of their confidence related to disciplinary knowledge (n = 8), professional knowledge and skills (n = 7), and pedagogical knowledge and skills (n = 8) were assessed using the International Council for Health, PE, Recreation, Sport, and Dance (ICHER-SD, 1997) Global Standards for Professional Preparation in PE. Key questions (n = 13) emerging from Hellison's (2000) Responsibility Model were used to assess the degree to which they felt confident about incorporating the model into their teaching. A total of 31 students (22M; 9F) out of a total of 64 (52 M; 12 F) from the initial cohort of the program completed the questionnaire both in 2007 and 2008. The other 33 students either completed the questionnaire in 2007 or 2008 but were unavailable to complete in both years. For the purposes of this paper, only those who completed the questionnaire in both years were included. All questionnaire data was inputted and analyzed using paired t-tests from SPSS 16.0.

*Interviews.* At the start of the degree program (Feb, 2007), individual semi-structured interviews were conducted with five students and three faculty members from the University about the role they felt PE played within El Salvador. These interviews were intended to provide a richer insight than the questionnaire data alone. One year later (Feb, 2008), two students and five faculty members were interviewed about the role PE played within El Salvador. All interviews were conducted in Spanish by a Canadian or Salvadorian research assistant who was trained to conduct the interviews and who had developed a positive rapport with the students through previous involvement with the degree program.

Interview data were transcribed verbatim into Spanish and then translated into English. The transcribed and translated interviews were initially subjected to inductive coding. Individual meaning units were then identified from the interview transcripts through the process of micro-analysis (Strauss & Corbin,

1998). Micro-analysis involved detailed line-by-line analysis to identify salient units of meaning, whereby meaning was represented by a word, a sentence, or a paragraph. Similar meaning units were coded from individual transcripts and a coding scheme that comprised the main categories presented in the results was developed. Each category was assigned a descriptive label that conveyed the essential meaning contained in the data housed in that category. Each meaning unit and each category was analyzed using the constant comparative method to ensure that the data in each category had been appropriately categorized.

*Reflection template.* At the beginning of the second year of the degree program, all students were asked to complete a reflection template about their first year in the PE program. Students were asked to identify up to five successes and five things they found challenging from their first year of the program. A total of 45 reflection templates were returned. To analyze the reflection templates, all comments were initially categorized into one of two areas (i.e., successes, challenges). Using a process similar to the interviews, the data were then translated from Spanish into English. A constant comparison method to identify common themes amongst each category was used. An alternate coder also coded the data and in instances where there was discrepancy, a compromise between the original coder and the alternate coder was reached.

## **Results**

### *Impact of PE Degree Program on Student Confidence and Competencies after Year 1*

Table 1 presents the results of a series of paired t-tests examining the changes in student confidence in disciplinary knowledge, professional knowledge and skills, and pedagogical knowledge and skills. The results from the paired t-tests studying the changes in the use of the responsibility model when teaching children and youth are presented in Table 2.

Table 1.

Mean differences in student competence from Time 1 (2007) to Time 2 (2008).

<i>Question</i>	<i>n</i>	<i>2007 Mean (SD)</i>	<i>2008 Mean (SD)</i>	<i>t-value</i>
<i>Confidence of Disciplinary Knowledge</i>				
<i>Philosophy</i>	27	3.63 (1.31)	4.26 (1.16)	1.96
<i>History</i>	29	4.07 (1.58)	4.48 (1.06)	1.51
<i>Human Anatomy</i>	29	4.31 (1.20)	5.21 (1.08)	2.84**
<i>Biomechanics</i>	27	2.85 (1.70)	3.70 (1.61)	2.12*
<i>Human Physiology</i>	26	3.96 (1.48)	4.54 (1.10)	1.53
<i>Psychology</i>	31	5.03 (1.54)	5.08 (.98)	0.18
<i>Sociology</i>	27	4.44 (1.63)	4.43 (1.08)	0.04
<i>Motor Development</i>	30	3.20 (1.77)	4.13 (1.94)	2.13*
<i>Motor Learning</i>	29	3.24 (1.68)	4.21 (1.78)	2.30*
<i>Confidence of Professional Knowledge &amp; Skills</i>				
<i>Nature of the Profession</i>	30	4.83 (1.56)	5.50 (1.01)	1.9
<i>Effects of PE</i>	31	5.13 (1.36)	5.60 (1.06)	1.90
<i>PE in Schools</i>	30	5.00 (1.23)	5.40 (1.07)	1.53
<i>Personal Philosophy</i>	29	4.52 (1.53)	5.10 (0.90)	2.14*
<i>Personal Commitment</i>	30	5.67 (1.27)	4.54 (1.10)	0.21
<i>Cultural Aspects</i>	30	5.27 (1.53)	5.50 (1.04)	0.82
<i>Curriculum Planning</i>	30	4.53 (1.68)	5.20 (0.89)	1.78
<i>Program Planning</i>	31	4.48 (1.61)	5.06 (0.93)	1.56
<i>Confidence in Pedagogical Knowledge</i>				
<i>Learning Theory</i>	30	4.70 (1.34)	5.23 (0.86)	1.74
<i>Teaching Theory</i>	31	4.77 (1.36)	5.23 (0.96)	1.37
<i>Teaching &amp; Learning Strategies</i>	31	5.10 (1.17)	5.65 (0.80)	2.20*
<i>Lesson Planning</i>	31	4.52 (1.31)	5.16 (0.86)	2.40*
<i>Skill Analysis and Evaluation</i>	31	4.87 (1.23)	5.23 (0.96)	1.25
<i>Class Management</i>	30	4.50 (1.20)	4.80 (0.92)	1.12
<i>Teaching in Small Spaces</i>	30	4.47 (1.68)	5.13 (1.36)	1.76

Note: \* $p < .05$ ; \*\* $p < .01$

Table 2.

*Mean differences in perceived confidence to apply personal and social responsibility model.*

<i>Personal and Social Responsibility</i>	<i>n</i>	<i>2007 Mean (SD)</i>	<i>2008 Mean (SD)</i>	<i>t-value</i>
<i>Do you like kids and can you relate to them?</i>	29	6.52 (.91)	6.72 (0.59)	1.29
<i>Do you try to treat children and youth as individuals?</i>	29	6.28 (1.09)	6.21 (1.18)	-.28
<i>Do you spend time consciously focusing upon students' strengths?</i>	30	5.10 (1.42)	5.60 (1.00)	1.58
<i>Do you listen to students and believe that they know things?</i>	31	6.10 (1.17)	6.39 (0.67)	1.36
<i>Do you share your power as a teacher with students</i>	29	5.90 (1.21)	6.34 (1.04)	1.86
<i>Do you help your students to solve their own conflicts so that they can do this on their own?</i>	31	5.94 (1.03)	6.26 (0.93)	1.35
<i>Do you help your students to control negative statements and temper?</i>	31	5.84 (1.03)	6.23 (.93)	1.99
<i>Do you help students to include everybody in the activities?</i>	31	6.29 (.69)	6.65 (.55)	2.16*
<i>Do you give students opportunities to work independently towards their own goals?</i>	31	6.23 (.96)	6.32 (.75)	.43
<i>Do your students have a voice in evaluating each lesson and solving problems that arise?</i>	31	6.00 (.97)	6.48 (.68)	2.54*
<i>Do your students have opportunities to assume meaningful leadership roles such as teaching and coaching?</i>	31	6.03 (.95)	6.23 (.92)	.92
<i>Do you place an emphasis on transferring the skills from your class to their lives outside of PE?</i>	31	6.03 (1.35)	6.35 (.95)	1.15
<i>Do your students leave your program understanding what taking responsibility means and how it applies to them?</i>	31	5.90 (1.10)	6.03 (0.98)	.56

\* $p < .05$

*Disciplinary knowledge.* Results from the paired t-tests identified that after one year in the program, students felt significantly ( $p < .05$ ) more confident in their disciplinary knowledge related to Human Anatomy, Motor Development, and Motor Learning.

*Professional knowledge and skills.* The findings also suggest that the only significant ( $p < .05$ ) change in the students' professional knowledge and skills was a higher level of confidence in their personal knowledge and skills in PE regarding their personal philosophy.

*Pedagogical knowledge and skills.* After one year in the degree program, students in the degree program felt their pedagogical knowledge and skills in PE improved significantly in the areas of "Teaching and Learning Strategies" ( $p < .05$ ) and "Lesson Planning" ( $p < .05$ ).

*Use of responsibility model when teaching children and youth.* After one year in the degree program, students reported a significantly ( $p < .05$ ) higher confidence in being able to provide more inclusive lessons and ensuring the children and youth they teach have a voice in evaluating lessons and solving problems (see Table 2).

#### *The Importance of PE in El Salvador*

The perceived benefits of PE in El Salvador were identified across five broad themes that emerged from interviews conducted at the start of Years 1 and 2. These themes included: physical, psychological, cognitive, societal, and holistic benefits. Tables 3 and 4 provide a breakdown of these themes and give a sample of quotes that represent the meaning of each theme by year.

Table 3

*Summary of emergent themes on the benefits of PE: Beginning of PE program.*

Theme	N	Quote Examples
Physical Benefit	4	Physical education helps to some extent because we have to be aware of what is good and bad for our body, we have to keep a good physical condition, we are more aware, we think if we have a few extra pounds or whatever, so children learn about this through their development, They learn about their body and about exercise
Psychological Benefit	5	<p>I have noticed that the students are always interested and its probably their favourite class because its recreational, fun, joyful, and it brings a sense of unity. It also helps students release stress and provides them a sense of satisfaction, of equality among their pees, so, it is very important.</p> <p>Self esteem is enhanced in the students that teach and play basketball, soccer, and other sports, baseball. They are encouraged to play sports to keep them away from addictions that other children develop. Children also have the opportunity of participating in sports, they are distracted, relaxed in their life at that time</p>
Cognitive Benefit	1	Physical education is not only that the child is dynamic, or that he is himself because if I allow a boy to say yeah lets play with the ball and hide it at home, that's not the point. Creativity is behind the physical activities
Societal Benefit	6	Physical education would help though teaching values and principles of health, moral values and how to treat other people. To enforce those values along with physical education will help them have a better life quality.
Holistic Benefits	1	Physical education means healthy mind, healthy body and that result on a healthy diet, right? The kids run, they are creative, and there we have a potential that should not be stopped. Through physical education and play we can teach children many things. We can contribute to the child's development through physical education.

Table 4

*Summary of emergent themes on the benefits of PE as identified after 1 year of the PE program.*

Theme	N	Quote Examples
Physical Benefit	3	So if we work with the communities, we are going to have better health. We are going to teach the youth about hygiene, about their bodies, about different techniques.
Psychological Benefit	2	We have to open more spaces and opportunities for them because the human body needs distraction and liberation from stress.
Cognitive Benefit	1	The body transpires toxins through physical activity, and the cells regenerate, allowing us to have a broader mentality.
Societal Benefit	7	<p>When the kid does physical exercise, he knows better how to respond to problems in a peaceful manner, he learns to handle it, to forgive and to respect the other. He will learn that if there is violence, he can intervene so that this doesn't multiply, he can create peace. Peace can be reached through physical exercise; the mind thinks clearer and does not react to aggression, does not respond with violence and knows how to solve problems peacefully.</p> <p>We talk about health, just the fact of being healthy through PE, physical activities, it brings as a consequence good health; then we can talk about values, integration of values through PE, this issue has a direct influence on each individual, they learn values, they practice them on daily basis and this has an impact into their communities. If people practice sports or any kind of physical activities along with values, this makes a kind of brotherhood among individuals and generates friendship, and therefore they learn to solve problems together through dialogues, through speaking and listening to each other.</p>
Holistic Benefits	1	Physical Education helps to have a new way of thinking, now through physical activities we stop children to think in conflictive situations instead we are helping them to integrate, to be happy, and also this helps them to have healthier hearts. We have to remember that a healthy spirit and soul works better and it is contagious to others. Physical education can help to get rid of violence, sports as well can help, and it would help us as a country.

Within the interviews, many students and faculty commented on the holistic role that PE can play in the prevention of youth violence and improving overall health. The following quote from a participant in Year 2 illustrates this perception of PE that many participants echoed through-out this study:

Physical Education helps to have a new way of thinking, now through physical activities we stop children to think in conflictive situations instead we are helping them to integrate, to be happy, and also this helps them to have healthier hearts. We have to remember that a healthy spirit and soul works better and it is contagious to others. Physical Education can help to get rid of violence, sports as well can help, and it would help us as a country.

#### *Student Successes and Challenges during Year One of Undergraduate Program*

Table 5 provides an overview of the themes that emerged from the reflection templates related to students' successes in the program during the first year. The majority (n=34, 75.6%) identified their involvement in the community as a highlight of their first year in the program. In particular, the students commented on the learning experience they gained from organizing and running the National Unity Games event which brought 500 children ages 6 to 12 from across El Salvador to take part in games and activities that fostered the development of key life skills (e.g., respect, cooperation, problem solving). Students also commented on how much they felt they developed as a professional and the development of a strong bond with the community through various projects and initiatives. For example, due to the success of the Unity Games in the fall of 2007, the students went to a number of remote schools across El Salvador to deliver mini-Unity Games to primary school students who were not able to participate in the larger National Unity Games.

Table 5

*Emergent themes related to students' perceived successes and challenges after one year in the program (n = 45)*

Theme	% Identified Theme	Example
<i>Perceived Successes</i>		
Community Connection	75.6	Organize sport events in the community to counter-act violence
Disciplinary Knowledge	46.7	More knowledge on physical education
Pedagogical Literacy	31.1	Through my studies I now know more about the body and about how to teach.
Social Aspects of Program	17.8	Respect between trainers and students
Career	13.3	Have a job as a physical education teacher
International Collaboration	11.1	Acquire experience with people of other countries.
Personal Skill Development	11.1	Be better athletes
Spiritual Development	8.9	Believe in God and be healthy
Personal Development	2.2	Give the best of myself
<i>Perceived Challenges</i>		
Pedagogical Skills	53.3	Learn how to teach a class
Degree & Career Success	51.1	Not failing subjects in the program.
Social Impact	33.3	Promote sport to decrease delinquency in my community
Disciplinary Knowledge	26.7	Always have answers for the students
Special Events	17.8	Increase the number of children for the next Unity Games
Personal Improvement	15.6	Improve Run 6km in less time
Social Interaction	15.6	To be more dynamically involved.
Quality of Program	4.4	Improve the level of education of the program
Resources	2.2	Better sport resources

NOTE: Students could list up to 5 items they felt were successful. Hence, the percentages do not add up to 100%.

Year 1		Year 2		Year 3	
Semester 1	Semester 2	Semester 1	Semester 2	Semester 1	Semester 2
Educational Psychology	Educational Psychology	Design and Application of Curriculum	Educational Computing	Professional Development	PE and Sport
General Didactics 1	General Didactics 2	Evaluation of Student Learning	Didactics of Individual Sports 2	Didactics of Team Sports 1	Didactics of Team Sports 2
Education and Society	Basic PE	Didactics of Individual Sports 1	Training Principles	Body Expression	Teaching Practicum
Anatomy, Physiology & Hygiene	Teaching Practicum	Teaching Practicum	Teaching Practicum	Teaching Practicum	Teaching Practicum

Figure 1. Overview of 3 Year PE program

Students also felt that their first year of the program had furthered their Disciplinary Knowledge and Pedagogical Literacy. These two themes were operationalized as experiences related to becoming a more competent and confident professional (e.g., increased knowledge and understanding) and the acquisition of skills directly related to teaching effectively (e.g., deals specifically with the act of teaching) respectively. Other themes that emerged included the Social Aspects of the program (e.g., making new friends), enhanced Career Opportunities (e.g., getting a job after graduation), International Collaboration (e.g., collaborating with experts from Canada), Personal Skill Development (e.g., enhanced athletic abilities), Spiritual Development (e.g., closer to God), and Personal Development (e.g., give the best of oneself).

Table 5 also provides an overview of the themes that emerged related to the challenges students faced during their first year in the program. The main challenge that students' perceived was their desire to further develop their Pedagogical Skills. Many indicated that they still needed more knowledge on effective teaching strategies to deliver quality PE programs. Many students also expressed concern over Degree and Career Success and being able to successfully complete their degree and get a job upon graduation. Other challenges that students identified throughout their first year were Social Impact (promoting sport to decrease delinquency), Disciplinary Knowledge (e.g., concerned with gaining more knowledge about content associated with education), running Special Events (e.g., ensuring success of the Unity Games), Personal Improvement (concerned with improving a personal attribute not related to academic achievement such as physical skill development), Social Interaction (amongst other students and children in the community), Quality of the Degree Program, and access to more Resources (equipment when teaching). Examples of the type of responses are provided in Table 5.

### **Discussion**

El Salvador has developed a 3 Year PE profesorado degree program focused on using PE as a change agent to combat youth violence. Findings from the examination of the first year of the new program suggested that local infrastructure, expertise, and social desire can be and was being quickly built to strengthen this endeavour. Evidence from the interviews suggests that PE is no longer seen by faculty and students as simply a way to foster the development of physical skills. Rather, there was already a collective belief that PE impacts the "whole child" physically, spiritually, and emotionally which can positively affect the social fabric of El Salvador. The degree to which this is in contrast to the pre-existing sense of what PE is and what purposes it serves cannot be overestimated. What little PE exists is heavily founded upon competitive sport and highly specific sport training primarily for its own ends. But powerful statements by participants in this study demonstrated that they believed after just one year in the program, children and youth can develop critical life skills and values such as self-esteem, stress control, equality, inclusion, self-regulation, creativity, problem solving, and critical thinking that are crucial in the establishment of peaceful societies. Although sport has been identified as a potential tool to develop conflict resolution skills amongst youth, simply throwing a ball out and telling children to play will not result in the kind of social change that is needed. Rather,

the way in which it is taught (i.e., the pedagogy) is the critical piece that is needed to ensure real change (Coalter, 2007).

After one year in the program, the results from this study suggest that the students in the teacher preparation program are becoming more confident and competent with their disciplinary knowledge, professional knowledge, pedagogical knowledge, and ability to use humanistic principles in their teaching of PE. Specifically, students reported significantly higher levels of knowledge in human anatomy, biomechanics, motor development and motor learning. Students also reported higher levels of confidence related to their personal philosophy in PE, teaching and learning strategies in PE, and lesson planning abilities in PE. In addition, students felt that after one year in the program, they were more confident in their ability to help children and youth control negative statements and temper as well provide them with a voice in evaluating their lessons and solve problems that arise. Although not significant, all the other indicators of confidence in PE were higher after one year in the program suggesting an upwards trend in the data. A continual tracking of these students into the final years of their program will highlight whether these changes in confidence reach significant levels.

Upon reflection, students consistently reported that interacting as Physical Educators with the community through student placements and special events was the top highlight during their first year of the program. Many commented that having an opportunity to work directly with children and youth throughout the country was a tremendous learning experience and provided them with a sense of empowerment with regards to being agents of social change.

In order for PE to have the type of social change that has been envisioned, it needs to be sustainable. The sustainability of PE taught in humanistic ways relies heavily upon the skills, knowledge, and attitudes of future teachers. It is this sustainability piece that is at the forefront of international development through PE (Sport for Development and Peace Working Group, 2008) and is one that is often overlooked or undervalued in sport for development work. Key stakeholders and experts must not only be engaged, but also able (and willing) to lead. Hence, universities are ideally positioned to provide future teachers with not only the disciplinary knowledge skills, but also the professional responsibility these students need to positively affect schools and sustain these changes for decades to come (Hellison et al., 2000). However, this can only yield fruitful outcomes if the efficacy of the teacher preparation process can be demonstrated with respect to the goal of addressing non-violence through PE.

Given the 25 year gap in professional training of PE teachers within El Salvador, pre-service teachers need to be both confident and competent with regards to delivering quality PE programs that have clear, relevant goals pertaining to the national identity being sought (as Ticas, 2007 reminds us). The results after the first year of the program suggest that the program is on track in terms of instilling these skills. A continual tracking of the students throughout the 3-year degree program will assist in monitoring the progress in the skills, knowledge, and attitudes needed to impact positively upon social change, as well as improving the long-term impact of these students once they enter the workplace in schools throughout El Salvador.

The desire to become a confident and competent physical educator was identified across the various methods used in this study. Although students did

report higher levels of confidence in some areas, they also indicated that there is still a lot of knowledge and skills that they need to be an effective teacher. The vision of the students and faculty is there. They see the potential that they have to create social change. This has resulted in a desire to receive the preparation they need to make these changes.

A major avenue that students identified with respect to enhancing their disciplinary and pedagogical confidence during their first year is the opportunity to apply their skills directly in the community. In addition to large scale events such as the Unity Games, students also went to local schools for practice teaching and had hands-on experiences working with children in PE classes. The benefits of having university students practicing their skills in local schools is far reaching. First, such experiences have a tremendous impact upon the university students themselves. Secondly, the children and youth who attend the schools receive programs from young adults who serve as role models for local students. The importance of role models in sport and physical activity programs has been identified to contribute in the prevention of crime amongst children and youth (Nichols, 1997). If students in schools can see young adults as positive role models emulating healthy behaviours, this in turn provides hope for many children and youth towards a brighter future. A third benefit may be that when university students run special events or do their practice teaching in a school, it may be the only form of PE that a school receives. Given the large ratio of schools to PE teachers (approximately 1: 10) across El Salvador, this leaves a large majority of schools across the country without a qualified PE teacher. In addition, even though the education policy is that students should receive PE once per week, it is estimated that only 50% of Latin American countries actually implement the required legislation (Hardman & Marshall, 2000). Therefore, it would stand to reason that a large proportion of students across El Salvador either do not receive PE on a regular basis and when they do, it is more than likely from a non-PE Specialist. Therefore, the benefits of service learning provided by the university students is not only fostering a sense of civic pride and responsibility, but it is also fostering hope for young children, the fostering of healthy role models for students, and an opportunity for schools to offer PE programs that are delivered by individuals who have some expertise in the profession.

### *Limitations*

One of the limitations of this study is the use the questionnaire. Likert-type questions were developed by the authors to enable the students to rate their confidence in being able to meet the international standards for University PE programs set by ICHPE-RD and their confidence to implement the various pedagogical strategies set out by Hellison's (2000) personal and social responsibility model. The questions were based upon the literature and not a previously developed instrument. Hence, the questionnaire lacks any validity and reliability evidence. This further compounds the ability to conduct rigorous statistical analyses. In this study, multiple paired t-tests were performed due to the inability to group questions together. This increases the chances of type one errors. Although the mixed-methods design used in this study suggests some elements of convergent validity (i.e., data from the questionnaire is consistent with the interviews and reflection templates) further research is needed to provide more sufficient validity evidence for the questionnaire to move it from simply a

descriptive measure to a more psychometrically sound measure of student confidence.

Another limitation stems from the lack of research involvement from those in El Salvador due to the lack of qualified researchers at the host University. The research team in this study is made up entirely of non native-Spanish speaking individuals from Canada. This resulted in the need to translate information from English into Spanish and then translate responses back into English. This increases the risk of misrepresentation of the data through translation. Despite the authors' engagement in the Salud Escolar Integral for two years prior to the data collection, the lack of engagement of native Salvadorans on the research team has the potential to misrepresent "... cultural and social interpretations connected to this knowledge" (Coalter, 2007, p. 91). As a result, it will be important to actively seek out engagement by local researchers not only to be involved with this study, but to continue to conduct and eventually lead the research on a longitudinal basis.

#### *Future Research*

The results from this study suggest that faculty and students feel more confident in both the role of PE to create social change and their skills to create social change as they relate to youth violence prevention. However, there is no way of knowing if real change can occur and to date, no real measure of the true impact of the new profesorado PE program on social issues such as youth violence. The research presented does not answer the critical question of whether a PE teacher education program built upon humanistic values and the development of life-skills serve to lessen conflict and violence among children and youth in schools. To truly measure impact, it will be critical to continue with this longitudinal study beyond graduation when the students start their first teaching jobs. Will their three years of preparation result in schools becoming an agent of change when it comes to youth violence? To date, we do not know the answer to this all important question. That will be the true impact test. It will be necessary not only to track the pre-service students but also the skill sets developed by the children and youth that they teach. Although the current study suggests that they are on track, it is the application of these skills, knowledge, and attitudes within the schools that will create national changes.

#### *Conclusion*

PE, taught by qualified and well-prepared teachers, has the potential to foster the development of critical life skills that children and youth need to make healthy choices. In El Salvador, these choices are often about how to deal with conflict peacefully. Simply telling children that it is right to make healthy choices is not enough to ensure that they will do so. Learning by doing and experiencing is one of the most effective methods of learning. PE can provide an ideal and safe setting to not only foster an understanding of the importance of conflict resolution, but also provide learners with an opportunity to actively engage in activities that provide opportunities to practice and gain the skills to make peaceful decisions. But they need confident and competent teachers to help them with this.

The result from the first year of this longitudinal study suggest that the pre-service students are developing not only the disciplinary and pedagogical skills to be effective physical educators, but they are also developing a level of enhanced

social responsibility to use their knowledge in ways that will help address one of their country's most pressing social health issues. Schools can either become a hub for violence or a hub for the prevention of violence. Teachers with the requisite skills needed to foster a place that encourages the prevention of violence have the potential to be the change agents desperately needed within El Salvador. Although having properly prepared PE teachers will not immediately solve the problem, it can be an important piece of the solution to El Salvador's growing problem of youth violence.

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**Endnotes**

<sup>1</sup> Funding for Salud Escolar Integral provided by Scotiabank International.

<sup>2</sup> Please contact the lead author if you wish to see a copy of the questionnaire.