ABSTRACT

Mark Earley, Advisor

Online course delivery is becoming increasingly prevalent in K-12 education. With budget cuts and other financial difficulties facing our schools, many schools are employing online courses as a means of delivering curriculum. At the same time, time constraints are being imposed on students through increasing academic requirements. As a result of these realities, in addition to more traditional issues related to student resistance to physical education classes, more and more students are choosing to complete their physical education credit through online formats.

The purpose of this study was to explore the experience of students fulfilling their physical education credit requirement through an online format. Using a case study format, the researcher conducted interviews with high school students, their parents, and school administrators and physical education instructors, to collect data on the online physical education experience. Recorded interviews were transcribed into narrative written format and multi-phased readings were conducted on the interview transcripts for the purpose of thematic analysis. Similarly coded language units were compared and grouped together in subsequent readings with individual units and clusters of units continually being reassessed for fit with the emerging coding structure which itself was open to modification throughout the process.

Results indicated that scheduling difficulties were the major reasons identified by participants as pursuing the online physical education option thus suggesting the “expendable” nature of brick-and-mortar physical education courses. In addition, while the online format offers a suitable mechanism for organizing and presenting physical education curricular content,
participants demonstrated little understanding of physical literacy or an appreciation of the
desirable long-term outcomes of the physical education curriculum. A third and final theme that
emerged from the study is that, exclusive to online physical education, is a lack of accountability
with the online option.
And whatever you do, whether in word or deed, do it all in the name of the Lord Jesus, giving thanks to God the Father through him.

~ Colossians 3:17

Dedicated to the glory of my Lord and Savior, Jesus Christ, to my parents, John and Betty Lee, who always wanted more for me than they ever desired for themselves, and to my husband, Tim Jackson, who endured, and supported this process.
ACKNOWLEDGMENTS

I Chronicles 4:10 says, “Jabez cried out to the God of Israel, "Oh, that you would bless me and enlarge my territory! Let your hand be with me, and keep me from harm so that I will be free from pain." And God granted his request. This was my prayer at the beginning of this journey. Praying this expectantly, I could not have imagined the course that the Lord would place before me. At every turn, individuals, circumstances, experiences, trials, frustrations, new challenges, and so much more surfaced. And with every new step, He has faithfully expanded my territory and blessed me beyond measure. It is only fitting that I publicly acknowledge those individuals who are answers to prayer throughout this process.

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My final thoughts go to my precious, dear family, who has listened to my frustrations, endured long hours of my absence, and observed this process from the first day of class to this final product. Tim, you will never know how much your patience throughout the stacks of articles, books, and general havoc throughout our home means, and I may never fully understand
what sacrifices have been made on my behalf. Thank you for believing in me, and loving me. I only pray I can do the same for you daily.

Jayme and Evan, my precious daughter and son, and Rob and Kari, the mates we prayed for God to give our children: If I have left an imprint upon your lives, I pray that you will always remember that (a) mom loves you very much, and (b) this is but one attempt to encourage and inspire you to believe that you can do all things through Christ who gives you strength. To my beyond believable, precious grandchildren, Liam Jackson Barone, Gavin Robert Barone, Colin David Barone, Caroline Rene Jackson, and any who may follow: My desire for your lives as I watch you grow and develop into the wonderful individuals God created you to be is that you will know Mimi believes in you, adores you, and wants nothing but to see you grow as children of the Lord who seek His perfect will for your lives. He has a special plan for each of you, and Mimi wants this work to be a motivator and inspiration to develop physically, mentally and socially in discovering your unlimited potential.
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CHAPTER I. INTRODUCTION

“In order for man to succeed in life, God provided him with two means, education and physical activity. Not separately, one for the soul and the other for the body, but for the two together.

*With these two means, man can attain perfection*

~Plato

John Dewey, a prominent figure in the history of American education, embodied Plato’s wisdom as his philosophy. Dewey believed passionately that education must be viewed as a lived experience in which students should be active participants rather than passive recipients, or a model known as progressive education. Progressive education, often interchangeably described as experiential education, embraced the concept of *doing* every bit as important as *knowing*. Dewey also described a strong belief in the *unity of man*: A notion that mental and physical could not be separated, and that all educational activity had intellectual, moral, and physical outcomes (Siedentop, 2009).

Contrary to the biologically innate mechanisms for movement, to Plato’s wisdom, and Dewey’s philosophy concerning the inseparable connections between the physical and mental/social elements of human beings, former reliance on consistent physical labor has been replaced by progress in the form of machines, including computers. The Information Age ushered in promising new ways of thinking, living, and working, and learning. While relatively new in delivering instruction to K-12 students, the use of technology for online learning presents opportunities to expand curricular offerings to student populations (Lips, 2010). Online learning (also known as distance education or e-learning) has been described as the next wave in technology-based K-12, according to Clark (2001).
While online K-12 education is a relatively new option for students in many states, distance education as a viable and sometimes preferable approach to education has gained noticeable acceptance among parents, educators, and the public (Ronsisvalle & Watkins, 2005). As a result, states, districts, and individual schools are examining the opportunities and challenges of online education for each subject matter area, including physical education (PE). According to the National Association for Sport and Physical Education (NASPE) (2007), required PE credits can now be earned online in 12 states, and half of these states claim comprehensive online PE (based on state and national standards). Further, of the twelve states that offered online PE at the time of its position statement, NASPE (2007) determined that only seven of those states required certified PE teachers to teach the online courses.

The educational system and profession have experienced a number of changes within the last decade impacting all stakeholders. Students are confronted with challenges of ever-changing demands placed upon them for educational success. Academic standards have increased in multiple ways: To earn an Ohio high school diploma, students must meet both the testing and curriculum requirements identified by the State of Ohio, changed to affect the graduating class of 2014 and beyond by the Ohio Core Legislation (Ohio Department of Education, 2014).

No Child Left Behind (NCLB), proposing to close the achievement gap by increasing standardized testing in core subject areas among America’s students with accountability, flexibility, parental choices, and research-based reforms, created a heightened sense of urgency toward change unprecedented in the history of education in America (No Child Left Behind, 2002). Simultaneously, 21st Century education goals suggested that students must have skills that include the capacity to design, evaluate, and manage one’s own work so that one continually improves. Further, these students must have the capacity to frame, investigate, and solve
problems using a wide range of tools and resources while collaborating and communicating strategically with others. Finally, they must be able to find, analyze, and use information for purposes such as development of new products and ideas (Darling-Hammond, 2010, p. 2).

These increased demands leave students searching for alternative ways to fulfill requirements in a jam-packed school schedule, while choosing an academic path for potentially future higher education programs of study and ultimately, careers. As a result, the emergence of technology services has witnessed a dramatic increase in the number of students completing courses and even entire completion degrees online (Allen & Seamon, 2014). During the 2013-2014 school year, Ohio reported 26 e-schools operating, which served 38,519 students in the previous 2012-2013 school year (Watson, Murin, Vashaw, Gemin, & Rapp, 2013).

The implications of students fulfilling Health and Physical Education (HPE) online as one alternative to traditional school HPE classes have led to significant concerns for the HPE profession, university programs preparing individuals for careers in HPE, and students served by such programs. Ironically, exercise provides the human brain with increased capacity to achieve the educational goals and high standards for achievement, as the human brain benefits with peak performance when the body exercises (Ratey, 2008, p.4).

While commonly accepted types of technology (Internet, video, computer assisted instruction, heart rate monitors, pedometers) are encouraged by NASPE and should be considered by PE teachers as tools to enhance learning, they should be integrated into exemplary programs, not isolated as the sole delivery means (NASPE, 2007).

According to Buschner (2006), a paradox exists: Many educators and parents see school PE and physical activity (PA) in competition with the Internet and other visual media for youth attention and precious learning time. Potentially for all educators, including PE and health
educators, an “if you can’t beat ‘em, join ‘em” rationale emerges with greater accessibility of information from a vast range of sources exposing individuals to many points of view. Therefore, the use of technology in any form, including its impact, contribution to, and/or hindrance to the physical condition of human beings, must be examined from political, economic, social, and ethical perspectives (NASPE, 2007).

Physical educators still advocate face-to-face teaching to ensure that learning takes place and that motor movements and exercises are performed efficiently, correctly, and safely (NASPE, 2007). Further, as defined by NASPE (2010), PE is the process by which changes in individuals are brought about through movement experiences. PE aims not only at physical development, but is also concerned with education of the whole person through physical activities.

PE is grounded in the progressive education theory, viewing education as a living experience in which students are active participants; doing is every bit as important as knowing (Siedentop, 2009, p. 64). Finally, the holistic approach to overall physical wellness, including health status and physical condition, refers to the interrelatedness of mind and body, and is grounded with the conceptual framework of progressive education. John Dewey’s strong belief in the unity of man; the notion that mental and physical could not be separated, and that all educational activity had intellectual, moral, and physical outcomes foreshadowed this central theme to Dewey’s philosophy (2009, p. 65)

There is a sizable body of evidence supportive of the claim that student attention and engagement in the classroom is benefited and academic achievement positively impacted by more, rather than less physical activity during the school day (Siedentop & van der Mars, 2011, p. 118). Human beings are born movers. Historically, they have learned and survived as hunters
and gatherers, as basic survival was dependent upon daily laborious work. The need to hunt and gather food, however, an innate mechanism for survival, is no longer a part of the sedentary character of modern life. This disruption to human nature poses a threat to Americans, regardless of age, as lack of physical activity creates major health risks economically, socially, mentally, and personally. Once considered a middle age to adult population concern, inactivity has led to an epidemic in the United States, even among its children (Ratey, 2008, p. 4).

Over the past quarter century, the prevalence of overweight and obese children and youth in the United States, as defined by body mass index, has more than doubled in the 6-11 year-old age group, and has tripled in the 12-19 year-old age group (Koplan, Liverman, Kraak, & Wisham, 2007). More than 2 in 3 adults are considered to overweight or obese, and more than 1 in 3 are considered to be obese. More than 1 in 20 adults are considered to have extreme obesity. Recent statistics concerning America’s children reveal that more than one-third of children between the ages of 6 and 19 are considered to be overweight, while 1 in 6 is considered obese (Weight-Control Information Network, 2014). The Centers for Disease Control (CDC) provided statistics for Senate Report 1080-345, claiming that currently, obesity is the second leading cause of preventable death in the United States, right behind tobacco use (as cited in Siedentop, 2009). Additionally, estimated direct and indirect costs associated with obesity come close to $1.2 trillion annually (CDC, 2012).

What is America doing to address this epidemic? Despite the connection between health-related illnesses and their diverse costs and the need for education related to prevention of such diseases, PE classes, PA time, and related health and wellness programs continue to be cut in America’s schools. In 2006, only 3.8% of elementary schools, 7.9% of middle schools, and 2.1% of high schools nationwide, offered daily PE or its equivalent for the entire school year.
(Lee, Burgeson, Fulton, & Spain, 2007). Despite the fact that childhood obesity is now one of the most serious health issues facing U. S. children (Ogden, Flegal, Caroll, & Johnson, 2002), school-based programs that engage students in regular PA are increasingly on the chopping block. The very programs directly relevant to preventing obesity, programs aimed at helping children acquire skills and habits necessary to pursue active lifestyles, are falling by the wayside (Trost & van der Mars, 2009).

According to a national study conducted by the Center on Education Policy in 2007, since the passing of NCLB in 2002, 62% of elementary schools and 20% of middle schools have significantly increased the instructional time they allocate to reading/language arts and math (Trost & van der Mars, 2009). Further, these increases, as reported by 44% of states involved in the study, resulted by decreasing (on average) time spent in PE by 30 minutes per day. The state of Ohio adopted new, higher learning standards for students in math, English language arts, science and social studies in 2010 in response to ranking 11th out of 50 states in the quality of its education system (ODE, 2014). These accumulative concerns and strategies developed to address them, known as Common Core State Standards, create a greater sense of urgency on academic focus and less time addressing health-related fitness of its students. Concurrently, the Obama administration launched a national appeal to all states to improve upon the childhood obesity crisis, recommending 60 minutes or more per day of PA for children and adolescents (Parsons, 2010).

A perfect storm has developed. Students seeking ways to accommodate the business of their lives along with the demands of preparation for the future lead them to alternative academic credit sources. Educational leaders are struggling to find balance since the implementation of strategies aimed at continual improvement on the academic front, and addressing the epidemic of
obesity related issues within its largest stakeholder population, the children and youth served within their systems. Physical educators are fighting to keep positions in a profession of personal passion and concern for a nation at risk. Programs of PE and health education at higher education institutions are finding it increasingly more difficult to defend, fund, and prepare their students in K-12 settings, as the demand for K-12 teachers in the profession wanes. Results of my informal research in fall, 2014, revealed that half of the colleges and universities in the state of Ohio previously offering PE licensure programs to its students, no longer offer such programs. Online programs are seizing the opportunity to attract the resulting captive audience with programs of instruction.

Within the context of PE, Kirk (1997) argued that PE programs must find new ways of engaging students in PA. Even NASPE challenges its professionals in PE to consider, open-mindedly, online PE as an “exciting and attractive, yet untested, alternative method to delivering quality PE” (NASPE 2004). Further, it suggests, “quality PE programs must include opportunity to learn, meaningful content, appropriate instruction, and student and program assessment” (2004).

Finally, while there are opportunities to all stakeholders involved when offering online PE courses, there are challenges for school districts, teachers, parents, and students to be addressed. State education agencies have just begun to develop state standards for online courses. These standards are best practices and have yet to be tested. “Therefore, programmatic research, to include standards, is warranted to provide a better understanding about the effectiveness of online PE programs and student learning” (NASPE, 2007).

Seven years after its first and only position statement, a former Board Member of NASPE reported that the same position statement exists (Buschner, 2014). Further, NASPE and the PE
profession is still walking a tight rope concerning online PE. Buschner (2014), an award recipient for his effective teaching and service as a PE instructor and for contributions to NASPE, admitted that NASPE’s original position regarding online PE is outdated. Nothing has changed since the first position statement was released concerning the intersection of online PE with technology. A tipping point had emerged: The wonders of the digital age and online learning were intersecting with school physical education. More than a few physical education programs and teachers were being asked to transition from traditional, face-to-face teaching, to online instruction. with the digital age (Buschner, 2014). Further, while the position statement was released in 2007, it was intended to be temporary until research concerning online PE’s effectiveness could be determined:

A hybrid model was a reasonable instructional alternative until research was available, and that OLPE (online PE) was an exciting and attractive –yet untested– alternative to delivering quality PE. Reasonably, NASPE advocated technology as a tool for learning if used appropriately for instructional effectiveness. OLPE could supplement, but not substitute, for effective instruction (Buschner, 2014).

The latest Shape of the Nation Report (SON, 2012) reported that 30 states now grant credit for online PE, however, only 17 states require certified PE teachers. “It made me wonder who teaches these courses in the other 13 states? Some futurists predict that by 2020 half of all secondary education courses will be delivered online, yet research is void of studies providing evidence of support for or against such online programming” (Buschner, 2014).

Statement of the Problem

While K-12 student online PE enrollment continues to climb, the obesity epidemic continue to soar upward (Ogden, Flegal, Caroll, & Johnson (2014). Research concerning online
PE is limited although programs have recently emerged as an option for students seeking to fulfill their high school PE requirements at a time when most children in America need to become more physically active and research reports that sedentary lifestyles are a contributor for obesity (Ratey, 2008). With the increase of online learning opportunities, more, rather than less time, is spent being on the computer. This equates to less time being physically active.

According to NASPE (2007), while technology devices have been designed to include physiological measurement, teachers supervising online PE courses must rely on activity logs and the “honor system” to assess if students are physically participating. The assessment of this type of online instructional delivery for PE is difficult for teachers to monitor. Further, web-based-learning programming in PE, while purported to facilitate individualized instruction and provide flexibility in time and location for the learner, may lead to a perception of social isolation, in direct conflict with the holistic model of educating the physical, mental, and social components of human beings (Hampton, Goulet, Her, & Rainie, 2009).

As school districts are faced with limited finances, health and PE programs continue to be on the front line to be cut from public education at a time when obesity is on track to overtake tobacco use as the leading cause of preventable death in the United States (Siedentop, 2009). While educational leaders continue to eliminate “unnecessary” programs, it is important to understand the reasons and motivations students and parents have for opting for online PE programs as well as the degree to which these classes address health and PE curricular standards, and ultimately, impact the health of students in our society. Moreover, it is essential to address the need for accountability of PE programs delivered through online programming. The next section provides a conceptual framework which sets out to illustrate the interrelated components described here.
Conceptual Framework

A conceptual framework describes what is to be studied and the presumed relationships between what is studied (Miles & Huberman, 1994). Further, a conceptual framework provides a visual that “explains” the key factors within the study, and their presumed relationship (1994, p. 18). According to Maxwell (2005, p. 47), a concept map pulls together and makes visible implicit theory, assists in clarifying theory, and invites insight into relevance.

In this section, I illustrate three interrelated components that impact stakeholders concerning their physical condition and literacy. Figure 1 provides a glimpse into the phenomena being investigated in this study. Finally, its function is to assist the rest of the design; help assess and refine goals for the study as an ongoing process, formulate research questions, select appropriate methods, and identify potential threats as they may exist throughout the research process:
Purpose of the Study

The purpose of this study is threefold: (a) to explore reasons why K-12 students and/or their parents opt to fulfill requirements for PE online, (b) to examine the characteristics of students opting for online PE courses, and (c) to capture experiences within online PE programs for purposes of future implications to PE programming.

Research Questions

The questions that guided this inquiry were:

1. Why do K-12 students and/or their parents opt to take PE online?
2. What are the characteristics of students opting for online PE?

3. What experiences (positive and/or negative) do students have when taking the online

Subjectivity and Validity

Subjectivity, according to Salling Olessen (2012), is a condition that is embodied within researchers consciously and/or subconsciously. Further, subjectivity is not something deliberate, but a natural phenomenon resulting from social interaction that can neither be ignored nor denied (2012), and thus a product of passionate involvement within research. While subjectivity may bias and unbalance inquiry, subjectivity may also motivate and illuminate inquiry (Given, 2008). Researchers are both consciously and subconsciously oriented to factors attached to the research problem based upon interest, desires, and preoccupations (Drapeau, 2002). These same conclusions may also initiate projection on part. Therefore, throughout the study, I remained keenly aware of the possibilities for what is described by Maxwell (2005) as reflexivity, or the inescapable fact that a researcher is part of the world being studied, as an ongoing process of balancing information. I was able, with integrity, to attempt to avoid influential, leading questions in the interview process. This minimized my effect and influence on the participants involved.

Personal experience in HPE programs poses a potential threat to the validity of this study. I have served in the capacity of traditional, face-to-face courses only, and have had to advocate for HPE programs at all levels (K-12, undergraduate, and graduate levels).

Conflicts with the rising numbers of students opting for alternatives to traditional HPE courses have contributed to this necessary research regarding the direction of traditional program development and facilitation of HPE programs. Ideally, representative samples of each of the stakeholders in the program would have been interviewed and the interview data would have
been compared to observations made during program sessions. A more thorough research process might have involved some degree of participation in the program in addition to the observation and interviews. I am already involved however, having been a participant in traditional programs for nearly 30 years as a K-12 educator, faculty facilitator, associate professor, and HPE program director. Using this “insider knowledge” has assisted my sense of the observation and interview data collected.

The possibility that school personnel, primarily administrators and HPE faculty, may have responded in a “guarded” manner during the interview data collection process exists. This was a second potential threat to this study’s validity. Because I am considered an “expert in residence” in the local school systems (of previously instructional experience) and at the university where instruction continues to be the priority responsibility, participants may have believed that “ulterior motives” existed throughout the interview process as districts strive to cut programs for financial gain within their respective budgets. This is a representation of what Maxwell (2005) describes as reactivity. Reactivity is the “influence of the researcher on the setting or individuals studied” (2005, p. 108). However, the author further suggests “the goal in a qualitative study is not to eliminate this influence, but to understand it and to use it productively (2005, p. 108-109).

Similarly, a potential threat to the validity of the study existed specifically with those chosen for data collection. Participants may not have been completely open and honest in their responses and may have held due to my position. In order to address this concern regarding validity I was careful to clearly communicate purpose in conducting this study to each of the participants involved in the data collection process.
The number of participants was another potential threat to validity to this study. To be able to collect abundant data for the study, it was necessary to be certain interviews were conducted with both adults and students involved in, and responsible for both traditional and non-traditional online programs.

**Definition of Terms**

The following terms were used in this study:

**Health and Physical Education:** Historically, health and physical education have been paired together to describe a discipline embedded within the overall, holistic development of human beings. Webster defines PE as instruction in the development and care of the body ranging from simple callisthenic exercises to a course of study providing training in hygiene, gymnastics, and the performance and management of athletic games (Merriam-Webster’s online dictionary, n.d.).

**Online Learning:** Education in which instruction and content are delivered primarily over the Internet. (Watson & Kalmon, 2005) The term does not include printed-based correspondence education, broadcast television or radio, videocassettes, and stand-alone educational software programs that do not have a significant Internet-based instructional component (U.S. Department of Education Office of Planning, Evaluation, and Policy Development Policy and Program Studies Service, 2010). Online learning is used interchangeably with Virtual learning, Cyber learning, and e-learning.

**Physical Activity (PA):** Physical activity is defined as any bodily movement produced by skeletal muscles that requires energy expenditure (World Health Organization, 2014).

**Physical Literacy:** Physical Literacy is the mastering of fundamental movement skills and fundamental sport skills that permit a child to read their environment and make appropriate decisions, allowing them to move confidently and with control in a wide range of physical
CHAPTER II. REVIEW OF RELATED LITERATURE

The purpose of this study was threefold: (a) to explore reasons why K-12 students and/or their parents opted to fulfill requirements for PE online, (b) to examine the characteristics of students who opted for online PE courses, and (c) to capture experiences within online PE programs for purposes of future implications to PE programming.

Importance of Physical Education

We live in an era of public health concern epidemics never before realized. During the past 20 years, there has been a dramatic increase in obesity in the United States and rates remain high. More than one-third of U.S. adults (35.7%) and approximately 17% (or 12.5 million) of children and adolescents aged 2-19 years are obese (CDC, 2014). This statistic represents a preventable cause of death, according to Siedentop (2009) about to overtake that of tobacco use as the number one cause of preventable death in the United States. The dilemma of current times is not limited to the subject of obesity. While obesity statistics continue to rise, so does the opportunity for physical activity across the lifespan. Joining the dilemma is an understanding that “lack of physical activity creates a major health concern” (Siedentop, 2009, p. 2).

Compounding the lack of physical activity as a contributor to obesity is the result of poor nutritional education, including basic nutrition knowledge, and interpreting and applying the knowledge into personal, every day living (Adair & Popkin, 2005).

Body mass index (BMI) is primarily used to estimate the degree of overweight and underweight among all age ranges. Reilly et al. (2006) conducted a cluster randomized controlled trial to study if there was any reduction in BMI due to physical activity intervention in young children. The study was conducted in 2002. BMI was the primary outcome measure and habitual levels of physical activity were the secondary outcome measure in this study.
For the study, 124 nurseries were invited to contribute to participate. Eligibility criteria included a minimum of 12 children on the enrollment for each nursery. Of the 124 nurseries invited to participate, only 36 were selected. Random pairing was done to make certain comparability of intervention and control group was accurate. Each pair had an intervention and a control. The process was carried out concurrently with respect to three aspects like type of nursery, size of nursery, and socioeconomic position of the nursery in the demographic area. The families of the children from 36 nurseries were also invited to participate and written consent for participation was obtained from the parents.

The method use in this study included nursery element, home element, and a control group. Over 24 weeks, three 30-minute sessions of physical activity per week was carried out and two members of the staff were given responsibility to monitor the study to assess proper implementation. It was made certain that the nursery element of intervention was inexpensive; hence a generalized approach was implemented. There were two parts to the home element of the intervention. Each participating family was given a resource pack and an education leaflet to monitor the linkage of physical activity at home and in the nursery. It was made certain that the nurseries in the control group continued with their regular curriculum without enhancing their curriculum on physical activity.

Multilayered modeling was carried out for statistical analysis. Wald tests were done to procure P values. Baseline and later results were analyzed by comparing the two in a two-layered model (individual child, layer 1, and nursery, layer 2). A slope with respect to log counts per minute was used to measure outcome variables, which were not derived by the measurement of physical activity in the first place. Follow-up data was collected at intervals of 6 and 12 months. Measurement at baseline and age, replica variables for female sex and intervention
groups was illustrated with the help of intercept slopes.

Results showed no significant change in the BMI index, sedentary behavior and physical activities due to intervention. However, the results do indicate that reduction in physical activity and increase in sedentary behavior does play an important role in triggering and upholding obesity. Practically and methodologically, the trial was successful. Replication of the results was not encouraging in the present study, but substantial improvements were observed due to physical activity with the intervention. Since childhood obesity is a global problem throughout the world, prevention and intervention, according to the study must not only focus on its findings, but also provide a trajectory into all components aimed at prevention and intervention. These conclusions were further addressed in a study by Kar, Dube, & Kar (2014), realizing that the epidemic continues to grow and threaten the lives of children from pre-school age through their adult lives.

According to the Kar, Dube, & Kar (2014), the major factors affecting weight reduction and the development of obesity in children are the result of a large number of biological, behavioral, social, environmental, and economic factors and the complex interactions between them that promote a positive energy balance. As children become older, changes in dietary habits with the adoption of sedentary life style choices self-imposed by growing children increases manifold obesity-related diseases and their complications. An obese child later on grows up to become an obese adult. Therefore, the role of primary prevention along with methodical diet control, behavioral changes, and physical activity are the important strategies against the battle of childhood obesity.

These conclusions validate findings such as those revealed in the previous study addressed:
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Efforts aimed at framing the consequences of childhood obesity in order to increase public awareness and support for obesity prevention strategies cannot be focused solely on assessing children during infancy and pre-school years. The consequences of childhood obesity are not necessarily observable and visible within preliminary screenings. Thus the urgency of utilizing known heredity factors in combination with those discussed by Kar, Dube, & Kar (2014) in order to address children at risk even if/before any evidence of obesity exists personally. Conclusions drawn from early screenings, before evidence of obesity related factors are present can lead to a mentality of ‘out of sight, out of mind’ concerning subsequent developments related to obesity as children become older.

Gollust, Niederdeppe, and Barry (2013), addressed such a mentality in a study that examined the effects of messages describing consequences of childhood obesity on public attitudes about obesity prevention and policy development. The authors collected data from two nationally representative Internet-based surveys. Respondents (n=444) first evaluated the strength of eleven messages interrelating obesity’s consequences as rationale for government action aimed at clarification of and instilling of a sense of urgency concerning the obesity epidemic. The second part of the study consisted of randomly assigning respondents (n=2494) to a control
group or to treatment groups shown messages about obesity consequences. Following data collection, attitudes contributed by the groups toward obesity prevention were stratified by political ideology (2013, p. 96).

The results of the study were indicative of a perception of health consequences of childhood obesity being the strongest rationale for government action. Messages about military readiness, bullying, and health-care costs were rated particularly strong by conservatives, moderates, and liberals, respectively. Military readiness, identified among participants in the study, was a significant concern, leading to endorsement of stronger policy support and endorsement of individual responsibility for personal health status. Finally, conclusions of the study summarized an alarmed public opinion concerning consequences of childhood obesity, and provided strong justification for obesity prevention policy. Activation of new, unexpected and unrealized values concerning obesity as a serious public health concern must become salient, as indicated by recent statistical studies regarding the epidemic.

In an effort to provide the most recent national estimates of childhood obesity, analyze trends in childhood obesity between 2003-2012, and provide detailed obesity trend analyses among adults, a study was conducted including 9120 participants. The National Health and Nutrition Examination Survey measured weight and height or recumbent length in the participants. Recumbent length was defined as weight for length at or above the $95^{th}$ percentile of the sex-specific growth charts provided by the CDC. Obesity in children and adolescents aged 2 to 19 as having a BMI at or above the $95^{th}$ percentile again measured by sex-specific CDC growth charts. Among adults in the study, obesity was defined as a BMI greater than or equal to 30. Analyses of trends in high weight for recumbent length or obesity prevalence were conducted overall and separately by age across 5 periods (2003-2004, 2005-2006, 2007-2008,
Results of the study provided significant evidence of a continued pattern of concern, without significance in overcoming issues associated with the obesity crisis. Between the years 2011-2012, more than one-third (34.9% or 78.6 million) of U.S. adults were considered obese. Further, obesity-related conditions included heart disease, stroke, type 2 diabetes and certain types of cancer, some of the leading causes of preventable death. Finally, the medical costs for people currently considered obese is estimated to be $1,429.00 higher than those of normal weight (Ogden, Carroll, Kit, & Flegal, 2014). The population of future adults fare no better. Childhood obesity prevalence remains high. Results of the study provided significant evidence of a continued pattern of concern, without significance in overcoming issues associated with the obesity crisis. There are significant racial and age disparities in obesity prevalence among children and adolescents. In 2011-2012, obesity prevalence was higher among Hispanics (22.4%) and non-Hispanic black youth (20.2%) than non-Hispanic white youth (14.1%). The prevalence of obesity was lower in non-Hispanic Asian youth (8.6%) than in youth who were non-Hispanic white, non-Hispanic black or Hispanic. In 2011-2012, 8.4% of 2- to 5-year-olds had obesity compared with 17.7% of 6- to 11-year-olds and 20.5% of 12- to 19-year-olds (Ogden et al., 2014).

In summary, a cyclical pattern has emerged. Studies presented in this literature review are representative of issues of concern regarding the physical state of human beings over time; a social issue without present resolve, as the obesity epidemic continues. According to Labaree (2011), society has historically turned toward education, and more specifically, public schools, for answers to social conditional problems. Why? According to the author (2011, p. 77), “one reason is that they are available, publicly controlled, located in every community, and willing if
not able to take on new public missions. Another is that asking schools to fix problems is a lot easier than trying to address the problem directly through the political system”.

Dr. Robert Pangrazzi, internationally recognized instructor in PE, Arizona State professor emeritus, and author of numerous PE textbooks, addressed the National PE Institute in Asheville, North Carolina in July, 2014 concerning the roles of PE in addressing the obesity issue. In his keynote address, Dr Pangrazzi (2014) indicated what he considered to be the greatest high stakes testing for PE educators across the nation. According to Pangrazzi, the real outcomes of PE will be realized only when students will report having become literate about the need for, as well as having embraced active lifestyles for a lifetime. He further revealed startling information regarding his beloved profession by opening the keynote address with these words:

I don’t know what PE is. We have jumped from one bandwagon to the next, and have created PE professionals who become jacks-of-all trades and masters of none. When you are masters of none, you do nothing. Our professional organizations have changed every 5-10 years on average. The public has no idea what we do; most think we are coaches. We have never shown accountability for outcomes we espouse, such as personal fitness and skill development. Activity has to be our accountability measure. We must create physically literate individuals, and the heavy emphasis must be on education (Pangrazzi, 2014).

The next section will present an historical perspective further illustrating a cyclical pattern similarly aligning with Dr. Pangrazzi’s (2014) address.

**Physical Education’s Earliest Ambitions and Pioneers**

What we do about history matters. The often-repeated saying that those who forget the lessons of history are doomed to repeat them has a lot of truth to it. But what are the
“lessons of history”? The very attempt at definition furnishes ground for new conflicts. History is not a recipe book; past events are never replicated in the present in quite the same way. Historical events are infinitely variable and their interpretations are a constantly shifting process. There are no certainties to be found in the past (Lewis, as cited in Phillips & Roper, 2009).

A glimpse into the history of PE is necessary in order to provide an understanding of how the past has not only shaped PE, but also how the past may influence the future. Past events in PE have not been replicated in the same way over time. While historical pioneers, theories, and models have provided a framework and objectives still applicable today, PE’s interpretative value and place within education has shifted and continues to be shifting. Therefore, this section will examine concepts in the history of PE including culture, social class, muscular Christianity, athleticism, the whole body, and gender, among others.

The term ‘physical education’ represents the core concept, and thus will be the main focus of this section. Earliest historical records include experiences of primitive man, Egyptians, Greeks, Romans, the population that existed during the middle Ages, the Renaissance, and during the Industrial Revolution. There seems to be little doubt that historians have uncovered evidence of PE and/or physical activity as an unequivocal component of man’s cultural development. Forms of PE have been present for over 2000 years (Tinning, 2011).

While not always actively involved in formal PE classes, humans were inherently born movers and developed fundamental movement skills out of necessity (Ratey, 2008). Fundamental movement skills include movement patterns of two or more body segments, such as running, throwing, and balancing, which combine movements of the arms and legs. Further broken down, fundamental movement skills are categorized as locomotor skills, manipulative
skills, and stability skills (Shimon, 2011, p. 128). Survival depended upon combinations of these skills in order to hunt and gather food, be safe from man and animals, and to provide for protection from the elements, an idea further substantiated by Duncan and Watson who stated:

Physical education has a cultural heritage and background that began at the dawn of civilization. Broadly interpreted it is one of the most ancient phases of man’s education. Primitive man (sic) had to be very active physically to survive. Simple, natural, and necessary physical activity was a continuous part of his experience, and through it he (sic) gained many of the same values that are claimed for the physical education programs of today (1960, p. 34).

Dependent upon demographic location, including terrain dynamics, climate, temperature, and others factors respective to immediate dwelling areas, walking, running, and jumping were modes of transportation combined with throwing (as in spearing). These and other survival skills were practiced over and over until children could perform skills instinctively (Shimon, 2011, p.4). Primarily, historians have focused upon these movements as foundational to the definition of PE, along with virtually any other type of physical activity.

Van Dalen and Bennett (1971) argue that PA is woven into the progressive cultural development and civilization of man with such intensity, an assumption can be made that one never existed without the other. Archeologists have discovered drawings in ancient Egypt and unearthed primitive sporting and game equipment suggesting that just as society dances, plays games, and then traditionally passes these various games, dances, and activities from generation to generation today, so did primitive man’s society (Shimon, 2011). Such traditions and customs, while emphasized in some cultures and societies more than others, were supported in the form of PA by the ancient societies of Egypt, China, and India, according to Van Dalen and
Bennett (1971).

Significant influence to the Western world concept of PE, sport, and fitness arrived with its earliest European explorers and immigrants (Siedentop, 2009; Leonard & McKenzie, 1927). European culture and philosophy concerning fitness, sport, and PE was largely influenced by the two great early civilizations of Greece and Rome, and was embraced by settlers and immigrants (Siedentop, 2009, p. 24). Thus the Western world’s earliest historical concepts were embedded in similar philosophy. Finally, assertions made by numerous historians and sociologists over time, according to Guttman (1978) and McKay (1991), led to the conclusion that views supporting and promoting PE are universal and timeless today.

The earliest influences to PE came from Greece. Greek influence contains both philosophical elements and the very definition of ‘physical education’ itself, according to Phillips and Roper (2006) who detailed the researched works concerning PE’s meaning:

Osterhoudt is one of the few academics who has attempted to be more specific about defining physical education from a historical perspective. He ascertains the term ‘physical education’ is derived from the Greek word ‘physika’, meaning ‘material’ and the Latin, ‘educare’ again, effectively meaning ‘to rear’, the most literal interpretation of physical education sees it as attempting ‘to rear in the form of our material element Specifically he defined the global historical development of physical education as taking three main forms. It has be characterized in turn as physical training in which it is thought of as an agent (a means to) bio-psychological health and fitness; as physical culture, in which it is thought of as an acculturative agent (a means to social ends); and as physical education in itself, in which it is thought of as the composite of sporting activities and dance (p.10).
Physical activities of the Greeks attracted the attention of historians and advocates for PE. Further, authors of literary classics as in the *Iliad* and the *Odyssey*, according to Phillips and Romer (2006), were attracted to the potential for story line based upon the intensity of Greek attitudes toward sport. The authors of these classics describe the heroes Achilles and Odysseus as ‘men of action’ and ‘men of wisdom’ who participated in such physical events as chariot races, boxing, dancing, discus, javelin, leaping, running and wrestling (2006, p. 18).

Sparta’s citizens, according to Van Dalen and Bennett (1971, p. 39) were a part of an autocratic, warrior-oriented society. Greek boys and men in Sparta were exposed to intense and extensive exercise, or physical training, primarily to develop dominating armies. While boys and girls were both recipients of PE, girls did not live in military barracks like the boys, although they participated in discuss, gymnastics, horse riding, javelin, swimming, running, and wrestling at separate training grounds (2006, p. 19). The role of exercise in the lives of Greek girls and women was solely aimed at bearing strong, healthy children capable of restocking the dominant armies (Siedentop, 2009; Shimon, 2011; Leonard & McKenzie, 1927; McIntosh, Dixon, Munrow, & Willets, 1981).

Sparta’s primary objective of being the greatest military power of Greece, resulted in every child being examined by a council of elders at birth, allowing only the healthiest and strongest infants to survive (Mechikoff & Estes, 2006). Besides brute physical prowess, other foci embedded in the education for those deemed fittest for survival included development of courage, strength, form, and grace. Furthermore, the development of well-proportioned physiques was determined to be foundational to intellectual development (Freeman, 2001, pp. 4-5). Finally, opportunity to display physical prowess was not only offered, but also demanded in Greek culture.
The earliest recorded games for competition were organized in Greece. Greek males were encouraged to participate in the events that would make up the Greek sporting calendar. This calendar became the precursor to the present day Olympic games. While officially amateurs, the city-states for which they competed treated the Greek athletes like professionals. They were revered and amply rewarded for athletic success (Siedentop, 2009). Athletes participated in highly organized events, evolving into the PanHellenic Games (predecessor of the Olympic games) held at Olympia to honor the god Zeus. The Pythian games were held at Delphi, honoring the god Apollo, and the Isthmian Games were held in Corinth, honoring Poseidon, the sea god. Finally, the Nemean Games, held in Nemea, were conducted to honor Zeus as well (Mechikoff & Estes, 2006).

While Spartans proudly displayed a character predominantly focused on strength, valor, discipline, obedience, and obsession with victory, the culture of Athens added complimentary components for the educational development of the whole child (Shimon, 2011, p. 5). Home to Socrates, Plato, Aristotle, and Aristophanes, Athens predominantly progressed a philosophical culture rich in the development of drama and a spirit of democracy (Siedentop, 2009, p. 24). Athens was a “more liberal, progressive and democratic society noted for its art, literature and philosophy as well as its political system” (Phillips & Romer, 2006, p. 19). PE began to evolve due to the diverse, yet complimentary components of Athenians and Spartans concerning physical activity, fitness, and sport. The Spartan influence of physical strength and prowess combined with Athenian appreciation for aesthetic ideals and molded foundational framework of balance between the mind and body.

The Roman Empire was built through wars, whereby emerging civilizations were conquered and put under control of Roman leaders (Siedentop, 2009, p. 24). While touting
victory over other civilizations, the Romans were not ashamed to adopt practices of those they conquered. Thus, Greek influence was visible, yet noticeably different where physical education and physical activity were concerned. During the early years of the Republic (509-27 B.C.) (Phillips & Roper, 2006), the primary objective for physical training was similar to that of the Greeks: Military strength, a mindset of courage in battle, overall strength, agility, and obedience to commands were emphasized. Unlike the Greeks however, who appreciated the value of balance in the lives of its citizens, the Romans were more utilitarian, as training that developed strong soldier traits and skills remained their primary objective (Van Dalen & Bennett, 1971).

According to Siedentop (2009) and Phillips and Roper (2006), a more contemporary philosophy concerning PA and PE evolved as Rome became more affluent. Women were not as marginalized within Roman civilization as they were in Greece concerning sport, and even participated in sporting events designed just for women. Men and women alike engaged in PE, fitness, and sport for enjoyment in lavish facilities, and followed activity periods with luxurious baths and massages. According to McIntosh et al (1981), these practices were recognized and adopted as a result of the work of philosopher and physician Claudius Galen, who promoted other qualities of overall healthful living, including their mental and social value.

During this period, spectator sports became popular throughout the Roman Empire, but it was in Rome that the greatest spectacles took place, in the most fabulous venues. Within the Coliseum, as many as 250,000 spectators witnessed events that were often gruesome affairs, costing both animal and human lives. The expansive facilities provided ample room to entertain audiences seated according to wealth, gender, and citizenship. Events included chariot races, boxing events, gruesome animal fights, naval battles, and bloody gladiator contests. Sponsored
by politicians a utilitarian philosophy was evident. Participants in the circus type atmosphere of events included unwanted slaves and prisoners not worthy of serving as military personnel. The lives of such individuals were sacrificed at the expense of pacifying and entertaining a Roman public with too much time on its hands (Phillips & Roper, 2006; Mechikoff & Estes, 2002). The collapse of the Roman Empire in A.D. 476 also led to the cessation of spectator sports as the Romans had known them. Thus, from its earliest beginnings, evidence of physical activity’s importance to the overall strength of man, physically, mentally, emotionally, and socially was evident.

During the Middle Ages, survivorship of rudimentary PE was strongly situated within the Church, whose role during this period became a critical factor in the PE’s history. According to Mechikoff and Estes (202, p. 104), “the influence of the Catholic Church on European culture cannot be overestimated. It permeated every aspect of culture; scholarship, politics, economics and even one’s private life”. Theologians, while recognizing works of such philosophers as Aristotle and Plato, believed participation in physical activity, including training and athletics, represented a dimension of paganism (Bottomley, 1979; Van Dalen & Bennett, 1971). Throughout the Middle Ages, while PA, education and sporting events were not entirely absent, they were not encouraged, but more appropriately described as being “tolerated” (Ballou, 1968; Bottomley, 1979; Pole, 1958).

The beginning of the Renaissance (circa 1300 – 1550) forced the Church to reconsider embedded philosophies concerning development of the whole person previously infused into the lives of Greek and Roman culture. New justifications for PA and sport evolved with the fundamental change in importance attached to and placed upon the body:

With the reading of the classic Greek and Roman philosophers, scholars began to re-
examine all aspects of their lives in classical perspective. Like Plato and Aristotle, the intellectuals of the Renaissance placed an emphasis on living in this world as opposed to living in the next world, or heaven. This philosophy, known as humanism, emphasized our “humanness” rather than our spiritual selves. As a direct consequence of this type of thinking, affairs of the human body were considered much more acceptable. Sport and physical education were direct beneficiaries of this type of thought (Mechikoff & Estes, 2002, p. 119).

According to Phillips and Roper (2006), during the Renaissance, Vittorino da Feltra was one of the first educators to introduce PE as an integral and equally important part of the entire educational program. His students would spend two or more hours per day engaging in physical activities in the form of games and individual activities. Da Feltra collectively used Plato’s wisdom with humanistic ideals of body, mind, and spirit to develop for the first time, a model of PE aimed at total individual development. According to Weston (1962), this idea or “bond” between concepts of mind, body, and soul was central to the philosophy of this period.

The Age of Enlightenment of the 18th century resulted in significant changes everywhere. New lands were being discovered, “scientific inquiry and experiments were being conducted, various philosophical ideologies of life and education were being recognized, and issues of medicine, health, and the body were of particular interest” (Shimon, 2011, p.5). Immigrants to the New World, while having no official PE structured classes, engaged increasingly in play, physical activity, games, and dance. Influences of various cultures were represented, tracing earliest roots back to the historical concepts first introduced by the Greeks and Romans. While PE was not yet officially developed, Benjamin Franklin and Thomas Jefferson were early pioneers advocating the need for PE and PA among colonial youth (McKenzie, 1936).
During the Early American period (1700s to 1900), events that shaped the nation also invoked the shaping of what would become the American way of life. Colonies grew to rural communities, and a frontier nation became more urban and industrialized (Siedentop, 2009). Physical activity was life itself. Building homes, tending pastures, creating fenced areas for livestock to feed families, farming on foot while tending teams of horses attached to rudimentary pieces of tillage equipment provided ample exercise and physical activity for all; no gender, age, or race was exempt from work. Yet PE as an organized school subject did not exist; it was simply not necessary (2009, p. 26).

**Emergence of Present Day Physical Education Initiatives and Influences**

Life in America rapidly changed with urbanization and industrialization. Institutions of higher learning were on the rise, yet no institution prior to 1885 prepared people in the teaching profession to become a specialized PE instructor. The first secretary of what we now know as the American Alliance for Health, Physical Education, Recreation, and Dance (AAHPERD) was William G. Anderson, in 1885 (Siedentop, 2009, p. 25; Lee & Bennett, 1985). Anderson was concerned about his own lack of training to be a professional physical educator. There were no institutions at the time that prepared individuals to be PE professionals. Further, no professional organizations, journals, or even designated areas for persons with like interests existed. Anderson’s desire to socialize with and communicate with those holding similar interests did not go unnoticed or unsupported.

Others dedicated to the field of PE and related topics began writing about the importance of PA, and numerous facilities and institutions adopted formal programs of instruction in PE, crediting Andereon’s leadership and AAHPERD’s promotion. These earliest American PE ideals were influenced by two prominent European systems: German gymnastics, and Swedish
gymnastics (Shimon, 2011, p. 6). Even though the idea of free, public education was growing in America, it was not until 1866 that California became the first state to pass legislation requiring PE in schools (Siedentop, 2009, p. 26; Shimon, 2011; Van Dalen & Bennett, 1971).

Although not limited to a gymnastics program as the sport is known today, PE was called gymnastics as an all-inclusive PE program. The Greek strength philosophy was very much a part of German gymnastics. Strength, endurance, music, and dance were all a part of this whole person development approach to PE, which set the stage for what PE in United States would become (Leonard & McKenzie, 1927). Also popular during the early development of PE in America was the Swedish system. The Swedish system included a more scientifically and therapeutic approach to the earliest gymnastics, focusing on development of heart and lung efficiency (Enebuske, 1890). The Swedish system was very methodical. Instructors’ bellowed commands for strenuous exercises and repetitions that were to be held for periods of time until the instructor released the individuals (Shimon, 2011).

Notable PE professionals contributed adaptations and modifications to the German and Swedish system influences on PE programs in public schools. Among these persons of influence is Catherine Beecher. Beecher is best known for her modifications of the Swedish system. Early in American PE programs, it was considered improper for girls and women to participate in activities that demanded strenuous physical training. Beecher developed a system of calisthenics designed specifically for girls that included movements to music aimed at the development of posture, strength, and grace (Beecher, 1867). Many of Beecher’s calisthenics involved holding positions for a period of time, similar to present day isometric exercises (Shimon, 2011, p. 9).

The Civil War was responsible for many aspects of developments in the fields of PE, fitness, and sport. Primarily, sport was enhanced during the post-Civil War period, as Americans
were eager to put behind them the agony of war, and focus on competition in friendly, energetic, and enthusiastic community competition. Organized sport experienced tremendous development and intercollegiate advancement recreationally, and through nationally sponsored organizations. Further, the YMCA, an institution that first began in England, became an institution in America with its first facility in Boston in 1851 (Siedentop, 2009). The growth of the YMCA program was nearly immediate and expansive, resulting in the need for the development of the International Training School of the YMCA in Massachusetts, later to become Springfield College (2009, p. 26).

The first recognized teacher in the field of PE in America was Charles Beck. Beck developed his own version of German gymnastics, and was joined by Charles Follen, who started a program at Harvard College as a professor, while Beecher continued to promote programs for women. Borrowing from the earlier European influences, specifically German and Swedish gymnastics, and adding creative yet scientifically based elements of exercise aimed at educating and developing the entire person, early pioneers such as these rapidly advanced PE as an American institution (Siedentop, 2009).

Contributions of early pioneers American PE programs were enhanced by the contributions of medical doctors using their background expertise in anatomy and physiology to improve physical training and health for youth and adults. Collectively, these contributions paved the way for American PE programs to become “less of a training regimen for the masses and more of a way to help improve the health and fitness of individuals (Shimon, 2011, p. 16). Simultaneously, the early years of the 20th century found Americans enjoying the freedom of time and energy-saving inventions.
The Cost of “Progress” to Physical Literacy and Physical Education

Paradoxically, improvements in the lifestyles of Americans that made daily living “easier” resulted in physical weakness as World War I commenced. The reality of “soft” Americans became apparent as soldiers were unable to withstand rigorous training regimens necessary to prepare them for service. This harsh reality necessitated experts in the field of PE across the nation to provide more in the way of PE in all schools for all children. However, the direction that PE should take became unclear (2011), and its inclusion in the American education system’s curriculum was not met with instantaneous approval, acceptance, or enthusiasm. Had it not been for the French philosopher Jean-Jacques Rousseau along with the influence of John Dewey, the new PE promoted during the mid-eighteenth century may have been completely ignored.

Rousseau was considered a radical for his time concerning educational theory. His argument was that “children were born good, and then were ruined by their contacts with society” (Siedentop, 2009, p. 65). His theory of education, eventually becoming the central theme of John Dewey’s educational philosophy, advocated for the development of social skills by means of games and sport. Rousseau’s book Emile (1764), promoted the ideals of healthy living. While Eastern cultures already understood the benefits of training children in all areas of life, the Western world was not yet advanced in teaching the integration of body and mind (Guedes, 2007).

The growing concern and initiatives to promote more PE for all school children resulted in what became known as the ‘New Physical Education’. Influenced by pioneers in the 20th century such as Thomas Wood, Clark Hetherington, and Mabel Lee among others, the new program focused on more than the physical body. The new PE developed the entire body, mind,
and spirit through the physical. This paralleled the social educational philosophy of John Dewey, pioneer in social education, or what is often referred to as progressive education (Shimon, 2011). Thomas Wood developed his program of natural gymnastics with this philosophy in mind. Wood set the stage for transitioning from a gymnastics curriculum formerly patterned after the Greek and Swedish systems in a speech to the International Conference on Education at the Chicago World’s Fair in 1893:

Physical education must have an aim as broad as education itself and as noble and inspiring as human life. The great thought in physical education is not the education of the physical nature, but the relation of physical training to complete education, and then the effort to make the physical contribute its full share to the life of the individual, in environment, training, and culture (Woods, as quoted in Siedentop, 2009).

Clark Hetherington was a student of Thomas Wood credited for promoting Wood’s natural gymnastics model. Hetherington continued to build upon Wood’s model by suggesting that PE should address for areas: (a) Organic, or the development of vital organs through muscular training and high nutrition, (b) psychomotor, the enhancement of the neuromuscular system for power and skillful movements, (c) character, including the development of social and spiritual powers, and (d) intellectual, or the enhancement of natural incentives to learn (Hetherington, 1910).

Mabel Lee, building upon the work of Catherine Beecher, fought relentlessly to improve attitudes toward PE for girls and women (Lee, 1978). Lee’s contributions to educating colleagues, physicians, communities, and women themselves helped pave the way for inclusion of PE for all females in the public education system (Shimon, 2011).

The mid – 20th century evoked concern for the state of America’s youth in terms of
fitness levels and their relationship to overall health and wellness. Having experienced a stock market crash in 1929, the Great Depression, and then World War II in 1941, the early part of the century was marked by poor economic conditions. This lack of finances became an issue everywhere, including education programming. PE programs were markedly cut due to opinions concerning their importance in the overall education program. As a result, history repeated itself and America’s military was once again deemed ‘unfit’ (Shimon, 2011).

With draftees being rejected from military service for fitness reasons, and following an epidemic of polio in the early parts of the century, concern for the fitness condition of Americans soared. Fearing inferiority to other nations concerning fitness levels, testing became a part of PE classes. Children were compared with European children using the results from the Kraus – Weber tests. These tests measured such attributes as abdominal strength, low back strength, and hamstrings in order to determine the strength and flexibility necessary for demands of everyday life (Kraus & Hirschland, 1953; Shimon, 2011). Scores were not good. Compared to European children, with an overall failure rate of 9%, 60% of American children failed miserably (Siedentop, 2009, p. 230). Results promoted even the highest levels of government, including presidents, to provide motivation for improvement in the overall health and well being of American citizens. President Eisenhower established the President’s Council on Youth Fitness in 1956, and fitness testing became a standard in PE classes. President Kennedy established yet another fitness program with award incentives called the President’s Physical Fitness Award in 1966 when results of Eisenhower’s provided short-lived fitness improvement (Shimon, 2011).

Significant developments during the mid to late 20th century America contributed to the development of new programs and trends in PE. Adapted PE, aimed at providing PA, fitness and sport appropriately and individually designed to meet the demands of individuals with
disabilities, became a new program area due to federal mandates. In 1990 the passage of two pieces of legislation, PL 101-476, Individuals with Disabilities Education Act (IDEA) and PL 101-336, Americans with Disabilities Act (ADA), mandated outcome oriented education and programming processes that promote community participation of individuals with disabilities, including PE (Carter, 1997). Thus, inclusion became consistent with every other discipline in education; students with special needs would be a part of regular PE classes or would be provided for in settings representing a least restrictive environment.

Institutions preparing individuals for instruction as PE teachers became more concerned with the credentials, research experience, and other qualifications of its teaching candidates (Van Dalen & Bennett, 1971). Their expertise led to extensive research aimed at improvement in overall physical health and wellness. Resulting implications pointed to an increased need for additional physical activity to all Americans, with a captive audience becoming America’s school children. Not all would agree with the inclusion of more time in physical activity, as this would mean less time in other academic areas in the public education system, according to Freeman (2001). However, the Surgeon General’s Report (U.S. Department of Health and Human Services, 1996) concluded that the significance of professionals’ knowledge and skills within the fields of health, PE, recreation, and dance to the nation could not and should not be overlooked. According to Carter (1997), this document “highlighted the importance of regular moderate activity to well-being while disclosing the limited degree to which adults participate”.

Reform in education in the latter part of the 20th century juxtaposed PE alongside professional dilemmas within the educational system. According to Oliver (1988), a heightened and earnest quest was pursued with sincere purpose in the educational reform movement. Reform across all 50 states included lofty aims toward excellence in America’s schools in the
form of accountability for performance. Strategies such as the attractiveness of teaching as a profession, and linkage of student potential with student performance, while admirable, resulted in “lopsided focus”, according to the author (1988).

Generalizations within the reform movement included such elements as “five avenues to better schooling: Teachers, students, organization and structure of the school, funding and teacher education programs” (Oliver, 1988, p. 68). The growing concern for educational reform in the form of content standards and accountability led PE professionals to address the issue within its discipline, as well.

PE had already addressed a more academic approach in the training and preparation of PE educators included moving from a less applied focus to a more academic focus (Henry, 1964). Preparatory programs for PE educators became more scientifically based, specializing in such areas as exercise physiology, biomechanics, motor learning, motor control, health, sport psychology and sociology, and sport history (Siedentop, 2009). Because these sub-disciplines did not necessarily fit under the umbrella title of “physical education”, departments and institutions began splitting programs of study, actually renaming them in many cases, to reflect a more global and academic scope (Shimon, 2011).

Historical developments in PE from this point forward necessitate explanation between PA and PE. Although interrelated, “quality PE programs provide learning opportunities, appropriate instruction, and meaningful and challenging content for all children” (Ballard et al., 2005). While PA is bodily movement of any type (including recreational, fitness and sport activities) (WHO, 2015), PE is designed as a process of learning divided into three domains according to the work of Bloom (1956). These domains include the psychomotor (sometimes referred to as health – related and skills – related), cognitive, and affective domains (sometimes
divided into affective and social). Psychomotor is unique to physical education as elements of physical movement involving the neuromuscular system, as well as development of health and performance-related fitness skills needed for playing games, sports, and being physically active are included (Shimon, 2011, p. 36). The cognitive domain addresses the knowledge-based components of PE, such as in the development of fitness-related concepts, designing of personal fitness plans, and rules of games and sport. Finally, the affective (and/or social) domain addresses the attitudes and emotions of individuals critical to the development of social skills (Shimon, 2011, p. 37).

Consideration of these learning domains is provided in NASPE’s purpose statement for PE: “The goal of physical education is to develop physically educated individuals who have the knowledge, skills, and confidence to enjoy a lifetime of healthy physical activity” (NASPE, 2004). NASPE began its quest to identify attributes of a physically educated person in 1986 with its “Outcomes Project”. The Outcomes Committee’s focus, in order to indicated the inclusion of all learning domains, focused upon 5 action verbs to be included in its definition of a ‘physically educated person’. These action verbs include (a) has, (b) knows, (c) does, (d), is and (e) values. Thus, PE instructors, by using the NASPE standards within instructional practices would increase the likelihood of developing physically educated learners capable of embodying the characteristics of a physical educated person represented by its definition, presented below:

A physically educated person has learned the skills necessary to perform a variety of physical activities, knows the implications of and the benefits from involvement in physical activities, does participate in physical activity, is physically fit, and values physical activity and its contribution to a healthful lifestyle” (NASPE, 1995).

NASPE’s first edition of content standards was introduced to physical educators in 1995,
revised from 7 to 6 standards and published as such in 2004 (Ballard et al., 2005). NASPE’s content standards are provided below:

Standard 1: Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities.

Standard 2: Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities.

Standard 3: Participates regularly in physical activity.

Standard 4: Achieves and maintains a health-enhancing level of physical fitness.

Standard 5: Exhibits responsible personal and social behavior that respects self and others in physical activity settings.

Standard 6: Values physical activity for health, enjoyment, challenge, self-expression and/or social interaction. (NASPE, 2004).

These standards continue to identify what the learner should know in becoming physically educated, and continue to serve as the guideline for PE programs into the 21st century. Regardless the model, “the teaching of physical education, as well as the preparation of physical education teachers, has increasingly come under scrutiny around the world” (Edginton, chin, Geadelmann, & Ahrab-Ford, 2011). As a result, the Global Forum for Physical Education Pedagogy (GoFPEP) was held in 2010 at the University of Iowa. The primary purpose of GoFPEP was to consider of the future of health and PE pedagogy in the 21st century. The forum consisted of 70 invited delegates from 23 countries, representing 64 universities, schools, businesses, community organizations, and professional organizations and societies.

The impetus for discussion was framed by a worldwide concern for the epidemic of obesity and overweight individuals. GoFPEP addressed such issues as the use of technological
applications, linking programming to community life the formation of cooperative relationships through PE programming to encourage more healthy lifestyles. Further, an emphasis on the investigation of new forms of PE pedagogy in elementary and secondary schools, as well as methods preparing PE teachers was discussed. Resulting conclusions focused upon the need for PE programs, as well as teacher education preparation programs, to be “rethought and reformed” (Edginton et al., 2011). These recommendations align with the goals for the remainder of the 21st century education worldwide, as addressed by Darling-Hammond (2010). Education must prepare learners to live in an ever-changing world by requiring them to gain critical thinking skills and problem-solving skills, operate with agility and adaptability, effectively analyze information, reflect greater curiosity, imagination, and innovation in their thinking, and finally to develop healthy active lifestyles (Edginton et al., 2011, p. 7).

According to the work of GoFPEP, PE pedagogy for the future must therefore focus on strategies that encourage student-centered, self-directed, individualized learning processes. Additionally, qualified professionals must guide individual growth toward the ultimate goal of practicing healthy lifestyles on a regular and consistent basis with assessment that is measurable at individual levels (Edginton et al., 2011). John Dewey in his work, “Democracy and Education” (2008) similarly concluded that “plasticity or the power to learn from experience means the formation of habits. Habits give control over the environment, power to utilize it for human purposes. Habits take the form both of habituation, or a general and persistent balance of organic activities with the surroundings, and of active capacities to readjust activity to meet new conditions”. Further addressing educational themes consistent with goals for 21st century learners, Dewey posited that “active habits involve thought, invention, and initiative in applying capacities to new aims” (2008). Dewey’s philosophy on education and its importance to and
alignment with goals of PE will be described in the next section.

**John Dewey’s Influence on Physical Education**

John Dewey, a product of nineteenth century America, gave the progressive movement in education its intellectual leadership (Perrone, 1983). Dewey’s theory centers around “education as a means for growth, activity, community building, reciprocity in teaching and learning, moral development, and democracy” (1983, p. 7). Dewey explored the relationship between ethics and education and the moral obligation to develop the whole person. According to Dewey’s philosophy on experiential learning, everything exists within a social environment. Therefore, knowledge should be strengthened through experience within a socially constructed environment (Grady, 2003). Dewey (1938, p.58) emphasized that while the principle development of experience comes from interaction, traditional education, providing the primary setting where interaction of children occurs, has not understood the value of social nature.

Dewey (1938) argued that the true source of control within education is found within the experience of students. Further, Dewey stated that, “it is a cardinal precept of the newer school of education that the beginning of instruction shall be made with the experience learners already have” (1938, p. 74). This is not to suggest that all children come with the same degree of social interaction. Rather, the collective social experiences, Dewey (1938) suggests, should correspond with the mental and physical growth of the child.

Dewey was a pragmatist, which led to the development of a moral psychology and value theory foundational to his education philosophy (Putnam, 1999). Dewey’s pragmatic lens enabled him to recognize the value of motor activities with mental development and its connection to the overall democratic issues of social justice (Thoburn, & MacAllister, 2013). Finally, according to Dewey held that educating citizens of a democracy should “endeavor to
shape the experiences of the young so that instead of reproducing current habits, better habits shall be formed, and thus the future adult society be an improvement on the current one” (Dewey, 2008, p. 85).

Dewey’s theoretical ideals align with the model of the health triangle, in which the physical, mental, and social elements of an individual’s make-up equally support each other. Interfering with the balance between the three components results in a holistic effect, or at least one of the other components suffering damaging results. It is represented by an equilateral triangle. In this type of triangle, all sides are the same length, and each angle is equal to 60 degrees. There is a reason why a scalene or isosceles triangle, whose sides have different lengths and angles, is not utilized for this model. By making all sides equal, the point that each aspect of health is of equal importance is illustrated (Mercer, 2014) (see Figure 2).

Figure 2.
Dewey’s Education Philosophy and the Health Triangle.
According to Putnam, (1999) one sees that the pragmatic outlook is forward looking, looking toward effects or future events rather than to the past. The forging of Dewey’s philosophy with physical education’s purpose and place of importance is overdue and surprisingly yet undone, according to Thorburn and MacAllister (2013). The authors stated “we are surprised by how seldom John Dewey’s writings inform contemporary reviews of aims and values”…“his (Dewey’s) writings are relevant to deliberations on how students could derive enhanced meaning from physical education” (2013, p. 458). The literature is void of studies connecting the value of PE with development of the whole child, as promoted by John Dewey’s educational leadership influence.

**Online Learning and Physical Education**

Online learning is not something foreign to the millennial generation, as most students in the 21st century do not think of technology as a phenomenon different from everyday life. As a result, the educational system has been challenged to successfully find strategies that engage youngsters who have grown up with technology as an integral part of their lives. The Millennial generation and those who follow look to the Internet as a tool for locating information, communicating, and as a way to entertain them. Therefore, they expect their education to be in line with their everyday technology-rich experiences (Wicks, 2010).

According to Wicks (2010), at the end of 2010, supplemental or full-time online learning opportunities were available to at least some students in 48 of the 50 states plus Washington, D.C. Further, at the time of the report, Alaska was on track to open a statewide online learning school in 2011, while 27 other states plus Washington, D.C. already had full-time online schools serving students and another 20 states were providing both supplemental and full-time online learning schools. Michael Barbour (2012) stated that by 2011, K-12 online learning programs
were prevalent in all 50 states with an estimated 2 million students enrolled in supplemental online courses, and over 250,000 students learning online full time. Further, Christensen, Horn, & Johnson (2008) predicted that by the next decade, the majority of K-12 education will no longer be delivered in traditional face-to-face classrooms, but will learn exclusively through online programming.

Wicks (2010) and Cook (2007) cited advantages of online learning to students across all grade levels, including students in higher education. Students benefit from opportunities to take courses that might not otherwise be offered at needed times respective to individual schedules, or offered at all. Further, courses taken online provide flexibility by allowing students to work on assignments anywhere, at any time they deem convenient and appropriate. Finally, convenience is a multi-faceted factor for students in online learning and web-based learning communities. Cook (2007) emphasized the importance of overcoming physical distances with web-based learning. Students have the opportunity to participate in the same instructional activities as others regardless of location, thus widening the scope of collaborative learning and communication with diverse groups of students, an idea further substantiated by Meyer & Jones (2012). Further, class size is limited only by server capacity (2007, p. 38), which can be an advantage if/when traditional face-to-face classes are closed due to limited space and instructors. Goleman, in his book Social Intelligence (2006, p.8) states “in the debate over its effect on users, the Internet has been attributed with both freeing human kind to explore limitless information and dooming them to isolation and “social autism”.

The benefits are not exclusive to the students in these online learning communities. Teachers who are not successful instructing in traditional schools and courses, for example, discover new ways to reach students. Administrators appreciate online learning for its ability to
offer students elective courses that otherwise might not fit into students’ academic schedules due to increased core requirements. Further, Wicks (2010) reported that online learning opportunities provided credit recovery programs for students who previously failed courses or had dropped out of school with the added bonus of on-demand tutoring available. Online learning could afford opportunity for other groups of students such as elite athletes and performers, migrant youth, pregnant or incarcerated students, and students who are homebound due to illness or injury by allowing them to continue their studies outside the classroom (2010).

Cavanaugh, Gillan, Kromrey, Hess, and Blomeyer (2004) reported similar benefits consistent to the authors previously discussed, adding another positive advantage. Online learning programs provide parents with control and influence over their children’s education. Parents are offered choices consistent with values, religious beliefs, and academic curriculum preference. The authors also suggested that actual “effectiveness of such online learning on K-12 outcomes has been somewhat ambiguous” (2004, p. 2). Further, the effects depend upon the context in which they occur.

While overall benefits may include all the afore mentioned contributions to positive student outcomes, Barker and Wendel (2001), reported that students enrolled in varieties of virtual, online learning schools and communities not only preferred this avenue for education, they excelled in multiple ways. Online students displayed greater improvement in critical thinking skills, researching, learning independently, and time management skills. Further, the improvement they showed was greater than their conventional school counterparts, affirming the notion that online learning benefits the learning needs and styles of some students.

Cavanaugh, Barbour and Clark (2009) reviewed works on structured content analysis and open access on K-12 online education. The trends that were reviewed were mainly based on
broad usefulness of K-12 online learning and its gradual growth, its benefits and the challenges with this type of study approach. They also stated that there have been new developments in the standards in K-12 online learning and effective practices.

For the study, the authors utilized the World-Wide Web and Google Scholar to search for papers, as most of the works reported on K-12 distance education had been done by private and public research centers. The key search terms that were used included K-12 online learning and distance education, web-based learning, virtual school and Cyber School. Research and general literature on virtual schooling was the focus in this study. Two-hundred twenty-six documents from 500 literature sources met the criteria related to K-12 online learning. Evaluation reports, books, journals, and online publications were some of the types of documents that were used in this review. The main reason behind choosing literature from the open source was because the authors wanted their work to reach a wider audience.

The authors, in order to synthesize literature aimed at providing a complete picture of K-12 online learning, used template analysis, a type of qualitative meta-synthesis. A template was designed to code the literature collected from systematic online searches. The history of this new field of inquiry along with decision-making can be understood by the systematic review of literature. Across the programs and within the literature, distance education was studied by using content analysis. Five themes were used to place the results from the template. Themes included the type of virtual school, professionalism of the staff, instructors and designers addressed in the articles, challenges and the advantages that were identified and “National Standards for Quality Online Courses”. Broad standard topic was coded but not the individual standards in each area.

According to the article, use of active learning strategies and feedback to students is the most frequently referenced article with regards to the literature. Goals and standards, learner’s
needs, and teaching credentials are the three points that are followed by the standards with frequency.

In both distance and face-to-face teaching, providing effective feedback to students and preparing active learning skills are the critical elements. Statewide and syndicate/virtual school, teacher’s role, administrators, virtual schooling promise, technologies used and interactive services provided to students are the main topic of the majority of open access literature. There is limited amount of information from experimental research, based on the information procured from meta-synthesis.

Lim et al (2008) conducted a study to probe an undergraduate Wellness course at a Midwestern University on the effectiveness of online education, traditional in class instruction, both forms of instruction together, the student’s satisfactory level, and their success rate with regards to different forms of instruction at the undergraduate level. Examination was also done on the instructor’s rating, learning quality, and communicative excellence and support.

For this study, the sample included 153 undergraduate students (71 men, 82 women) who were obligated to take the Wellness course at a Midwestern University. The age group of the student sample ranged from 18-55 years of age. The students were separated into 3 different groups, depending upon their choice of instructional model. The 3 models were online education, traditional in class instruction, and a mixed/combined form of both types of instruction.

The method used in this study included a survey based on student location, student view of online learning, and the level of student’s satisfaction. Content knowledge of the student was determined by comparing mean scores of pre and post written tests between three groups. An online education survey was used to gain understanding on the location makeup, background
types, and satisfaction of the student on instructional models. A test-retest pilot study was used to determine reliability.

For statistical analysis, descriptive studies were utilized, and these descriptive students were used to examine student demographic information. In order to compare different instructional models with students’ success rate and level of satisfaction, a one-way analysis of variance (ANOVA) was done. The study indicated the achievement of students in the traditional in class model were significantly lower than the students in online learning groups and the combined learning group. Satisfaction levels of students in combined learning groups were significantly higher than the traditional learning group. Upon in-depth examination there were no profound differences between online learning and traditional learning groups (Lim et al, 2008).

Runnels et al. (2006) reviewed literature on online teaching and learning. Course requirements, outcomes of learners, characteristics of learners, institutional and administrative factors were the topics that were selected for this study. The material for this review was procured in two stages. In the first stage, electronic literature was reviewed using online course descriptors and in the second state, articles that were referenced in the articles reviewed, read and searched online before was done. ERIC, PsycINFO, Content First, Education Abstracts, and Wilson Select were used for procurement of content. Upon reviewing the literature, it was found that earlier studies were exploratory, but designs of recent studies were found to be more investigational and causal-comparative.

Forty quantitative analysis studies were examined in this literature review. In those 40 studies, 10 studies procured information using survey instruments and 18 studies were describing correlational and causal-comparative analysis. Approximately 20 qualitative studies were also
reviewed and most of those 20 studies were primarily case studies. Researchers in some considered cross-case studies or multiple course re-statement of those case studies, but the majority of them only reviewed one factor or one course. A mixed-methods design using both quantitative and qualitative methods was used to obtain and examine information in 16 articles. Finally, the topics that were considered in this review were course environment, learners’ outcomes, learners’ characteristics, and institutional and administrative factors.

Upon reviewing, Runnels et al. (2006) found that most of the students taking online education were nontraditional, Anglo-American, and that written policies, guidelines, or technical support were available in very limited universities. In comparison, in-depth communication was facilitated in asynchronous communication, but the level was found to be less than in traditional classes. The outcome of the learning in asynchronous instruction was similar to traditional courses and students with previous knowledge in computers were far more satisfied with the online education model. It was also found that in order to test learning theories and teaching models inherent in course design, additional research is need with regards to learner outcomes, learner characteristics, course environment, and institutional factors.

**Instruction in Online Education**

Archambault and Crippen (2009) studied the nature of the location and experiences of online K-12 educators. For the study, instructors from across the United States were considered. The eligibility criteria were that these instructors should have at least taught one online class in a state funded virtual school. The focus was on instructors from public school educational institutions and virtual schools. To gather as many teachers as possible, a criterion sampling was used and pre-determined characteristics were set to select participants. The email address of the
teachers was obtained from the list of state sponsored schools listed in “Keeping Pace with K-12 Online Learning” and an annual report on K-12 online learning in the United States.

The results from this study showed that due to their advance degrees and years of experience, online teachers are experienced in traditional classroom setup. The study illustrates that teachers are seeking better ways to interact with students and the change to teach in a nontraditional teaching set up without the constraints of bells, schedules, or classroom management issues. The study also stated that due to certain factors regarding online teaching such as number of students, number of classes, and motivational support to students, online teaching could be a bit overwhelming at times.

While challenges and advantages to online education can be synthesized by these various studies according to both student and educator lenses, there has been no discussion of online HPE and/or Wellness course satisfaction from either stakeholder perspective. The literature is void on the topic of HPE and/or Wellness programs being offered online.

**Summary of the Literature**

According to Thorburn & MacAllister, “given the prominence of Dewey’s writings in education and his particular contribution to discussions on the child and the curriculum, democracy and social justice in education and experiential approaches, we are surprised that in the field of physical education there are so few recent references to his (Dewey’s) work” (2013, p. 460). According to Karafillis (2012), the basic element of education is that it teaches tools of survival, not in silos, rather in collective, collaborative, and inseparable units as a whole. Dewey defined education as a social function existing within the “structure and functionality of this society which it strengthens, reproduces and changes” (2012, p. 451).

Historically, PE has primarily existed for both strength building and sporting
entertainment. The throngs of individuals “in the middle” have been subject to models admirably aimed at reform, yet lacking engaging, personal meaning and applicable skills for optimum lifestyle. PE, according to Thorburn and MacAllister (2013) has experienced mundane programs not challenging enough to those already physically active and/or sports minded.

School administrators must abide by the laws set forth for the benefit maximization of all (Strike, Haller, & Soltis, 1995; Callahan, 1988). Emphasis upon skills needed for academic success personally and globally have resulted in PE programs being cut, despite the current obesity epidemic and its implications for a nation of individuals physically and economically. Public education provides a captive and needy audience to address these concerns, and yet they continue to be cut despite the fact that the earlier overweight and obesity occurs without preventive and intervention strategies in place, society will continue to incur greater reactive costs (Levi, Segal, & Juliano 2006).

The educational contributions of PE have and continue to be open to discussion, debate, some doubt and uncertainty. Establishment of a comprehensive program that would connect physical activity with feasible connections to overall health and wellness could result in more positive support. According to Kirk (2010), mundane programs relying on repetitious, dislocated and unadventurous approaches not challenging, have contributed to disengaged and disinterested students, and non-support from academia.

While PE faces an uncertain future, multi-faceted costs related to obesity and other health concerns as a result of lack of physical activity continue to grow. Schools struggle to meet the demands imposed by legislature. Simultaneously, participation in online education continues to grow. A moral conflict emerges: Justice and caring become intertwined concerning tested academics and affective mental and social needs. Martin Luther King (1963), in *Letters From a
*Birmingham Jail,* suggested that if justice is denied in one respect, to one person, culture, class or people, or an entire generation, injustice by others will be realized. Sacrificing health and PE programs in schools, either entirely, by reducing minutes of actual physical activity, or providing credit for PE without accountability will have far reaching effects. Individual and societal injustices in the form of neglect for development of the whole person will prevail. Today’s children, diagnosed with obesity at alarming statistical rates (CDC, 2014) become tomorrow’s adults, societal role models, and leaders. Removing programs historically aimed at improving overall lifestyle will result in lower quality of life, financial strain resulting from rampant health care costs, and lack of productivity due to resulting disease and illnesses.

Finally, PE has been an integral part of the school curriculum for more than 100 years (Houston & Kulinna, 2014). Over the century, focus has changed, but the objectives of providing students with the knowledge, skills, abilities, behaviors, and confidence to be physically active to enjoy optimum level living over the lifespan remain the same (Sallis, McKenzie, Acarez, Kolody, Faucette, & Hovell, 1997). Well-rounded PE classes can impact students of all abilities and interests. The PE profession is not without responsibility to address the factors contributing to students opting out of its traditional settings in traditional classrooms. With online education popularity on the rise, the PE profession must equip itself to confront the inevitable: Delivery means are changing, whether in face-to-face settings or in online, virtual classrooms. Accountability and assessment for students, regardless the setting, must improve.
CHAPTER III. METHODOLOGY

The purpose of this study is threefold: (a) To explore reasons why K-12 students and/or their parents opt to fulfill requirements for PE online, (b) to examine the characteristics of students opting for online PE courses, and (c) to capture experiences within online PE programs for purposes of future implications to PE programming.

Rationale for Qualitative Research Design

According to Feagin, Orum, and Sjoberg (1991), case study is the ideal methodology to utilize for any study when holistic, in-depth investigation is needed. Further, as indicated by Merriam (1998), case studies are generally applicable within the education field. According to Patton (1990), in order to holistically examine and tell stories embedded within decisions, qualitative case study is a method that provides opportunity for input from all stakeholders concerning PE instruction. Listening to and observing administrators responsible for decisions regarding PE in academic programming provided insight into their rationale as well as the reactions of those affected by their decisions. Listening to and observing students and their parents/guardians opting out of traditional PE provided insight into their responses and decisions to authority in PE education. Finally, engaging in dialogue as well as observation of instructors involved in PE curriculum delivery provided insight into reaction to methods of instruction within their control, as well as those outside of their control. Maxwell (2005) refers to this typology of interaction and deduction as a grounded theory approach in which there is constant interaction of data being collected with inductions developed throughout the process.

In summary, all stakeholders involved in the study had the opportunity to explain their thoughts, opinions, and decisions concerning PE instructional methods within their particular context, an idea supported by Maxwell (2005). Finally, this approach was utilized because the
study was an attempt to “understand an issue or problem using the case as an illustration” (Creswell, 2007, p. 3). The primary method of investigation employed in this scenario was the interview process.

**Participant Selection**

The interview protocol was appropriate for this study due to the fact that participants would be able to contribute to an understanding of the research problem based upon the dynamics they represented within the central phenomenon in the study (Creswell, 2007; Lincoln & Guba, 1985). According to Patton (1990), purposeful sampling is based upon the logic and power represented in participants capable of providing information-rich cases for in depth study (1990, p. 169). ‘Information-rich cases’ refers to those with experiences representative of the central issues in the study. Therefore, purposeful sampling led to the identification of participants within two public school districts in a fifty-mile radius. This method of selection reaffirmed Patton’s (1990) explanation of logic and power, which was exemplified by personal experience and knowledge concerning the population opting for online PE in lieu of traditional face-to-face classes. This “logic and power”, arrived upon through personal experience and knowledge, led to five cases (students).

According to Beauchamp and Childress (1983), four guiding principles should direct the process of securing participants for qualitative study. These include (a) autonomy, or respecting the rights of the individual, (b) beneficence, or demonstrating the intent to do good through the study and its resulting implications, (c) non-maleficence, not intending to do harm, and finally (d) justice, particularly in the form of equity toward all. The central themes in this study were examined through the lenses of those benefiting from, impacted by, and making decisions for PE options for students in America’s schools.
Participant Selection Summary

This sample included five cases (students) as the primary data source, having some experience as a student in K-12 public school PE courses prior to online PE choices. Additionally, parents of the same students were invited and agreed to participate in the study as they have influence over scheduling choices students make. Insight into the PE profession was provided by instructors from traditional, face-to-face PE classrooms. Finally, perspectives of administrators responsible for decision making regarding school programming was sought, and three administrators representing the two school districts from which the five students in the study came were included. Purposeful sampling led to these fifteen participants. Following this identification, invitation letters were sent to each participant. This letter of invitation has been included as Appendix C. The 15 participants, identified as the sample in this study, and initially identified as potential participants, elected to participate in the study.

Procedures and Ethical Considerations

HSRB approval was obtained prior to any contact with participants to ensure that legal, ethical responsibilities, guidelines, and approval were met. The HSRB approval document is attached as Appendix B.

Interview Process

Creswell (2007, p. 132) indicates that of all potential data collection measures, interviewing and observation “deserve special attention because they are frequently used in all five approaches to research”. The process of interviewing in qualitative research requires constant interaction between the researcher and participants in their natural settings, within the diverse perspectives of participants, and their narratives. Next, a description of the interview process that was utilized in this study is presented.
Following HSRB approval and acceptance by 15 participants, personal interviews were conducted. Face-to-face interviews were conducted, as this personal interaction allowed for the observation of non-verbal reactions, gestures, and other communication that serves to enrich the meaning of spoken word (Carr & Worth, 2001). Further, in-person interviews in authentic settings selected by the participants facilitated trust building and openness with the interviewees in an effort to yield authentic and descriptions of phenomena relevant to the study (Polkinghorne, 2005).

According to Adler and Adler (2002) and Mishler (1986), multiple interviews may initiate stronger relationships between participants and the researcher, allowing them the freedom to share more in-depth information regarding their experiences. Furthermore, multiple interviews allow for exploration and inclusion of information resulting from reactions, thoughts, and feelings to the first interview. Therefore, opportunity for follow-up interviews was provided to each participant, following each participant's examination of transcribed, verbatim copies of first meetings. None of the fifteen participants requested a second interview, although all confirmed transcribes were conclusive as delivered.

A semi-structured interview protocol was employed for the study. According to Creswell (1998) semi-structured interviews are conducted with a fairly open framework that allowed focused, conversational, two-way communication. Further, the interviewer follows a guideline but is able to follow topical trajectories in the conversation that may stray from the guide when it seems appropriate (1998). Therefore, interviews were tape-recorded, with permission of the participants, and then the tapes were transcribed verbatim. Some notes were taken in order to assist in accuracy and transcription, but the note taking was limited to allow me to focus on the participants and their answers to the prompts. The transcriptions were analyzed using the
constant comparative method.

This constant comparative method of data analysis involves the “process of taking information from data collection and comparing it to emerging categories” (Creswell, 2009, p. 13). Merriam (1998) defined the constant comparative method as the researcher beginning “with a particular incident from an interview, field notes, or document” and comparing with “another incident in the same set of data or in another set” (p. 159). These comparisons were conducted throughout the data collection processes so as to inform collection of further data. This means of analyzing data allowed for refinement of interview questions and probes as needed and to focus in on responses that were comparable to incidents described by either other participants or the same participant.

Each interview was originally scheduled for an hour, although two exceeded this time frame, while twelve were completed in an average of forty minutes. Verbatim transcripts were provided to each participant for authenticity verification. Each participant was given the opportunity for a second interview for inclusion of any thoughts that may have emerged since the original interview session, as well as further explanation and/or clarification of statements made in the initial interview. None of the interviews extended into a second session.

The participants within each ecosystem were assigned a case number by their respective role in the case to represent shared commonalities. They were all from similar white, middle-class families who lived in suburban towns. All participants were members of the school district of residence for at least five years, either as a student, parent, instructor, or administrator. The participants’ uniqueness was evidenced in the details of the lenses through which they examined the phenomenon of online PE. Speaking to some of the uniqueness of these details, biographical and demographic information of each participant is included in chapter four. Focus on the
information most relevant to the study as well as some of my thoughts, feelings, observations, and experiences during the interviews and analysis of the interviews that are most relevant to the study are presented in the following sections.

**Interview Questions**

The interview questions used in this study resulted from multiple sources. The literature review has revealed a tremendous void regarding the institution of online PE. Accountability for credits being earned by choosing this instructional delivery method has not been addressed. Additionally, my professional roles have initiated the underlying decisions for the research. Previously as a guidance counselor and also an HPE educator in the public school system for eighteen years, a complex ethical dilemma surfaced: Legislation inhibited the inability to deny students the right to HPE in the school systems if/when they opted to earn credit through online programs. At the same time, the personal and professional philosophy of developing the whole child physically, mentally, and socially could not be placed aside. Questions concerning the accountability of online programs for ensuring an education toward a lifetime of physical literacy, activity, and wellness surfaced. Further, questions regarding the rationale behind the decisions of parents and students determined to exit traditional HPE courses and enter online courses emerged. Finally, the attention to and consideration of delivering HPE for all students via online programming appears to be in opposition to goals aimed at reduction of obesity as an epidemic in the United States. These concerns and questions have guided the questions of inquiry to be posed to students, parents, instructors, and administrators regarding traditional and/or versus online HPE. (See Appendix A: Interview Questions)
Data Analysis Background

Merriam (1998) and Marshall and Rossman (1989) suggest multiple sources must be processed simultaneously. Maxwell (2005) emphasizes the sense of urgency accompanying accumulated, unanalyzed field notes and transcript piles (p. 95). Therefore, qualitative data analysis strategies must be synchronous to collection of data, which entails the classification of persons, events, things, and their relationships. I read transcription of interviews for a general sense of ideas presented. Following, I extracted significant phrases and statements pertaining to the phenomena within the holistic topic being studied. Significant phrases and statements were then systematically formulated into overarching concepts, then into clusters representative of themes, and finally into theme categories. A rudimentary analysis resulted from color-coding of the clusters and themes. I then constructed a written description of the lived experiences. Participants were solicited to validate my description with their perceived lived experiences. Participant biographies are presented in the order they were conducted in chapter four. Finally, coherence from themes resulted from triangulation of the data, and will be presented in the findings and implications section of the study in chapter five.
CHAPTER IV. RESULTS

Background

Multiple case study is a variant that includes two or more observations of the same phenomenon. This variant enables replication, that is, using multiple cases to independently confirm emerging constructs and propositions. It also enables extension, or using the cases to reveal complementary aspects of the phenomenon (Santos & Eisenhardt, 2004). This multiple case study focused on the phenomenon of online PE as an alternative means of earning required high school PE credit for graduation.

Five cases were included in this study. This represents an acceptable number of cases, according to Creswell (2007) because more cases may result in data saturation while less than four or five (2007, p. 76) results in limitation of critical, observable data. Further, the author advises that decisions concerning “who or what should be sampled can benefit from sampling four aspects including events, settings, actors, and artifacts (2007, p.126)”. All aspects are included in presentation of the study’s data.

Sample selection included implementation of mixed sampling strategies that, according to Creswell (2007, p. 126) is acceptable and desirable in order to maximize potential for collecting the most beneficial and extensive detail concerning each case and its participants. Furthermore, according to Pinnegar and Daynes (2006), qualitative research should not only study a few sites or individuals, but also collect detail as extensively as possible on each site or individual selected. Therefore, purposeful sampling strategies were employed in the study will be described next.

Maximum variation provided diverse variations within participants, while allowing for identification of important common patterns, according to Miles & Huberman (1994, p. 28).
Snowball, or chain sampling strategies became evident as identification of cases representing the phenomenon being examined led to “people who know people who know what cases are information-rich” (1994, p. 28). Finally, stratified purposeful sampling, illustrating subgroups and facilities comparisons (1994, p. 28) is evident in the study, as parents, instructors, and administrators represent unique and diverse subgroups supporting the primary data source within each case.

Each case in this study represented an ecosystem in which a student was invited to participate as the primary data source or case. Other members of the ecosystem included the student’s parent(s), a PE teacher from the student’s district of residence, and administrators from that same district. The additional participants in each case represented persons of influence concerning PE academic scheduling decisions. Fifteen total participants agreed to participate and were included in the study, representing two separate school districts from Northwest Ohio. The two school districts of residence of each of the participants involved in the study ranged from a k-12 population of 634 to 1281 students. The distribution of the study’s participants is illustrated in Figure 3.
A semi-structured interview protocol was utilized for the study. According to Creswell (1998), semi-structured interviews are conducted with a fairly open framework that allows focused, conversational, two-way communication. I followed a guideline but was able to follow topical trajectories in the conversation that may have strayed from the guide when it seemed appropriate. Therefore, interviews were tape-recorded, with permission of the participants, and then the tapes were transcribed verbatim. Some notes were taken in order to assist in accuracy and transcription, but the note taking was limited to allow me to focus on the participants and their answers to the prompts. The transcriptions were analyzed using the constant comparative method.

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conducted throughout the data collection processes so as to inform collection of further data. This means of analyzing data allows for refinement of interview questions and probes as needed and to focus in on responses that are comparable to incidents described by either other participants or the same participant.

Each interview was originally scheduled for an hour, although two exceeded this time frame, while twelve were completed in an average of forty minutes. Verbatim transcripts were provided to each participant for authenticity verification. Each participant was given the opportunity for a second interview for inclusion of any thoughts that may have emerged since the original interview session, as well as further explanation and/or clarification of statements made in the initial interview. None of the interviews extended into a second session.

The participants within each ecosystem were assigned a case number by their respective role in the case to represent shared commonalities. They were all from similar white, middle-class families who lived in suburban towns. All participants had been a member of the school district of residence for at least five years, either as a student, parent, instructor, or administrator. The participants’ uniqueness came through in the details of the lenses through which they examined the phenomenon of online physical education. Speaking to some of the uniqueness of these details, biographical and demographic information of each participant has been included. Focus on the information most relevant to the study as well as some of my thoughts, feelings, observations, and experiences during the interviews and analysis of the interviews that are most relevant to the study are presented in the following sections.
Participant Biographies

Case One:

Student

The student in case one was a fourteen-year-old male who had completed his freshman year of high school two months prior to our conversation. The student is also an athlete, having earned his first junior varsity basketball, track and field, and cross country letters. Further, he was on the honor roll all four grading periods of his freshman year, an achievement he expressed as important to him, and indicative of the value he placed upon academics. He also completed an online PE course to satisfy the requirement for high school credit during his freshman year. The interview took place in his home with a parent at home, although not present in the same room where our discussion took place.

The young man appeared confident, polite, and sincere in thought and discussion. Initially, our discussion was centered on his definition of physical education. I observed in him a hint of indecisiveness as he shrugged his shoulders and implied that PE was a general sum of “sports and games”. His next comments indicated that PE was learning about “how to stay fit and active”. These two responses peaked my curiosity. If sports and games represented PE, and PE was about learning to stay fit and active, then could fitness be achieved by playing sports and games only? His responses provided a springboard to the next prompt concerning the importance of PE, both to him as an individual as well as his insight into the importance he believed schools placed upon its inclusion within the curriculum. I intentionally did not differentiate physical activity from PE in a prompt that asked him to do the same. His reply to this prompt was as follows:

To some people, PE can be really important if that is what you do. People
who work out, that is physical education. But the people who don’t work out, it is not as important to them. If they are active, it is pretty important, if not probably not as much. Activity is doing it yourself, like the cardio in sports.

Education is learning about the body, how much water you should drink and the heart rate stuff.

Throughout the interview, the student indicated a lack of definitive purpose, importance of, and overall effect(s) of PE on individuals and society. Comments by the student reflected a perception of PE from his frame of reference as an athlete. I found this to be interesting, considering he is an athlete that, according to his remarks, is “an active person that needs the physical activity”. This led to my next question concerning his rationale for taking online PE as opposed to staying in the traditional classes offered in his high school. The only issue addressed by the student in this case was scheduling. Since this student engaged in extra-curricular activities and was eager to achieve academically, time became a precious commodity. He emphasized that he not only needed, but also wanted to take additional academic courses that simply would not fit into his regular school day. He also pointed out that “clearing his schedule” was not to add a study hall in place of PE. The additional courses he could add by “getting PE out of the way” were truly academic in nature. This reply provided a segue into a discussion about his online PE course experience. Specifically, questions aimed to address how much credit he received for the online course completed, how he was held accountable for work in the online PE course, and the curriculum included.

The state of Ohio requires students to fulfill ½ credit of PE in order to graduate with a high school diploma (ODE, 2014). The student indicated that he received the entire ½ credit in one online PE course. The same credit in a traditional PE class would have required his schedule
to permit two semesters of PE at some point during his high school career. He then explained via his participant lens, how the program was designed, delivered, and assessed. His initial explanation is provided here:

The first block of the class was the pre-test. You take the test, which was kind of nice. It would determine where you are and then take a unit test. If you got the unit test question right, you didn’t have to do the unit. There were 60 questions overall. I took it as 3 units and there were 20 questions each. You to get 4/5 right to get past that. Each unit had the physical activity part. I think it was 60 hours a unit. You had to get the 20 hours, you weren’t allowed to get the 60 in one unit. That wasn’t very hard for me because I had cross-country, basketball, and during the summer I swam every day.

Our discussion then turned to accountability. Initially, questions immediately following aimed at explanation of the online PE program. The student was then asked for a comparison of all elements in the online program discussed to his experience in traditional PE classes prior to this online experience. What I found to puzzling were the first words spoken concerning accountability:

I mean, some people could lie about it, but if that is what they want to do and they feel alright about it then that describes them, but I had no problem getting that done. I probably doubled what was required, because I could count practice times. I probably counted 6 hours on some days.

Our discussion turned to the student’s experiences in traditional PE classes. He explained that when he was in junior high school, there were packets that students were asked to complete in a week’s time. Everyone began with 100%, and it was up to them to lose that grade. For example, “If you didn’t bring your clothes, you didn’t listen, if you didn’t participate they would
knock off points for the day”. He also pointed out that this type of PE schedule was for one nine-week period during his junior high years, but during elementary school, PE was held 3 times a week all year for 30 minutes each session.

Following our discussion on both online and traditional PE courses, I posed this prompt: “Would you recommend online PE to friends?” His response was inclusive of diverse thoughts. Initially, he replied, “it depends”. According to the student, if someone choses online PE simply because he/she did not want to do gym, then that was not a good reason. If someone wanted to earn credit for similar reasons to his own, that is to create more room in the academic school day schedule, then yes, he would recommend online PE. He also pointed out that “if you are taking it and you do sports, then I say why not? But if you are going to take it just to add a study hall, then I don’t think you should take it online”.

The final discussion prompt centered upon whether or not the student would opt for other online courses for high school credit. His reply indicated that with the pressure of ‘big tests’, probably not. His rationale was that if a concept was not understood, and that concept was going to assist in doing well on the achievement tests he deemed ‘big tests’ necessary for graduation, face-to-face classes with teachers were more helpful.

**Parent**

Following time with the student in this case, I interviewed his mother in their home on the same day. She has resided in the school district since her son was an infant, thus has become very familiar with the schools within the district. Further, she is a high school principal, age 45, with 16 years of experience in the same district that her son attends. She is involved with curriculum decisions affecting the school. The next section will present her perceptions as a parent as well as those resulting from her experience and responsibility as an administrator.
Distinctions between the two roles and their respective responses will be provided as needed, following the sequence of our time together.

Defining PE from this parent/administrator perspective does not require distinction. She believes PE to be a class “where students learn activities that can help them in staying fit and working with others”. Throughout her response, it became evident that questions were being viewed from an administrator’s lens. Particularly, when posed with the question about PE’s importance, the administrator persona became apparent. There was no reply regarding the importance of PE. Rather, her opening remarks were aimed at an explanation regarding program time:

We have tried to help a lot of our programs fit together and have a place. For instance, for a long time we had concerns about students having room in their schedules to maintain choir and band programs. Everybody is competing for student time and interest, so to speak. So, we found ways to shift some of the health and PE to different grade levels to try to give the high school credit and save some space in later years in high school. I think this has helped quite a bit. It was quite an adjustment too, because it meant teaching a lot more contact time to do it for high school credit and they had to move a lot more in less time than before.

The next portion of our time together concentrated on a trajectory that emerged from the first two questions. While this case one parent/administrator did not specifically address the question concerning the importance of PE, but rather explained that students now earned high school credit for PE in the 8th grade, I embraced the opportunity to develop this trajectory. Following the explanation, I asked if students completing high school credit in the 8th grade was sufficient for promoting lifetime physical fitness, and if this was a concern to her as a parent
and/or as an administrator. She responded that students getting required PE credit “out of the way” earlier allowed for more lifetime fitness classes as elective choices at the older grade levels. These courses would be physical fitness activities that students would be more inclined to engage in for the rest of their lives, rather than “playing mat ball or floor hockey”.

During the final minutes of our time together, we concentrated on the topic of online PE education. Her thoughts mirrored those of her son, which indicated the disapproval of persons opting out of traditional PE simply due to not wanting to participate in a face-to-face class for reasons such as not wanting to dress. Similarly, she indicated that “the more advanced students and athletic kids who often have good physical fitness” could benefit from an online course. The online option would provide more scheduling freedom for students wanting additional academic options.

Finally and purposefully, the interview moved into the direction of online learning as a viable educational option in general. Much like her son, this parent/administrator indicated that while technology is good for some courses and has a purpose due to its appeal to changing times and interests to students, its inclusion as a sole delivery means for PE is “not the best choice”. She concluded by emphasizing that the main reason for hesitancy as a “replacement method” of teaching PE is due to no one having “first hand oversight of the physical activity hours; that is the main drawback”.

**Administrator**

The third participant interviewed in case one was the district’s superintendent. The participant was a male, age 52. He has 18 years of experience in education administration, with 6 years at the current case 1 district. The superintendent responded to all questions in a professional manner after deliberation on each question prior to responding. The interview took
place in his office for 55 minutes. While invited to participate in a second interview for additions, corrections, and/or clarification concerning thoughts developed from the first interview session, this participant declined.

Discussion began with his thoughts concerning the definition of PE, as well as its importance. I found it interesting that he described PE as “an art” for those passionate about instilling lifelong learning goals and interests pertaining to maintaining a healthy body.

Considering that PE, according to the superintendent, is associated with healthy, lifelong learning and living, we moved to a discussion concerning its importance as perceived by schools, to which he replied:

I have to place a priority on the core subject areas themselves. There are essential elements of traditional education like reading, math, science, and social studies. The second element as I look at is employability skills, the ability to maintain and become a healthy servant of our community following graduation from the k-12 system. From there, I see healthy PE fitting into a quality of courses that fall below that, included with art, music, foreign languages. These are other areas that are grouped together in that third tier.

This administrator indicated that PE today is not what it was when he was a student. His explanation referred to a sports-related them while he was a student while today more is required. When asked to elaborate, comments centered upon the need today to include more information about how the body works, including what it takes to fuel it properly, and how to “stay fit and healthy for a lifetime”. He addressed PE today as a model similar to one of the 1960’s and 1970’s in which sports and games are emphasized, although a more fitness minded approach is needed. When asked to elaborate, his explanation referred to the ideal versus reality:
Budget differences. Funding for schools, how they are funded, structured within, reduction in funding, increases in special education requirements…these have all had a huge impact on educational systems as a whole. We know obesity is a problem. But every time we add something to remedy the situation, there is only still so much time in the day for school, and the choices based on mandates have to be made. It is like balancing a scale. Every time we add something to one side of the scale, something has to be impacted on the other side. Schools become the social antibody for society. When society comes to the realization that obesity is a problem and issue that need with the same forceful impact in the same way that tobacco, for instance, was forced like lawsuits initiated by society that desired change, perhaps we can afford the same type of focus to this area of education. Right now, the emphasis is on core subjects.

Concerning online PE, the superintendent considered the option as “an escape for many”. Further, he indicated that “if online students return to the regular school setting, less than 20% of them are at a grade level comparable if they has stayed with us, and they are playing catch-up in some form or fashion”. He added that there are other reasons, such as pregnancy, or students who simply cannot accommodate scheduling without considering this online option. He concluded by stating that online PE, in his opinion, was fine for the core component; that is, knowledge base, physical anatomy, body function, safety, etc. However, there must be supervision, and he did not believe that to be happening with online PE where developing fitness through activity is concerned.

Instructor

The final participant, enhancing case one, involved a discussion with a PE instructor employed in the same district. The instructor, age 53, has 28 total years of experience in K-10
PE and health education, with 16 years at the current district. The interview concluded in 45 minutes at the instructor’s home by her request. The instructor received the Ohio Association for Health, Physical Education, Recreation and Dance Ohio PE Instructor of the Year in 2009. Further, this instructor is a Nationally Board Certified teacher.

The instructor externalized a passion for not only her PE profession, but also for the welfare of her students and the greater society. She acknowledged an ideal concerning PE neither evident nor expressed by other participants in case one. Emphasis concerning the role and influence of PE to the overall development of the whole child was her theme. She began by expressing what PE is:

Physical education to me is providing educational or activities that are educational as far as teaching a child or student about their physical body, what benefits you can get from being physically active, how to maintain a certain level of wellness or health as they get through life and providing some age-appropriate activities all through the school.

‘Whole child’ language was introduced for the first time in case one. Actualizing the cumulative definition of PE as being more than sports or fitness, the course of our discussion led to PE’s importance to schools and their students. The instructor revealed extensive research and experience on brain-based education and PE’s benefit to the whole child. She spoke confidently about presentations made before parent groups as well as to area educators:

My perspective is that it is crucial to the whole development of a person. As research will show and recent studies have indicated, and I am up on this due to a recent institute that I attended, activity inspires the brain to grow new neurons. Learning can be enhanced through physical activity. You are at the optimum levels of learning if you are physically active. So with that being said, the more activity the better in school.
Unfortunately, schools are cutting back on physical activity thinking that the academic is the most important part and therefore devoting time to kids sitting and being taught math, science, English, or whatever. In reality, if we would keep those kids moving every day, and even in the classrooms with the academic parts, that would be the best environment in which a student could learn.

Spurred by comments about physical activity time being cut in schools, a question unique to instructors within the PE profession followed. Inquiry into challenges facing the PE profession today resulted in these thoughts:

I think in the past people have basically, and this phrase is over used in our curriculum, thrown the ball out; just roll it out and let the kids do what they want. Yes, they are being physically active, but are we doing anything as far as having them become physically literate? We talk about literacy in reading, we need to be physically literate also when it comes to our bodies to maintain our wellness. So in the past, old school was sports; roll the ball out and keep them moving and a lot of teachers abused that and did nothing but that. They would sit and read the paper, whatever. So now we live by the stereotypes, to a very large extent, where administrators who had teachers that did just that, believe that is what most if not all PE teachers do. This could not be farther from the truth. Things have changed. People have come on board to help us clarify and justify the changes through an educational process that is an element of the entire process, not just PE. Unfortunately, it is an uphill climb.

The discourse conclusively revealed a multi-faceted uphill climb. The instructor elucidated phenomenon related to the historical 1960’s philosophy of PE educators as being ‘roll out the ball and play’ instructors. Coupled with challenges of providing evidence, and ultimately
‘convincing’ decision making bodies in education that the profession is indeed different today with the emphasis on core standards presents a steep ascent. Since core standards, deemed more important than ‘extras’ like ‘third tier’ PE as previously described by the administrator of the district, time available to provide evidence of improved, researched, and evidence-based curriculum in PE is more endangered than ever.

Technology became the final focus of the interview session. The instructor firmly acknowledged that being technologically educated is vital to students. She further affirmed technology’s use in the PE profession at large, as well as in her own school, indicating the use of Smart Boards, I-Pads, and applications developed specifically for PE as being not only useful, but desirable. Since, according to the instructor, all of her PE classes include health-related instructional activities, technology has further enhanced and expanded options for curriculum delivery. Assessments utilized in her PE classes are completed via computer applications that provide students and their parents immediate, observable, and accurate information related to performance, fitness level, and progress throughout her time with the students. Based upon the information the instructor provided concerning elements addressed in her PE classes, she was asked to differentiate between physical activity and physical education. Her reply was based upon information retrieved at a recent national conference attended just a week prior to our time together.

Physical activity is just moving; moving your body parts, stretching. Physical education is having them become physically literate; knowing why (her emphasis with voice inflection noted) your body needs to do something in a certain way, or knowing what happens to your body when it responds to exercise. That is the difference.

Finally, inquiry ensued concerning online PE. Her entire response is provided:
I have mixed feelings about this. In our school system, in the past when they have left my classroom they had 6 or 7 years of dodge ball and mat ball. So in that instance, an online PE course that contains all of the necessary curriculum elements they say they are going to cover might be better than what they are getting in high school. But that is not the way it should be. The PE teacher should be focused on having that student become physically literate. Do they know the components of physical fitness? Do they know how to figure their target heart rate? All of these things should have been done in 4th – 8th grade gym classes, but they haven’t been. If that is what they are going to get in online PE, then that is a good thing. But they are missing social interaction. How are we going to make a valid point that they actually did do that, or do they have mom sign off on the paper, or they have a coach that they have known forever that they approach and say, “Hey, can you sign this paper that says I completed this?” If they are getting credit for band or sports, for example, does that count? I was a band person, and I was an athlete. I was a cheerleader also. All of these are great activities, but they are not teaching what I need to become physically literate. I am not going to be doing toe touches the rest of my life. I am not going to be marching 8-5 down the football field to become fit or keep my wellness level. If they honor that as a PE class, and I am teaching the way I should teach target heart rate, for example, then they should get credit for Algebra I, because I am teaching math skills. I am doing the math, I am doing science, let’s just qualify out of Biology I. That may be a stretch, but do you see my point? What it boils down to is literacy. Are they getting what they need in an online course, for example, to become physically literate? If so, this may be an alternative. Unfortunately, it is based upon an honor system in terms of activity.
The case one instructor concluded with thoughts based upon her observations. For example, she described a student in the district who had opted for online PE class as one that could not bend over to tie his shoes without becoming short of breath as seriously overweight. She described an inevitable situation for PE professionals to consider: Since online PE is gaining in popularity as an option for earning high school credit toward graduation, she would recommend that the online program be kept in-house in order to establish validity as a viable, beneficial option. In her words, “I don’t think we are doing them (students) a favor by farming them out to a techno world where we have no idea what I going on. The answer is not technology all the time. We have to be accountable, we have to get back to the roots of socialization, and being active on our own”. Further, she compared the use of technology to teach online PE to a ‘Velcro syndrome’ without such accountability in place:

We have middle school students that don’t know how to tie shoes because their parents got so tired of tying their shoes that they bought Velcro for them. Yes, that is a wonderful invention, but seriously, remember the basics: You need to learn to tie. Likewise, you need to know why you should do curl-ups, why you don’t want a BMI over 30, what is going on in your heart; things like that.

**Case Two:**

**Student**

The student interviewed in case two was an 18-year-old female entering her senior year of high school, attending district one described in this study. Upon my arrival at her home for the interview, she was still at band camp. Her mother welcomed me and explained that her daughter was the field commander for the marching band, and also a varsity cheerleader for football and basketball. When her daughter arrived home, the student was introduced to me and
then her mother left the room. My first impression of this student was one of drive and confidence, as she approached me, looked directly into my eyes, and offered a firm handshake. Informal greetings about her experience that day were swiftly transitioned to inquiry concerning the purpose at hand.

This young lady responded quickly when asked for her thoughts on PE’s importance, its definition:

Physical education I would say is how to live a healthier lifestyle. You learn what kind of exercises you like and how to build on that to help you stay in shape, and learn about your diet to maintain. I think it is important to learn to live a healthy life. I just don’t know a proper way to go about that.

I followed by asking her to explain ‘controversy’, to which she replied: “Whether it is working. People say that gym class doesn’t do much and I think I would have to agree”. According to the student, PE in schools is not highly regarded as important nor necessary due to the fact that “people are so focused on test scores and getting to college and getting a job and getting a degree that physical education or gym or anything besides core classes are just pushed aside”.

Discussion concerning differences between PA and PE determined the student’s conclusion that PA was simply doing what the educational component aimed at why and how they were to be completed. Whether or not her traditional PE courses in school prior to online PE had differentiated between activity and education led to these recollections from face-to-face PE encounters:

I didn’t like PE at all. It was so stressful to me. There were always a couple of boys that treated it like the Olympics and they were super good at all sports. I wasn’t bad at sports,
but I wasn’t fantastic. There was just so much pressure because everything was games and sports. The teacher was a coach and knew his athletes. They (athletes in class) were treated like stars and everyone else were just playing games. There was a lot of favoritism. It was like if you weren’t an athlete, then ‘why are you here kind of thing’. In fact, I think those who were not athletes were graded differently than those who were athletes. I just think that traditional PE classes favor the athletes and I just don’t think that is right. It (favoritism) happens in other classrooms too. But with gym, there is more anxiety because you are forced to participate in order to pass. In a regular class you can sit there and not be noticed most of the time, but not so in gym.

Interpretation of the student’s comments indicated that she had chosen online PE to escape the drudgery of PE in school. This was not, however, the case concerning her decision to opt for online PE in order to earn high school credit. Rather, according to the young lady involved in this case, her primary reason for the online PE course was due to scheduling conflicts. The result of being involved in activities such as cheerleading and marching band, coupled with a school schedule that offered only seven academic periods per day, trumped any other consideration concerning the inclusion of PE. Further, this self-motivated and high-achieving student wanted to include post-secondary classes, for which there was limited time. In her words, “something had to give, and PE was the easiest to move”.

Crediting online PE as the most viable option for completion of the required high school credit, discussion concluded by describing the online PE course, followed by her recommendation(s) for others considering similar PE instruction. The student alluded to the online experience as positive for her due to the fact that she could count her cheerleading practice hours toward required activity hours. She followed those hours with the logging of time
spent in band camp. Actual content was delivered in the online program by tape-recorded lectures and videos, at the conclusion of which she wrote three paragraph essays describing what she had learned in each session. Based upon ten hours of activity time being logged per week, the online course extended for a period of ten weeks in order to accommodate the necessary one hundred total hours needed for completion.

Finally, this student recommended online PE “definitely” as an alternative to traditional face-to-face PE classes. When asked for an explanation, she indicated that, “it may not work for everybody, but for the majority it would, because you could complete it so quickly and get it over with”. The student also added she would not consider taking core classes online: “I think, especially for something like math classes, you need someone in front of you to ask questions because there is so much content there. But with PE, what are you going to ask, how do I run”?

**Case Three:**

**Student**

The primary focus of study in case three was a fifteen-year-old female, having just completed her sophomore year of high school in district one. Her entire education has been within the same school district in which she and her parents have lived since her birth. The student in this case is an athlete that has played competitive volleyball since the fourth grade. She did not mention any additional extra-curricular clubs, activities or sports involvement. I had not met the student prior to our time together in the interview reflected here. She appeared a bit apprehensive at first, but spoke matter-of-factly in response to questions posed. Primarily, her responses conveyed utmost concern for academic performance. The underlying message conveyed concerning the value of PE in her own life and among her peers was frankly stated:
I think the first thing that comes to mind when I think about PE is, it is just gym and people kind of slack off in gym class. You can either take it seriously or not take it seriously. I take it seriously because it is for a grade, but there are different types of teachers you have for PE and some teachers slack off and some teachers don’t. I don’t think anyone takes it as seriously as they should, knowing it is for a grade. I always tried in class because it would affect my grades overall, but people seem not to really care. They have other things to worry about.

Discussion turned toward definitions concerning PE and physical activity. The student explained, “If it was really PE, you could actually learn something. Like injuries, for example: You could learn about how to take of your body to prevent injuries rather than just playing games”. She revealed that instruction provided in her traditional PE courses included more about game rules so that chaos did not erupt, adding that students would typically listen to instructions, and then either attempt the games half-heartedly or enjoy standing around and talking with each other. She liked, for the most part, her traditional classes due to the fact that she did put forth effort. This led to my questions concerning why she chose online PE and explanation of the online PE program she had recently completed for high school credit.

Scheduling became the targeted subject addressed for choosing online PE as an alternative to traditional PE classes. Her rationale, not only citing that she wanted to “open her schedule for school because I wanted a study hall and not have to worry about getting things done”, also emphasized she would rather be learning something rather than “just being in gym”. Since nothing, according to this student was learned in gym, I proceeded with an inquiry addressing the learning components included in the online PE course:

They made me keep track of the work that I had done. We had to take multiple quizzes
and then we had to read everything. Like, for example, we had to learn about what you do if you are injured or if you get an ankle sprain or if you pass out; you need to learn about that kind of information and had to take a quiz to prove you knew the information. There was an activity log that had to be filled out. You had to get in so many hours of activity in a week.

When asked how the instructor held her accountable for her recorded activity time, she reported that the online instructor told her, “I am counting on you to be honest with me”. She insisted that if you did cheat about weekly hours logged, you were cheating yourself. Clarification on the online grading system was also provided. The student explained a system of grading the exams provided for each section. Five was the highest score, and 0 meant a failing grade. She explained that you had to have a 3 in order to pass each section. The online PE course was completed in two months successfully, although this student indicated, “if you really wanted to work hard, you could complete it faster”.

Finally, the student involved in case four indicated that she would recommend online PE to friends ‘mostly for scheduling reasons’. Concerning any other online courses for subjects required in her high school career, the student revealed that she would likely not take courses online. Her explanation focused upon lack of personal interaction with the instructor as the main reason for remaining in face-to-face classes for what are described in her words as ‘courses that really matter’. Taking advantage of the opportunity to inquire further about face-to-face interaction with online education in general, this student replied that she missed the social interaction not only with the instructor, but also with other students. She did express that in traditional PE classes social interaction ‘is usually the best part because in other classes all day you have to be quiet unless you are doing something in groups or labs’.
**Parent**

The parent interviewed was the mother of the student in case four. The interview took place, at her request, in her office. She is an occupational therapist. The mother in this case is married, 44-years-old, and has only one child. Extremely confident and out-spoken, this participant expressed opinions very openly, candidly, and at times unprompted. She indicated information concerning her daughter that was not personally revealed by her daughter within her session. According to the mother in this case, her daughter has sensory issues that make focusing on academics at times especially difficult. She was very curious about her daughter’s responses. She was reminded that her daughter’s interview would remain confidential, as would discussion from our time together.

The mother in this case spoke very fluidly and indicated a strong knowledge base concerning physical activity, PE, and its importance. She indicated a belief that PE was a place where individuals could exercise and hopefully learn leisure-time activities and sports. Further, the value of PE would be made known as evidenced by activity levels in later adult life. She also added that PE represented an atmosphere in which students could connect. Finally, by definition, PE should be inclusive of a knowledge base concerning body systems, functional movement, and injury prevention.

Elaboration on the importance of PE was further initiated without prompting. This mother/occupational therapist portrayed PE as a necessary component to the school day: Students need to have activity in order to focus. I see them sitting in a chair for 8 hours a day, and that is not conducive to, nor appropriate for sound, desirable educational outcomes. Research continues to provide evidence that if they are active, engaging in physical activity while at school, they can concentrate longer and have more focus. Unfortunately,
I think the school perspective is just following mandates. I really don’t think they have a choice in believing what they want to believe. That seems to be how the state of Ohio operates at least. The mandate comes down, the school has to react appropriately, or a knee jerk decision is made, or whatever is necessary to meet standards in order to get state money. This common core crap, and you can quote me on that, is ridiculous. My daughter recently participated in a test that was to take 45 hours in the spring semester. An entire week of education was lost, not to mention that the pilot test required the students to sit in front of a computer. There was no opportunity to move around during the testing period, and my daughter simply cannot concentrate that way. I do not believe lack of concentration in a setting such as that is exclusive to my daughter either, for reasons I mentioned earlier about needing exercise to focus throughout the school day.

Attention turned toward this mother’s perception of her daughter’s online PE experience. She indicated that her daughter, who had been training for competitive volleyball since fourth grade, not only took online PE but also received personal training from a local trainer in a privately owned facility. Her overarching belief was that her daughter should have been able to receive high school PE credit for the time spent in personal strength training and volleyball related practices, drills, camps, and other aspects of being a varsity volleyball athlete. Since this was not acceptable at her high school, the “next best option was online PE”.

Reasons for the online PE course were not limited to scheduling, although attributed to scheduling initially. Concerned for her daughter’s lack of focus in class due to her sensory issues, a study hall during the school day was desired. There simply was not time in the school day for a study hall and PE, as two academic periods would be needed to accommodate both in the same semester. Additionally, because the mother indicated that both she and her husband
were firm believers in physical activity and led by example, their daughter would be suited for a lifetime of activities. When asked to describe the online experience, for which her daughter received the full ½ PE credit required for a high school diploma in Ohio, her perception was as follows:

She had extensive work to do in order to pass the quizzes. The online tests that she had to take were pretty funny. If you got it right the first time you got an A. If not, you had so many attempts to get it right and you got the A. After so many attempts, if you didn’t get the answer, you got the next lower letter grade. To be honest, since she is an athlete, getting the activity hours required for the online program was not an issue. Frankly, I must admit that if you were not a parent that was hands on, there would have been no accountability for the activity hours.

Further expounding upon the online program experience, this mother explained that the program chosen for her daughter was one of many that could have been recommended by her guidance counselor to suffice credit requirements. She pointed out that the chosen online PE program was confusing, as there were so many elements to be printed out, followed as a guideline, and then align with required responses. Her daughter completed it in two months, but would not have done so if left alone. The course necessitated both she and her daughter working together to “figure out what to do” for each section. Therefore, she indicated that she would not recommend the program to others unless they are extremely motivated; meaning both parents and the student working together toward its completion.

Finally, in response to the decision about her daughter taking other online courses, this mother responded no to core classes online. She revealed that she would not be against her taking a foreign language or other elective class online.
Case Four:

Student

The student participant in this case was the only student interviewed who had graduated from high school the previous year. She added that the school from which she graduated the previous year was the one attended since third grade. A female, age 19, this young woman invited me to her home for the interview. Her insight provided a unique view, since she reflected upon her online PE experiences and at times compared those experiences to a freshman wellness class.

The discussion began with her general thoughts about what PA and PE meant, as well as its importance to individuals overall, within schools, and to society as those individuals become adults. She informed that PE is what schools attempt to provide by delivering lessons aimed at making students aware of their bodies and minds working together for the rest of their lives. She indicated that her traditional PE classes had begun in elementary school with simple games, then developed into sports. She had no high school classroom experience in PE, because she chose to get her PE credit through an online PE program. She indicated her belief concerning high school PE to be a program in which persons would “branch out and develop some individual activities or work out on an individual program” in order to be physically literate.

Importance for understanding how to take and record one’s own heart rate, what that heart rate number means, and how to improve upon physical condition through exercise should be the focus, for example. Furthermore, this student indicated that when she entered her freshman wellness class at the college she was attending, a realization concerning how little she really did know concerning health and wellness became apparent. She attributed this lack of health-based knowledge not to traditional high school PE courses, because she never attended
one. Her only high school experience with PE in high school was through the online PE program she completed. Focus then turned toward elements of the online PE course.

According to the student, her online experience consisted of “exercising and keeping track for how long we did a certain activity”. She explained that this involved describing the activity, such as playing volleyball at an open gym, taking a walk, or biking. Biking, she indicated, was her activity of choice, and the one utilized most for logging necessary hours. She revealed that she “faked some hours at times because you can get away with that kind of stuff and I probably did. I actually went on a 2-hour bike ride, for example on the chart, but only rode for forty-five minutes. Further discussion revealed that written assignments were required. The student in this case designed charts and made a poster about the benefits of exercise, and loaded these elements into Power Point presentations that were submitted for a grade. She reported “I feel like I probably learned something at the time, but I can’t actually remember any of that”.

Unsolicited, this student participant finished the discussion on accountability by stating, “I never had anyone contact me. I just kind of sent my stuff in and got my grade back, and I was like ‘Ok, that’s cool’ and that was that”.

The student reflected about traditional PE experiences in elementary and middle school, eventually leading to an explanation for her choice to take online PE in high school. In younger years, PE was mostly activities that kept us busy. When I was young I didn’t have very good brain function. I have horrible memories of PE. I kind of blocked out most things because I didn’t have great experiences in school. Actually, I had really bad experiences in school. I didn’t really learn a lot except rules of certain games and that it sucks to not be picked for a team and that is a lot of the reason behind not wanting to be in gym in high school. I would often get picked last and I didn’t want to deal with other
people anymore. Plus, I have to be honest. I didn’t want to get sweaty and all in class, then have to go back to another classroom. Also, with my ADHD, it was very important to me to have time to work on my homework inside of school, so creating a free period during the day was important. Plus, I was involved in band and choir, and didn’t want to give those up and there just wasn’t time in the day to do it all.

Our time together concluded with a summary of thoughts from this young woman who explained that she really wanted to “just get the credit out of the way”, referring to completion of the online PE course. Finally, she expressed that she had contemplated taking some type of course other than PE online, but only elective courses of interest that her school did not offer.

**Parent**

Case five concluded by interviewing the student’s mother. The interview also took place in the family home after completion of the student interview. This mother remained upstairs during her daughter’s interview, which was downstairs. A nurse by profession, this mother is 56-years-old. She is married, and lives with her two daughters and husband in the same district where here daughters attended school since 3rd and 1st grades.

Referencing her profession, the mother in this case indicated a strong belief in the importance of learning to live a healthy and active life. She also described her perspective concerning the importance of PE in schools:

On the whole, it (PE) needs to be there from the health aspect. I think it is fairly narrowly defined right now. I think it could be much more broadly defined. I don’t think it can occur only in a gymnasium, but should also occur out in the community, in the home. Especially with our modern lifestyle and lack of physical activity, there needs to be some form of, I guess, formal accountability that somehow we know our kids are at
least being exposed to being physically active. Right now I believe that ‘accountability’ simply means being in class. I’m not sure that means we have changed the students’ ideas about what they should do to me physically active and healthy.

The mother’s comments confirmed what she believed PE classes consisted of in terms of accountability and assessment during her daughters’ traditional PE experiences prior to the online experience. “In younger days they received an ‘S’ or ‘U’, and then later received a letter grade which was, I believe, based upon dressing appropriately for class and participating”. I followed this trajectory with questions concerning online PE accountability.

Asked to explain how online PE delivered, assessed, and held accountable her daughter, she provided several points included here:

She had some actual health topic things to report on or research, and I do know that she had to do different activities and report on the time spent. There was both education of the physical and physical activity time. Both activity and education are important to discovering why and how to live a healthy life. Everyone enrolled in the program could feel successful because there was no competition. My daughter was not a super athlete, and in school she always felt like a ‘D’ student. Honestly though, scheduling was clearly the number one reason for completing the online course. That came first, and naturally accomplished the other situations and conflicts concerned with traditional classes in school.

Concluding thoughts expressed by the mother in this case supported online education for some, while not for others. When asked to elaborate, she addressed personal motivation as key to successful completion. Her daughters had, she added, considered taking other online courses. Online PE was a “no brainer due to time constraints with scheduling”. She also expressed
concern that the high school her daughters attended did not offer credit for such activities as marching band, adding that such credit would have accounted only for physical activity time and not education concerning the physical.

**Case Five:**

**Student**

The student in this case is a 15-year-old sophomore of Chinese nationality. She was adopted while an infant, and raised within the same community and school district in which her entire educational experience has taken place. The district of residence for this case is district two. She is a very sweet, somewhat shy and reserved young lady. She has an older sister within the same school district, also adopted from China. Both girls are home-schooled. The student participant enrolled in an online PE program for completion of high school credit during her freshman year of high school. The interview took place in her home with her mother present but located in another room during the interview process.

The first encounter with the interview included a description of PE from her vantage point, as well as how important she believed it be personally. She then discussed what she perceived the importance of PE for all of society to be from her perspective. Her reactions and responses were at times very short, soft-spoken, and straight to the point without elaboration. She indicated that PE was “doing fun sports and getting active and healthy”. She described PE as something that was needed because it offered a break during the school day, and something all kids could do. Focus then turned to the differences between PA and PE. The student referenced both PA and PE as being close, with PE being more controlled games and the activity portion consisting of running, moving, or whatever the game/activity required. Her perception of her regular PE classes prior to online PE enrollment therefore was a games and sports model.
Since the student consistently returned to a games model representing fun and a pleasant break in the school day, I became curious about the decision to enroll in online PE. The student described in detail about the bullying that went on in school overall, not specific to PE class, which she had been subject to and wished to leave behind. As a result, the choice for home school education was made. However, the impact of online PE to this young lady was not positive. She described the online PE program in which she was enrolled:

It was boring, because you really couldn’t do much PE because of the Presidential Fitness Program. They told you to run the mile and do the pull-ups and other stuff, but if they are not there, they don’t know if you actually did it or not.

She explained an activity log that was required to be filled out “after the teacher taught us about stretches and what PE was, and then we didn’t really have homework, but she wanted us to get active for an hour each night”. She drew comparisons of the online PE experience with her traditional classes as being similar, except that “no one else was there to do activities with” in the online setting. She was assessed utilizing the same Presidential Fitness Program in traditional as in the online setting, but pointed out that primarily, with friends in school, there was a variety of regularly played large group games and activities.

This provided a juncture to investigate the student’s recommendation for others to also complete PE credit requirements in an online program rather than through traditional classes in school. Her response was, “probably not, because when you think of PE you think of going out and playing kickball and dodge ball with your classmates, and online, you didn’t really get to do anything. You just sat in a chair and listened to her (instructor) talk about sports”.

She was indecisive concerning the possibility of taking any other academic courses online.
Parent

The parent participant in this case was a 58-year-old single mother. She is a teacher within the district in which she and her daughters reside, although the girls do not attend school there. She communicated openly, even leading to discussion on topics within the interview protocol without being prompted. This indicated an interest and forethought concerning PE in general, as well as thoughts about the delivery method her daughter had previously discussed. No questions were provided in any form prior to the face-to-face interview.

When asked for her perspective, the mother described PE as multi-faceted. She believed that it should “represent the entire person, particularly that an emotional and mental component of feeling good about oneself must be included”. She further expressed that in order to accomplish this one must understand how to get the body in “proper healthy physical condition”. She also spoke with conviction concerning the importance of the opportunity for students to interact with others to learn cooperation and social skills. I found this to be confusing since her daughter had previously mentioned missing the social element in her online PE experience. This led to an inquiry about why her daughter left the traditional setting for the online PE course.

The mother in this case explained that her daughter did not opt for online PE as a stand-alone decision. Rather, this was part of the complete package as an attempt to avoid the bullying situations her daughters were exposed to regularly in public school. Further, the traditional classes previously attended by her daughters were enjoyable. I asked for clarification on what ‘enjoyable’ meant, and what she knew about the curriculum and assessment in the traditional classes. Her reply was as follows:

Both my daughters enjoy physical activity. They are both pretty athletic and so they just enjoyed the competition and variety of activities that were available to them at school. I
really only heard about team game activities. I do know they did the Presidential Fitness testing. They both commented about wanting to do better, for example, in the mile run the next time, and so on.

Concerning online PE, when asked whether she would recommend such a program to friends of her daughters, family, or anyone, she replied that she would not. She described online PE as “an oxymoron”. She concluded online PE as primarily “sitting in front of a computer listening to lectures and so forth. That is definitely not what my daughter needed for PE. It just did not meet her needs at all”, again emphasizing that primarily, there was no interaction socially. Besides the missing social component, there was no competition or motivation extrinsically nor intrinsically to do better, ending with “it was a bust for her”.

Since here daughters were home-schooled, I inquired concerning her thoughts on other online courses. She indicated that online learning might serve her daughters if there were courses of interest to them not offered in traditional school settings. However, she added that “all kids are different. A girl in our church graduated a year early through online schooling, loved it, was motivated to work at a faster pace and so forth. But it was not a good situation at all for my daughter”.

Our time together concluded with her explaining assessment in her daughter’s online PE course. She indicated that while she taught her daughters to be honest, there was no way that activity time could be proven unless she ran for example, with her daughter. Further, she hinted that there were parents who would “report false information” just to help their child along in such a setting.
Instructor

The PE instructor representing the district of residence in case two is a female with 29 years of experience teaching health and PE, grades K-12. Her initial teaching assignment was in a rural school similar in size to the current school district in which she has instructed for the past 17 years. The face-to-face interview took place within her home and lasted for 58 minutes.

The instructor spoke passionately and expressed concern for her students and her profession. She expressed PE as more than extension of athletic interest and/or ability. Her primary objective through years of experience was that of helping people recognize their strengths and weaknesses in order to focus on a lifetime of learning and fitness:

The traditional ‘throw out the ball’ is history. Lots of time PE teachers get a bad rap, but there is so much more to it (PE). In addition to the activity, nutrition must be taught, as what fuels the body provides energy or lack thereof to enjoy physical activity. Frankly, standards scared a lot of PE instructors when they were first introduced. But, they are revamping the way is taught, and should have been taught for years because instructors are being held more accountable. We talk about biomechanics of movement, and students are learning and helping each other to see that mechanics of specific sports skills are learned and demonstrated correctly. That is the fun part of it; when the light bulb comes on, and students are able to progress.

When asked to differentiate between physical activity and PE, the instructor provided an analogy of learning to drive a car:

I also taught driver education in the early part of my career. I would much rather have a 16-year-old boy who maybe had driven minimally with his family come into my car and open to learning to do things the right way than have the proverbial know-it-all farm boy
who had grown up driving tractors since old enough to touch the pedals come to my class close-minded about learning to drive or learning things the correct or better way. In PE, so many times a student, even athletically talented ones, have learned technique incorrectly. Without personal instruction, they will eventually have less success with the skill. Another example would be if students learned to do something incorrectly and as result, they become injured because they didn’t learn proper training and stretching. There are rules and guidelines for how to perform any skill correctly, and that is not possible without both education and physical activity.

Attention turned toward challenges as perceived by this instructor to instruction locally as well as to the entire PE profession. This instructor cited funding as a major contributor to local challenges. She indicated a desire to include technology more within her instruction, but could not justify the request for more funds when PE time allocated for students was being cut with greater consistently to the program at all levels. Further, the limited instructional time she was able to offer students presented frustrations associated with trying to meet standards when instructional time was limited and irregular.

Bringing conclusion to the interview session, the possibility of online PE instruction as a supplement and/or alternative to face-to-face PE courses was discussed. Having addressed limited on task time with students as a frustration, I asked if the instructor would consider teaching online PE. Her response is provided:

Wow. I would have to say no. I just do not see how PE and online go together. If you are teaching theory and content, then maybe. But as for physical activity, I just believe that interaction with other kids is key. Social skills and emotional control is developed when people interact with each other, and PE has historically been a place where that
occurs in the school day. For those persons not excited about PE, those who are overweight, what will an online PE course do to improve their situation for a lifetime? They will be less motivated to go out and run a mile for example, if no one is holding them accountable. Every community has basketball courts; there are YMCA’s, streets to walk on, and yet we have an obese society. Structured PE classes, effectively taught, can address the issues facing society’s overall health and wellness. Online activity just doesn’t make sense to me.

**Administrator**

The final participant interviewed was employed as an administrator within the county’s educational service center. This individual also worked directly with special emotionally handicapped students. The administrator is a female, age 60, with 33 years in education. The interview, which was completed face-to-face in her home, concluded in 25 minutes.

The administrator indicated that all students she worked directly with completed their entire education online because “emotionally they have a hard time focusing on their education in a classroom where other kids are around them”. She elaborated that students participating in her program had been identified through formal testing procedures and diagnosed with emotional disabilities. Even an adapted PE course would not be possible for the students she worked with, due to their inability to engage in safe, meaningful interaction with others in an activity setting. I purposefully asked about the online PE program(s) that her students had participated in over the years from her recollection of experiences:

I had three students take online PE last year during the second half of the year, following taking a health class the first half of the year. It (the PE course) centered on them developing a personal goal for the semester. As far as physical activity, they were to
keep a tracking record throughout the whole semester of their activity time. The course would spend 2-3 lessons on each particular game of basketball, soccer and would go over the rules a little bit, but never did they participate in these, they were just reading about them.

Her explanation provided a springboard to discuss the issue of assessment and accountability in the online PE program in which her students participated. When asked how they were held accountable, her reply was, “They weren’t. They were trusted”. This comment prompted me to ask if online PE would be something she would recommend to all students, or only to such students as those she described. Her response indicated that any student capable of moving in a regular class should do so, even if there were physical disabilities. Her final comments were as follows:

I hate to admit this, but frankly, they were enrolled in the online PE program simply to get them the credit, as they have already been through steps where they have gotten to the point where they cannot participate in a public classroom with other students due to emotional difficulties.
CHAPTER V. IDENTIFICATION OF THEMES

Merriam (1998) and Marshall and Rossman (1989) suggest multiple sources must be processed simultaneously. Maxwell (2005) emphasizes the sense of urgency accompanying accumulated, unanalyzed field notes and transcript files (p. 95). Therefore, qualitative data analysis strategies must be synchronous to collection of data, which entails the classification of persons, events, things, and their relationships. I read transcription of interviews for a general sense of ideas presented. Following, I extracted significant phrases and statements pertaining to the phenomena within the holistic topic being studied. Significant phrases and statements were systematically formulated into overarching concepts, then into clusters representative of themes, and finally into theme categories. A rudimentary analysis resulted from color-coding of the clusters and themes. I then constructed a written description of the lived experiences.

Patton (2002) discussed the constant comparative method of data analysis as “comparing research sites, doing theoretical sampling, and testing emergent concepts with additional fieldwork” (p. 125). This study sought to gain insight into online PE programs through the lens of students choosing online PE programs for fulfillment of required high school PE credit. According to Patton, (1990) qualitative case study provides opportunity for the researcher to holistically examine and tell stories embedded within decisions. This case study approach focused on stories as told by the primary stakeholders in the study, the students (or cases) who opted to take online PE course during their high school experience. These holistic stories became revelations leading to themes concerning decisions as well as epiphanies revealed by primary participants. Additionally, revelations from other stakeholders with potential impact upon the primary stakeholders’ decisions have been included. According to Creswell (1998), focus by the researcher on epiphanies, stories, and historical context within data analysis aids in
triangulation of data for identification of emergent themes. By listening to and for epiphanies, stories, and the historical accounts of participants in the study, I was able to extract themes expressed through what Maxwell (2005) described as grounded theory, or revelation through inductions developed throughout the process.

Analysis of the three major themes identified is provided here. The three themes include (a) attitudes concerning physical fitness and literacy, (b) PE scheduling difficulties within students’ school days/academic schedules, and (c) the need for accountability within online PE programs.

Denzin’s (1989) approach of using multiple exemplars to synthesize overarching perceptions will be utilized to illustrate the themes. These exemplars will then be inspected for essential sub-elements or components and then brought back together in their conceptual context in the summary section. Expounding upon and reporting these three themes will follow.

In the previous chapter, participant biographies provided a portrait of revealed three major themes common to all participants. Students opting for an online PE course to fulfill graduation requirements represented the primary data source. Contributions from these student participants in the study revealed themes that were not exclusive to the primary data source. Parents of the students, PE instructors, and finally the administrator participant responses provided similar evidence of distinct themes evolving from the interview questions. While not exclusive to a discussion of online PE, the themes being presented provided primary impetus for the choice to fulfill PE requirements online. Ultimately, the themes revealed insight into attitudes concerning online PE. These themes are presented in this chapter along with sub-themes that emerged by demonstrating how they relate to the participants’ perceptions. Guidelines posed by Lawrence-Lightfoot and Davis (1997, p. 263) as presented below, providing structure and organization.
Finally, convergence of the three themes and their implications to online PE programs is discussed in chapter five.

Theme:

1. Relevant Dimension: Physical education literacy
   - Evidence-Quote(s) that illustrate relationship to relevant dimension
   - Dissonance-Perception(s), quote(s) illustrating participant agreement on issues, but highlighting areas of divergence
     - Sub-themes including PE’s reputation as being less than desirable, and therefore, expendable

2. Relevant Dimension: Accountability within online physical education programs/courses
   - Evidence-Quote(s) that illustrate relationship to relevant dimension
   - Dissonance-Perception(s), quote(s) illustrating participant agreement on issues, but highlighting areas of divergence

3. Relevant Dimension: Online physical education choice due to scheduling
   - Evidence-Quote(s) that illustrate relationship to relevant dimension
   - Dissonance-Perception(s), quote(s) illustrating participant agreement on issues, but highlighting areas of divergence

“I don’t even know what physical education is. We have jumped from one bandwagon to the next. It (PE) should be about physically educating kids, with the heavy emphasis on education, not roll out the ball, not make everyone happy, not teach them 1,000 games. The greatest high stakes testing outcome for our profession will be when kids leave high school and report that PE
taught them the importance of active lifestyles. Otherwise, we have created a lot of professionals that are jacks-of-all-trades and masters of none. When you are masters of none, you do nothing”

~ Dr. Robert Pangrazzi, 2014

Relevant Dimension/Theme 1: Attitudes Concerning Physical Fitness and Physical Literacy

“People don’t stop moving because they become old. They become old because they stop moving.” ~ Author unknown

The above quote represents an intuitively congruent perception in varying degrees, among all participants in the study concerning (PA) and fitness. A need for physical fitness for the lifetime was a theme that emerged after my sessions with each participant included in each case. Differentiation between PA and PE was not as clearly evident among any of the participants. When comparing athletes to non-athletes in the study, no significant distinctions were obvious between activity and education components as part of the equation for a lifetime of physical fitness and healthy living. The chart below depicts responses by the five student cases regarding definition and differentiation between PA and PE, status as athlete or non-athlete, and discussion of lifelong fitness goals within the definition/differentiation:

Table 1

<table>
<thead>
<tr>
<th>Case</th>
<th>PA</th>
<th>PE</th>
<th>Lifelong Value of PA/PE Mentioned: Yes/No</th>
<th>Athlete or Non-Athlete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case One</td>
<td>Separate from PE</td>
<td>Separate from PA</td>
<td>No</td>
<td>Athlete</td>
</tr>
<tr>
<td>Case Two</td>
<td>Inclusive of PE</td>
<td>Inclusive of PA</td>
<td>Yes</td>
<td>Athlete</td>
</tr>
</tbody>
</table>
Three of the five student cases did not make a connection between PA and PE, or education of or about the physical. All five cases involved students who had taken traditional, face-to-face PE courses at some point in their K-12 education experience(s) as well as an online PE course, indicating a disconnect between PA and education of the physical, or PE, after being a participant in both delivery methods of PE instruction.

Ladda (2014) reports that a physically literate individual embraces and embodies the values, skills, knowledge, and dispositions to engage in activity throughout the lifespan. The importance of fitness is not left from the definition inclusive of skills, nor are skills mentioned apart from knowledge. Therefore, regardless the delivery method, concerning what constitutes an interrelation between PA and education of the physical, a link between the two components was not identified.

The three athletes in the study, responding to the perceived importance of PE personally, responded as follows: Case one indicated “no problem getting activity hours because I play basketball”. Case two replied, “I think it is important, I just don’t know how to go about it”. Finally, case three added, “since I play volleyball, I can count those hours as activity time”. These remarks suggested that each athlete in the study equated physical fitness as being synonymous with their current PA status. Furthermore, they were utilizing current activity involvement as sufficient for meeting requirements in their online PE experience.

The two non-athletes interviewed provided similar responses. Even though activity hours could be counted in their respective online PE courses, neither indicated (1) enjoying the activities chosen, nor (2) continuing the activity beyond what was required for the online PE
course credit. While mentioning lifelong values of PA and/or PE, the case two athlete as well as the case five non-athlete failed to connect these lifelong values with current values concerning physical activity engagement and/or education.

All cases reported traditional PE courses in which they had participated prior to online PE were similar in promoting activity, as all five cases reported a sports and games emphasis. Reference to education of the physical was minimal to non-inclusive in all five cases regarding traditional PE courses.

Parents of the five students interviewed revealed a common concern not only for their own children, but also for society as a whole concerning physical fitness. All parent participants voiced concern for the long-term effects in adulthood as children overall become less active, contributing to health problems. This finding is consistent with a study in the literature review indicating that reduction in physical activity and increase in sedentary behavior does play an important role in triggering and upholding obesity (Reilly et al., 2006). Further, parents indicated a paradox consistent with Buschner (2006), stating that many educators and parents see school PE and PA in competition with the Internet and other visual media for youth attention and precious learning time.

The process of inductive reasoning, as explained by Maxwell (2005) as an acceptable phenomenon in case study research, led to my conclusions indicative of a syndrome affecting all parents involved in the study: Concerns were verbalized, but did not necessarily affect their own children. Consistent with their child’s perspective, respective to each case, the parents provided no indication of specific lifelong goals concerning overall health and fitness.

All three administrators distinguished PE as more than physical activity. Administrator two from district one expressed:
Physical education is the act or art of instilling life long learning in the students pertaining to their ability to understand how their body works, operates, the type of functions that are required to maintain a healthy lifestyle, all forms of nutrition, all forms of safety as a whole in the treatment of the human body, drugs and alcohol and the impact of these substances, as well as the cause of the things to maintain a healthy lifestyle.

Administrator one from district one stated, “To me it is a class where students learn activities that can help them in staying fit and working with others, different rules of games that maybe they don’t have first hand experience with”. Finally, district two administrator indicated the following:

That’s a big question. Physical education is identifying or learning how your body works, the balance that would make for a healthy person. It is an important element in schools as it is part of the whole balance of education, knowing about yourself and your surroundings and the things that shape you as you grow. I think its important in school and should be incorporated more in all the classes instead of just singling it out as just one item, the same way that spelling and language is incorporated all the way through.

Two of the three administrators revealed that PE is important for both the instruction of PA as well as education concerning the physical body. The district one administrator one focused more upon a sports model of PE, indicating a social component of learning that takes place in PE classes. The administrator in district two hinted that PE should be included as a cross-curricular subject with other course, indicating the need for more collaborative effort among all educators, in delivering PE content.

Both instructors, representing two different districts, spoke with passion concerning their profession. The instructor from district one spoke exclusively to the ‘whole person’ concept.
This instructor never mentioned PA apart from PE, but referred instead to the overall PE program as one developing the cognitive, affective, and psychomotor learning domains as being interrelated. This is consistent with information addressed by Dr. Bob Pangrazzi (keynote address, National PE Institute, UNC at Asheville, NC, July 28-30, 2014). Dr. Pangrazzi reminded PE professionals that academic improvement based upon PA is the one researched intervention strategy providing evidence of academic improvement in student performance. The instructor provided this example of how her PE classes are more than PA:

All of my classes are health related activities. I am trained in Physical Best. We are not worried about how many times they can dribble a ball down the floor, we are worried about their heart rates getting up, worried about them listening to their body and telling me why does your body feel like and what do you think is going on in there. So I want them to know why their body is responding a certain way and we might do that through dribbling a soccer ball, throwing at a target, doing different things like that which will get their heart rate up or stretch them.

The district two instructor responded similarly by focusing on life long learning and life long fitness within her description of PE classes she instructs. In her own words, “The traditional throw out the ball is history”, indicating that PE is more than PA. She further described PE as a course aimed at teaching about the entire body in terms of how it works, why it works the way that it does, and what individuals can do to improve its function. Where PA was concerned, she emphasized inclusion of biomechanics; not simply moving, for example, but how and why the body movement(s) necessary for particular skill(s) should be performed. The instructor from district two expressed firm belief that PE teaches and addresses the whole person,
not just the physical aspect or PA, but also social and emotional development through PA together in one classroom.

Ladda described physically literate individuals as those having the values, skills, knowledge, and dispositions to engage in activity throughout the lifespan, and embedded within physical literacy is an exhibition of responsible personal, and social behavior that respects self and others (2014, p. 3). The author (2014) also reported that a physically literate individual embraces and embodies the values, skills, knowledge, and dispositions to engage in activity throughout the lifespan. The importance of fitness is not left from the definition inclusive of skills, nor are skills mentioned apart from knowledge. Therefore, regardless the delivery method, concerning what constitutes an interrelation between PA and education of the physical, a link between the two components was not identified.

Among all participants in the study, dissonant harmony describes perceptions concerning embodied PE literacy, based upon experience(s) within PE programs. Sub-themes that emerged from the data concerning PE literacy include uncertainty of purpose and significant reputation for being expendable. The primary emergent themes, as well as the sub themes to be discussed in the section are consistent with Dr. Robert Pangrazzi’s statements concerning PE literacy even among the discipline’s professionals.

Among administrator participants, a need for physical literacy was in theory consistently exhibited. The three administrators suggested that students must be engaged in PE programs that both encourage the learning of activities and which are aimed at helping them stay fit; suggesting that fitness has already been attained. Recent findings, as suggested in the literature review, would conclude otherwise. Gollust, Niederdeppe, and Barry’s study (2013), provided significant evidence of a continued pattern of concern, consistent with administrator discourse in this study,
without significance in overcoming issues associated with the obesity crisis. Furthermore, in 2011-2012, 8.4% of 2- to 5-year-olds had obesity compared with 17.7% of 6- to 11-year-olds and 20.5% of 12- to 19-year-olds (Ogden et al., 2014). The 12-19 year-old national statistic indicating obesity rates among America’s youth is not limited to students within school systems instructed by administrator participants in this study. This statistic represents youth nation-wide. Youth are not already in shape. Youth do not need to be encouraged to stay physically fit. Reality displaces ideology: Youth need to be educated concerning overall health, including nutritional information, how the body functions, why it responds as it does to energy intake and expenditure, and what a lifetime of physical activity promotes.

Parent participants in the study provided similar, consistent conclusions regarding what PE should be accomplishing among youth today. Indication for desirable physical literacy was directly linked among all parent participants, but not exclusively addressed. The case four parent’s discourse represented most directly what Dr. Pangrazzi (2014) addressed concerning a desirable PE outcome. While PE, according to this parent is a place where individuals exercise and hopefully learn leisure-time activities and sports, evidence of its (PE’s) value would be revealed through activity levels later in life. All parents indicated social interaction as an assumed element of PE, although opinions concerning the reality of social skills becoming transferrable as a result of PE participation were not consistently positive or negative.

The three instructor participants expressed PE as more than an extension of athletic interest and/or ability. Theoretically, all three perceived PE as an opportunity to engage students in individual and/or team related activities with two primary goals in mind: (a) To promote lifelong interest and participation in something/anything aimed at physical activity. (b) Team sports/games provide an additional opportunity and teaching strategy for development of
valuable and necessary social skills. Finally, all instructors in the study concluded that while PA within their respective classrooms and schools should be the primary outcome, education of and about the physical should accompany activity. Collectively, the idea that students must develop a knowledge base concerning an understanding of how and why the body responds under varying conditions as it does was unanimous: Additional topics that must be included concern nutritional needs and energy expenditure throughout the lifetime, not exclusively related to athletic performance during school years, or within a particular age range or period of life.

Primary student participants in the study provided complex and varied interpretations concerning PE by definition. All student participants hinted that PE is learning about the body and that PA is actually doing (interpretations based upon activities, games, and sports participated in within respective classes and/or programs). These findings are consistent with Edginton, Chin, Geadelmann, & Ahrab-Ford (2011), and Dr. Pangrazzi’s (2014) statements regarding the scrutiny that PE programs of education have experienced concerning teaching methods, content, and even preparation of PE teachers. Furthermore, due to uncertainty concerning perceptions of participants in this study, while all agreed concerning what objectives of PE programs and their outcomes should be, revelations were uncovered concerning personal value attached to the same programs. These revelations will be presented next, as sub-themes including expendability (as compared with other academic courses) and uncertainty of purpose, with specific examples and summaries of participant responses concerning the themes and sub-themes.

The case one student stated that additional courses in his academic schedule could be added by “getting PE out of the way”. A ‘once and done’ mentality was exhibited. This student also indicated that because he was an athlete, he was able to entertain PA needs. A temporary
mindset, rather than an embodied and embraced attitude toward a lifetime of PA was evident.

Online PE, as the viable choice for the student, provided the avenue to accomplish his purpose of “getting PE out of the way” in a short period of time during the summer.

Contradictions were evident in the case one parent/administrator participant’s responses. On the one hand, this participant indicated PE’s physical and social value by stating, “PE is a class where students learn activities that can help them in staying fit and working with others”. However, the other hand provided a different outlook, as this administrator did not respond to the importance of PE for a lifetime. Additionally, she responded that students could “get PE out of the way earlier by taking online courses, allowing for additional scheduling choices at the older grade levels”.

The second case one administrator concluded that PE is “associated with healthy, lifelong learning and living” and therefore a “need exists to include more information about how the body works, including what it takes to fuel it properly, and how to stay fit and healthy for a lifetime”. However, funding issues will prevent this from happening. The decision-making process associated with ‘sorting out’ and/or ‘prioritizing’ academic content within his jurisdiction will find him placing PE at a “bottom tier” in terms of its value and importance. Therefore, students may be forced to find alternative delivery methods in the future to secure needed information benefitting their physical fitness status. However, this administrator spoke of online PE as a ‘last resort’ for students because “most cases, they typically do not perform well in online settings”.

**Relevant Dimension/Theme 2: Scheduling**

Time is a precious commodity to all stakeholders within the public education spectrum, although not favorably concerning PA during the school day. The CDC recommends 60
minutes of moderate-to-vigorous aerobic activity per day, as well as strengthening activities (CDC, 2014). The State Indicator Report on Physical Activity Behavioral Indicators (2014) revealed that in the state of Ohio, 13.2% of all youth received no physical activity daily. Further, the report indicated that just 25.9% of all youth reporting met aerobic activity guidelines (not necessarily in school PE programs).

Ohio schools reported results of a survey conducted among Ohio’s public schools and reported that only 26.8% were physically active for a total of at least 60 minutes per day on each of the 7 days prior to the survey. Further, only 35.7% of youth participated in daily physical education (CDC, 2012).

These statistics, while not dissected to determine rationale for inactivity and lack of regular PE on a daily basis in Ohio, do correlate with academic scheduling. Participants in this study, representing a normal population of high school students, purposefully elected to remove themselves from on-site PE programs. Further studies need to be conducted to determine more specific factors concerning scheduling and priorities placed upon the academic curriculum. However, all participants in this study provided similar, yet eclectic rationale concerning their academic schedules and the inclusion of PE within their choices.

Students in cases one, three, four, and five indicated the need to receive the credit within the most convenient time available, during the shortest amount of time, and primarily, to open room in their schedules for additional courses promoting advanced placement opportunities. All students but the young man in case one revealed an absolute need for more room to accommodate for courses other than those within the core curriculum.

The primary concern with scheduling, as cited by student cases four and five, included a desire to continue with music (band). Parents in all five cases, as well as two administrators in
case one, supplied rationale supporting such scheduling concerns. The administrator participant in case two revealed special scheduling concerns, citing needs of students with specific, behaviorally driven disabilities needing an alternative schedule in order to satisfy Ohio graduation requirements.

The case administrator in case two alluded to a factor congruent with previously discussed conflicts emerging as major themes in this study. This participant’s admission to a mentality of ‘PE is expendable’ was confirmed in this statement:

They were not held accountable in their online PE course. Frankly, it was an attempt to simply get them the credit and they have already been through steps where they have gotten to the point where they cannot participate in a public classroom with other students because of emotional difficulties. To be honest, I would ask them if they completed this or that, in terms of activity, and for the sake of completion being a goal, encouraged them to answer, ‘yes’.

Concepts of physical literacy, as well as comments aimed at scheduling difficulties experienced by student participants stimulated a trajectory into an additional sub-theme. Expendability of PE, whether purposefully and/or consciously realized, was an additional topic expressed by every participant within this study except participating PE instructors. All three instructors, representing all student cases, did refer to the expendability of PE as it relates to budgetary cuts and where PE is placed on the priority lists of those making curriculum decisions. Further, the instructor representing cases one, three, four, and five admitted due to sub-par teaching strategies even among peers within her profession, the historical reputation of ‘throwing out the ball’ programs has preceded PE’s importance. Thus, she suggested that (a) administrators with only such a frame of reference are quick to make decisions that place PE at
the bottom of the priority list, and (b) students coming from such sub-par programming would benefit from alternative programs such as online PE. These conclusions support her conviction that as long as students are taught physical literacy, the setting should not matter.

The case three student referred to PE as being “just gym”. Similarly, the case one student replied, “to some people, PE can be really important if that is what you do”, suggesting PE as hobby-like rather than a necessity. This conclusion was drawn following the student’s indication of needing to “get PE out of the way” as soon as possible. Similarly, the case two student described PE as controversial. She explained while PE should be providing knowledge about living healthy lives over the entire lifetime, there is reason to question its importance: “People say that gym class doesn’t do much and I think I would have to agree”. Further, this same student responded, “people are so focused on test scores and getting to college and getting a job and getting a degree that PE or gym or anything besides core classes are just pushed aside”. Finally, this case four student indicated choosing online PE simply to escape the drudgery of PE in school, although her primary reason focused upon scheduling difficulties and once again, PE was an “easy course to get out of the way somewhere else”.

The case three student explained that for any other course, she would remain in a traditional, face-to-face setting in her home school for “courses that really matter”. Confirming this belief was the student in case four who indicated PE as “what the schools attempt to provide and described as their way of contributing to an awareness of their (students’) bodies and minds working together for the rest of their lives; it isn’t working though”. This student also indicated that upon entering college and attending a wellness class, she realized how little impact PE actually had upon her physical literacy. Further telling and consistent with comments made by the case one, three, and four student participants, the case five student explained that all she
really wanted to do was “get the credit out of the way”. Merging comments indicative of PE’s expendability, scheduling difficulties associated with ‘in-house’, ‘traditional’ PE courses in schools, and uncertainty concerning its actual definition and importance have led all students in this study to online PE courses for fulfillment of necessary credit requirements. The next section will describe the last major theme of accountability within respective online courses chosen by the students in this study.

Relevant Dimension/Theme 3: Accountability in Online PE Courses

“The evil of technology was not technology itself, Lindbergh came to see after the war, not in airplanes or the myriad contrivances of modern technical ingenuity, but in the extent to which they can distance us from our better moral nature, or sense of personal accountability.”

~ David McCullough

Accountability in PE was a subject revealed openly by some participants in the study, while an issue that became evident by means of inductive reasoning in all participants in the study. Questions addressing assessment and accountability, while addressed as individual issues, were referred to inter-changeably within dialogue. Therefore, the theme concerning accountability will also include discussion of assessment as indicated within individual participant accounts in this section.

Case One (Student)

The student in Case One discussed accountability openly and voluntarily concerning activity hours he reported as evidence of fulfilling the online PE activity requirement. His explanation, unsolicited, indicated, “I mean, some people could lie about it, but if that is what they want to do and they feel alright about it then that describes them, but I had no problem
getting that (required hours) done. I probably doubled that, I probably did about 6 hours a day”. While his remarks throughout the interview provided no hint of dishonesty, he hinted that participation in sports provided evidence; he simply needed to record the hours spent in practice, open gyms, and basketball camps in which he participated during the summer.

Accountability and assessment were addressed together, as the student reminisced specifically about her elementary PE experience. He indicated a sense of “seriousness” in how the instructor approached teaching physical education. His responses were inclusive of written assignments and tests. There were no complaints concerning the type of accountability, described as assessment by this student. Rather, PE was not just activity, nor was it just “learning about your body”. His perception was that both were completed in the PE class. However, once in middle school, this student revealed that “at the beginning we did push-ups, sit-ups, running and things like that for a test”, but provided no indication of such assessment continuing. He did include a games and sports model approach as the majority of his middle school PE experience.

Online PE assessment included packets of assignments, based upon units. This young man indicated that each unit, or block, would begin with a pre-test. Success in the pre-test indicated he did not need to complete subsequent portions of the blocks. However, activity hours related to the block would need to be logged. The student praised the content portion of the online PE course for providing information he had not previously learned: “I learned a lot, health has always been a struggle for me but I learned a lot in units I had never done before”.
Parent

The mother of the young man in Case One began conversation concerning assessment and accountability in traditional PE classes:

At the elementary level the teacher was well known for incorporating with some activities doing in class, trying to tie them in with units they were doing in grade levels. There was a cross-curricular influence involved. I don’t know that this is very common, but we had an exceptional teacher. At the Jr. High level I think it was more of the old school, traditional PE in terms of more focus on sports type activities as a class; definitely more activity based.

Online PE was described as a positive experience with one drawback by this parent: “The parent has to understand while there is a lot of assessments it is not an easy thing, it takes a lot of time to complete it. No one is going to have any first hand oversight of the physical activity hours”.

Administrator One

When asked about assessment and/or accountability, no information was included. The administrator (principal) provided instead a ‘recap’ of what was offered in the high school representing district one in the study.

Administrator Two

The superintendent interviewed in case one immediately responded to questions concerning assessment and accountability by directing attention to online PE courses. His first statement was, “It (the online PE experience) is very difficult to verify, difficult to validate, that may be the best word, unless there is someone monitoring who has the knowledge of what is being done. The issue I have had is the ability to falsify”. He clarified that content, or ‘book
knowledge’ would be very easy to evaluate with online programming. His responses indicated reaction to the PA portion of online PE courses.

When asked for comments concerning assessment and accountability in traditional face-to-face classes being conducted in-house, this participant did not specify any particular assessment or accountability. He concluded that PE was primarily a sports model in which students were awarded grades and credit based upon dressing appropriately for class and participation during activities.

Instructor

The Case One instructor first addressed traditional class assessment. She provided the following information:

We are using Fitness Gram. In the past I have done it twice a year, at the beginning and the end and they are assessed on height and weight of course, assessed on sit ups, arm strength which I do with the younger kids called a modified pull up, the older kids do a push up, assessed in aerobic fitness by a pacer test which is running from one end of the gym to the other at a certain paced beep and whenever they can’t get to the other end or get tired we record that number, and/or the mile run. Now, I started doing the mile run with the kids 19 years ago and of all the things I do, that is one of the most requested. When are we going to do our mile run?

I found it particularly interesting that students would ask to do the mile run, which led to further explanation from the instructor:

I think they are getting outside and I think the activity I called smile less if it takes them a half hour or 10 minutes. But I am introducing a habit to them that is fun, I hope. And since we are lucky enough to have a track out in the back of the school, they go around
once I mark an eye on the back of their hand, second time they get another eye, third time they get a nose, 4th time they get a smile. If they want to go around again and get a hair bow, a mustache, a pair of glasses, go for it. Some of them are running 2 miles and they don’t even know it. Their assessment is what they see on their hand, maybe they got up to a nose this time or I got a beard this time. So that is motivating them to run. The older kids I actually time them and they are motivated in the spring, they ask what did I get last time in the fall? So I am yelling out times as they are going around. That is their motivation.

The instructor’s comments were exclusive to elementary and middle school children.

She further explained accountability and benchmark assessments now required in Ohio:

The grade that I give them on their grade card is based on their participation and their effort and I keep track of something simple like do they wear their correct shoes? As far as I am concerned that is the effort. It is like bringing a book to class, bringing a pencil and paper. If they don’t have the right shoes on they are not really making an effort to be part of the class and participate as much as they can. The state of Ohio does benchmark assessments now. They have certain tests that you could make paper tests, but again, I am having the kids sit and I don’t want to do that. So I have modified the tests to be a movement type activity and the kids are all in the center of the room and I have the answers posted on the walls and I ask them a question. If I am doing a mile run is that a muscular fitness, is it aerobic fitness and they will go to the wall with they answer they choose. I record the ones that don’t get it correctly and that is how I use that. That is required by the state now and they have 12 benchmark assessments that have to be done.
I don’t give a grade because Joey can’t sit ups like Bobby can. I don’t grade on fitness. I give grade on effort.

Finally, attention in this interview turned toward discussion concerning online PE programs. The instructor indicated mixed feelings about online PE, explaining problems associated with traditional PE as being a driving force behind choices for online PE. She expounded on what traditionally takes place from middle school PE courses through high school PE as the games model. She did not entirely disapprove of such a model due to the potential for development of socialization skills. Her biggest concern was that students were not becoming physically literate. Therefore, she concluded that online PE, if promoting physical literacy, could be a viable option. She ended by expressing a concern for online PE as being based upon an “honors system” that would not work for many students. ‘Many students’, according to the instructor, would be those attempting to escape PE by taking online PE courses, not those wanting to expand physical literacy.

Case Two (Student)

Responses from the student in Case Two were very brief, but straight to the point. When asked to explain assessment, this student began with an explanation of her online PE course assessment. She summarized that grades were determined by submitting a 3 paragraph summary report on the content portion. This, according to the student, involved the presentation of content according to the activities chosen. For example, if she chose running, the content would be related to aerobic activity. Following the submission of the summary paragraphs, she would then be asked to log weekly hours as required for successful completion and credit. Logging of activity hours, the student volunteered, was entirely based upon the honor system.
Traditional PE assessment was, according to the student, a non-issue. I asked for further explanation on how she was graded in PE courses prior to the online course, to which she replied, “I don’t really know, I just kind of always got an A. There were people that would just stand in the corner and talk to their friends and they weren’t trying obviously, but I think they got the same grade”.

This student indicated one major difference between her experience with traditional courses and her online course: She would have needed two semesters to complete the required ½ total PE credit needed for high school graduation in traditional classes offered at school, while one 2-month course online provided the entire ½ credit needed.

Parent

The parent’s comments regarding assessment in both traditional PE classes and the online PE course completed were consistent with her daughter’s comments. She described assessment in PE with these remarks: “I think it was just participation. I know in elementary at one point if they had their tennis shoes, I remember at one point getting a mark and asking why and being told it was because she forgot her tennis shoes a couple of times”. Further, she added no memory of her daughter being assessed through fitness testing or through any other means.

Online PE assessment was entirely based upon an honor system. This mother admitted to having no oversight over her daughter’s online experience, although trusted her explicitly to complete the program as requested by the online academy selected.

Case Three (Student)

The student in this case was ‘grade-driven’. She indicated attempting everything with a great deal of effort in traditional PE classes because effort and participation supplied the entire grading decision. However, when asked about online PE, her explanation was more extensive:
We had to take multiple quizzes and then we had read everything, for example, like injuries, you had to learn about what you do if you are injured or if you get an ankle sprain or if you pass out, you need to learn about that and had to take a quiz on that and then take a test over the whole thing. So then we had an activity log that we had to fill out and get a certain amount of hours in a week you had to keep track of and type it in your schedule and you had to turn it in at the end of the week and that was one required piece you had to do to pass the class.

Upon inquiring further concerning how the quizzes were graded, the student indicated that multiple attempts were provided in order to succeed and move on to the next module. Referring specifically to the required activity hours, she explained that her instructor told her, “I am counting on you to be honest with me”.

Parent

The parent in this case was the first to verbalize the intensity of the online PE course her daughter had recently completed. First, in terms of accountability, she replied, “the grade held her accountable. Her mother held her accountable”. According to the discourse concerning her daughter’s education, including this online PE course, this mother was ‘hands on’. She indicated that every module was printed out, they studied together, and then the quizzes were completed. She described the experience as “more intense by far than what she would have done in class at school”. These comments were in reference to the course curriculum content, or knowledge base. As discussion turned to the activity requirement and accountability for those hours, her comments were as follows:

Well, with her, she is an athlete, so she had open gym, she had practice and we could use that time. What they offered as time, we did the 8th grade trip and went to New York and
the one day I think we walked 12 miles, the tour guide told us that. We were allowed to count some of that too. I was with her so I knew that and I got the information from the tour guide. Because she is an athlete it was easy, when she was taking the course I said to her, if you weren’t an athlete, what would we be doing? If I remember correctly, they did want some very specific things too if you aren’t an athlete and if you weren’t a hands on parent, there would be no accountability.

This mother indicated she had “absolutely no clue” concerning what types of assessment, if any, were included in her daughter’s traditional PE courses at the elementary and middle school levels.

Case Four (Student)

The young lady interviewed in this case explained assessment and accountability in online PE with some detail, as provided here:

The most basic thing we had to do was we had to exercise and we had to keep track of how long we did a certain activity, write down what activity it was and how long we did it and put it in this chart, we had to do something every day or every week, I can’t remember how long or anything, but I know I did a lot of, I played volleyball at this open gym or I went for a walk, I biked a lot because that is the easiest thing to do because I don’t like running. I never ran until I was in freshman year in college and I was bad at it. Other things we had to do was research a little bit, they tell us about heart disease, I made a chart once on I guess it was Microsoft Word about the benefits of something on something and I made a chart and I just got rid of it. I didn’t really learn anything from it, but I know I spent the right amount of time doing what I was supposed to do.
Her explanation was revealing in terms of curricular description to some degree, but did not indicate accountability. I pursued further, to which she responded:

I know I definitely kind of faked some hours at times because you can get away with that kind of stuff and I probably did. I mean logging the activity hours, it is easy to say I actually went on a 2-hour bike ride instead of the 45-minute one that I did. I never had anyone contact me or anything like that. I just kind of sent my stuff in and got my grades back and was like, okay, cool.

Focus returned to discussion of traditional PE courses experienced by this young lady in elementary and middle school years. She declared, “I hated them”. The discussion was very limited concerning her experiences in these face-to-face classes, except for her mention of “getting an A all the time, and I hated it and didn’t try very hard”. Grades, she determined, were earned by “being there and dressing for class”.

Parent

The interview with parent participant in Case Four began the discussion concerning assessment and accountability by offering her perception concerning what took place in traditional PE classes in which her daughter had participated. She provided the following information:

I think that the accountability that they went to class and they were there. I’m not so sure that means it has changed the student’s idea about what they want to do and what physically active and health means to them. So basically, it (her grade) was based on participation. In the younger grades they had S and U grades. As you know, my daughter didn’t go through traditional PE in high school so she got different feedback from their online course.
Providing a direct trajectory to discussion concerning online PE assessment and accountability, she continued:

I know she submitted whatever activities she had done. Activity being going out and doing something, or activity being content she had to do online, taking quizzes, looking at content. I know she know they also had to do different activities, I remember her counting the hours of different things she did whether it was riding her bike, or swimming, it was different things she had to do. She did it on her own. She logged and reported hours and I trusted her to do it.

Case Five (Student)

The young lady interviewed in case five provided a brief explanation indicating her perception of PE assessment. Concerning online PE assessment, she indicated being awarded a grade “if I logged on, listened to the lecture, then turned in my activity log”. She received a letter grade for the course after completing the required time listening to lectures, recording results for the Presidential Physical Fitness test, and then logging additional hours, “which I just wrote down and sent in”. Traditional, face-to-face courses this student previously attended and participated in were graded according to dressing for class and participating each day.

Parent

The mother interviewed in case five, when asked for her input on online PE assessment and accountability replied with:

To be honest, I’m not real sure. I wasn’t there to sit in on classes with her. Basically, and this is the part I remember, I saw her moaning and groaning that she had to do the stuff, dragging her feet, not wanting to go out and run the mile or do whatever. It wasn’t any fun for her and therefore became more of a chore than an activity. I do know she had to
do the Presidential test. Frankly, I trusted her to turn in the hours. I raised her to be honest, so I trust she did it.

Traditional PE classes were more enjoyable to her daughter, as they included games and sports, according to this mother, describing PE grades in those classes as “based upon participation, I think”.

**Summary of Findings**

The writer C.S. Lewis stated, “Integrity is doing the right thing, even when no one is watching (1956)”. Regarding the place of integrity in education, Lewis (1956) also stated, “Education without values, as useful as it is, seems rather to make man a more clever devil”. The educational theory of John Dewey, as addressed earlier in this study, has posed alignment between the multi-faceted triangle representing physical (motor skills), mental (mental development), and social (democratic issues of social justice) elements composing human beings. National standards for PE imposed upon the former NASPE professional organization governing PE, now known as SHAPEAmerica, compliment these elements as illustrated in an alignment of the Health Triangle elements with John Dewey’s Progressive Education Theory, overall health and wellness components, and National PE Standards as displayed in Table 2:
Table 2

Alignment of Factors Contributing to Whole Person Development

<table>
<thead>
<tr>
<th>Triangle Elements</th>
<th>John Dewey’s Theory</th>
<th>Overall Health/Wellness Elements</th>
<th>NASPE SHAPE America Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor Skills</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Mental (mental development)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Social (democratic issues of social justice)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Participants in this study referred to the importance of learning sports, games, and the rules necessary to provide governance within. Furthermore, skills concerned with social ideals objectively taught throughout the educational process directly represent one of the primary components of the overall health and wellness picture. The first administrator interviewed in case one referred to PE as a place where “individuals learn the importance of acceptance, respect, working together, and ethical decision-making concerning fairness and rules imposed through sports”. Instructors representing participants within all five cases addressed the importance of social accountability encompassing ethical and moral decision-making in dealing with self and others. None of the students indicated accountability in terms of cheating or being dishonest as a factor within traditional PE courses. Conversely, concerning accountability in terms of honestly earning credit in the online PE programs was addressed unanimously; all participants discussed accountability as both a concern and a reality within their online PE courses.

The student in case one, while not indicating personal cheating or ‘fixing’ reports
associated with required activity time, did admit, “I mean, people could lie about it, but if that is
what they want to do and they feel alright about it then that describes them”. All other
participants in case one offered concern regarding accountability required by instructors and
program directors in online PE courses as well as concern for what they expressed an
“unfortunately extreme opportunity to be dishonest and take credit without earning it”. Both
administrators representing case one indicated hesitancy in recommending online PE as a
replacement for traditional PE, stating unfortunately, first hand oversight of the physical activity
hours is the main drawback” (administrator one). The second administrator added “while there
are reasons for not being able to be in regular PE classes such as pregnancy, or students simply
cannot accommodate scheduling without considering this (online PE) option, there must be
supervision, and I do not believe this to be happening with online PE where developing fitness
through activity is concerned”. The instructor in this same case concluded, “technology has
further enhanced and expanded options for curriculum delivery. Unfortunately, it (completion)
is based upon an honor system in terms of activity”. Finally, the same instructor stated, “we
have to be accountable; we have to get back to the roots of socialization, and being active on our
own”.

The young lady student in case three reported that the instructor held her accountable by
insisting “I am counting on you to be honest with me; if you cheat about weekly hours logged,
you are only cheating yourself”. Besides honesty on the part of the student surfacing as a
concern in this case, the very program assessment was reported as being “less than desirable” by
the same student’s mother who added her daughter simply needed to “select alternative choices,
hit submit, wait for the response to indicate ‘correct’ or ‘incorrect’, and be finished without
researching why she may have missed questions. She learned nothing from that. I have to admit
that if you were not a parent that was hands on, there would have been no accountability for the activity hours”.

Finally, the student in case five admitted to cheating. Consistent with what the online instructor in the previous course indicated concerning she would be only cheating herself if the choice to be dishonest while reporting activity time was made, evidence of expedience in “getting PE out of the way” rather than quality programming is reinforced again.

Tables 3 - 5 provide a summary of statements from all five cases concerning the three major themes identified: (a) Physical literacy concerns, inclusive of sub-themes such as PE’s expendability and reputation as being less than desirable (2) scheduling conflicts with PE and students’ school day/academic schedules, and (c) accountability in online PE courses/programs:
Table 3

Summary of Participant Statements Related to Theme 1: Physical Education Literacy

<table>
<thead>
<tr>
<th>Case #</th>
<th>Participant Statements</th>
</tr>
</thead>
</table>
| 1      | • Activity is doing it; education is learning about the body  
|        | • Learning activities that help students stay fit and learn social skills  
|        | • “Art” for instilling lifelong learning goals for those interested  
|        | • Whole person education  
|        | • 6-7 years of dodge ball or mat ball  
|        | • How to live a healthier lifestyle; I just don’t know how to do it  
|        | • Traditional PE classes favor athletes; it’s just games and sports  
|        | • If it really was PE, you could actually learn something  
|        | • Game rules and sport rules  
|        | • Core classes must take priority  
|        | • Budgets demand cuts to extras like PE, art, and music, deemed lower in need |
| 2      | • Place where you can exercise and hopefully learn leisure time activities  
|        | • Doing fun sports and getting active and healthy  
|        | • Provides social skills and valuable life lessons |
| 3      | • It’s just gym  
|        | • Should include knowledge about body systems, movement, injury prevention |
| 4      | • What schools attempt to provide concerning social skills  
|        | • Mostly activities that kept us busy |
| 5      | • Horrible  
|        | • Needs to be there from the health aspect  
|        | • Needs to be more broadly defined  
|        | • Controlled games  
|        | • Multi-faceted; represents the entire person |
Table 4

Summary of Participant Statements Related to Theme 2: Scheduling Issues and Online Choice

<table>
<thead>
<tr>
<th>Case #</th>
<th>Participant Statements</th>
</tr>
</thead>
</table>
| 1      | • Getting PE out of the way made room for other classes  
         | • Gave students more flexibility for scheduling |
| 2      | • Could not fit in electives wanted; online made that possible  
         | • Did the online PE program during the summer without scheduling issues |
| 3      | • Wanted and needed a study hall  
         | • Didn’t have to worry about getting things done by getting it online  
         | • Made room for learning something in a regular class of importance  
         | • Mostly for scheduling reasons |
| 4      | • Scheduling was the number one reason for choosing online PE  
         | • Was a ‘no-brainer’ due to time constraints |
| 5      | • Part of the complete scheduling problem package |
### Table 5

**Summary of Participant Statements Related to Theme 3: Accountability in Online PE Programs**

<table>
<thead>
<tr>
<th>Case #</th>
<th>Participant Statements</th>
</tr>
</thead>
</table>
| 1      | • You could cheat if you wanted to  
        | • No first hand oversight of actual activity hours logged  
        | • Unfortunately based on an honor system  
        | • Needs to be kept in-house to establish validity  
        | • Must be supervision, and that is not happening |
| 2      | • You could be dishonest if you wanted to  
        | • Without being there every step of the way, no way to know if activity occurred |
| 3      | • Online instructors indicated honesty as a concern  
        | • There was no accountability for activity hours |
| 4      | • Faked some hours because you could get away with it  
        | • I learned nothing because it wasn’t taken seriously |
| 5      | • No one was there to do the activities with, so you could say and do anything  
        | • There was no interaction whatsoever  
        | • No way activity could have been proven  
        | • Even parents report false information just to get it over with |

**Attitudes Concerning Physical Fitness and Literacy**

Whitehead (2013) described physical literacy as a disposition to capitalize on our human-embodied capability wherein the individual has the motivation, confidence, physical competence, knowledge, and understanding to value and take responsibility for maintaining purposeful physical pursuits and activities throughout the life course. While participants in this study expressed the need for physical fitness and a foundational knowledge of physicality, embodiment of these attributes across the lifespan was not addressed consistently. Further,
varied ideals concerning the means by which individuals become “fit” and physically literate were presented.

**PE Scheduling Difficulties Within Students’ School Day/Academic Schedules**

“Honestly though, scheduling was clearly the number one reason for completing the online course. That came first, and naturally accomplished the other situations and conflicts concerned with traditional classes in school”.

~Case Four Parent

Influence from three administrator perspectives revealed PE as expendable compared to other academic disciplines. The trickle-down effects of administrator influence were noted in the two PE instructors participants, all parents, and within each student case discussion: Where decisions must be made concerning the inclusion of PE in the “regular” daily academic schedule, PE takes a back seat. Quoting the second administrator interviewed representing cases one through four:

I have to place a priority on the core subject areas themselves. There are essential elements of traditional education, reading, math, science and social studies. The second element as I look at is employability skills, the ability to maintain and become a healthy servant of our community following graduation from the K-12 system. From there, I see healthy PE fitting into a quality of courses that fall below that, included in art, included in music, included in foreign languages, other areas that are grouped together in that third tier.

**The Need For Accountability in Online PE Courses**

“I mean, some people could lie about it, but if that is what they want to do and they feel alright about it then that describes them, but I had no problem
getting that done. I probably doubled what was required, because I could count practice times. I probably counted 6 hours on some days”.

~Case One Student

The case five administrator, when asked to describe how her students were held accountable for PA in online PE courses replied, “They weren’t. They were trusted”.

“The course would spend two to three lessons on each particular game of basketball, soccer and would go over the rules a little bit, but never did they participate in these, they were just reading about them”.

~Case Five Administrator

“I faked some hours at times because you can get away with that kind of stuff and I probably did. I actually went on a 2-hour bike ride, for example on the chart, but only rode for 45 minutes”.

~Case Four Student

These responses reflect sentiments of all participants in this study. Further, these same sentiments express the need for accountability in online PE courses, specifically concerning PA evidence. The case three student reported her online instructor saying, “I am counting on you to be honest with me”. This remark indicates the potential for accountability issues concerning PA in online PE programming.
CHAPTER VI: CONCLUSIONS

Implications for Practice

Increasing physical activity is an important factor in public health and education (Young, 2014, p.8). Consistent with Siedentop’s (2008) commentary presented in chapter one, following thousands of years of engineering physical activity out of daily living, society is in crisis mode. Irrefutable evidence that PA is good for us and that inactivity is directly associated with risk factors for chronic diseases (2014, p. 8) continues to surface. Extensive evidence that an inadequate level of PA is a major public health problem, in the United States and around the world exists (Hallal, Andersen, Bull, Guthold, Haskel, & Ekelund, 2010). PE has been re-invented for centuries as the public’s primary tool to reach the multitudes. Professionals in fields of PE have and continue to advocate for it, adjusting curriculum as needed to target specific societal needs associated with the health and wellness status of individuals.

Resulting from this study, several implications for the future of PE as a tool to educate children and adolescents in a proactive strategy against the obesity epidemic and its related issues should be addressed. The need for a paradigm shift has emerged concerning approach and delivery of PE to America’s school children. Children and subsequent youth and adults must be taught how and why physical fitness is needed (Pangrazzi, 2014). Further, as Dr. Robert Pangrazzi (2014) reaffirmed in his keynote address, the key issue at stake is PA: Assessments mean nothing if the youngest of our citizens do not develop a knowledge base motivating them to become and remain physically active for a lifetime. The task for PE professionals training others to teach PE, instructors currently in the field, and those in curriculum development is to focus upon delivery methods concerning health and wellness, inclusive of physical activity demanding and demonstrating accountability.
The perfect storm surrounding the shape of Americans will not remain off shore in distant waters. Research provided in this study has confirmed the situation has not improved despite efforts over the past decades aimed at increasing favorable fitness status nation-wide. Further, public education’s programming aimed at prevention and intervention within youth and subsequent adults continues to be cut. Currently in the state of Ohio, just 26% of public high school students are involved in daily physical education classes (CDC, 2014).

Krause and Sanchez (2014) endorsed the use of technology as a key component to meeting National Physical Education Standards based upon its valuable role in society today. Citing children of today as the ‘iGeneration’ due their advanced technology skills and access on a daily basis, indeed the ‘if you can’t bet ‘em join ‘em’ mindset mentioned in chapter one has taken on new meaning. Children today spend an estimated 15 – 20 hours each day ‘multi-tasking’ using different forms of technology:

Technology has become so prevalent that schools are recognizing its potential to enhance teaching and learning and to prepare students for a technology-rich future. With the number of technologically advanced students increasing, paired with the push to integrate new, motivating teaching methods, it is important for teachers, and particularly physical educators, to innovate teaching and learning to meet the needs of these tech-savvy students while still meeting educational standards (Rosen, 2011).

Among online PE programs, the same advice can be implemented. The concern, as data within this study has provided, deals with the credibility of the programs offering credit for PE. Participants in this study were not solely and/or positively in favor of, nor negatively against the courses being utilized for PE credit. The common thread existing among all participants indicated a concern with accountability, or lack thereof concerning physical activity. The
challenge for such online communities proposing online PE programs aims at providing a more credible accountability system. Methods may vary from utilization of technology, such as videotaping skills, activity sessions, and other elements providing evidence of actual activity time. According to the technology savvy generation described by Rosen (2011), students could utilize skills in technology to create their own evidence-based presentations displaying physical literacy by and through physical activity. Further, students could utilize technology programs to self-assess, record, and periodically send assessments for progress reports to online instructors for more thorough evaluation.

Similarly, as suggested by the instructor in cases one through four of this study, schools could benefit from similar in-house PE programming. Instructors could offer a hybrid or entirely online course in PE as an elective for those with scheduling difficulties as other rationale for opting out of traditional PE classes in schools. Physical literacy in terms of knowledge base as suggested by administrators, parents, and students in this study could be centered upon the how and why the body functions and performs as it does. Providing in-house delivery of such programming would enable face-to-face appointments, periodic assessment for individually constructed fitness goals, and analysis one-on-one with students via hybrid-based courses. These courses would enable and equip students to work independently on content, yet be responsible for demonstrating baseline and subsequent, objective and standard-driven improvement. This is consistent with Dr. Pangrazzi’s (2014) suggestions concerning teaching students physical literacy and promoting individual control for fitness.

**Implications for Leadership**

“When there is trust, conflict becomes nothing but the pursuit of truth, an attempt to find the best answer possible”
Decisions concerning the subject of PE in schools represent an ethical dilemma. An ethical dilemma is a complex situation that often involves an apparent mental conflict between moral imperatives, in which to obey one would result in transgressing another (Gilman, 1999). Choosing to reduce PE programming in schools in lieu of core content or ultimately pressure students to choose between physical literacy and core content creates such a dilemma. Callahan divides ethical dilemmas such as this into two distinct categories and these categories are useful as a starting point for determining the approach to be taken when working through ethical problems.

The first category consists of ethical theories that assert ethical decisions are based largely on the consequences that come from the decisions made. Callahan identifies these theories as “teleological theories” (Callahan, 1988). Others such as Howe (1993) and Strike, Haller, & Soltis (2005) have described these ethical approaches as “utilitarianism.” Callahan identifies the second category of ethical theories as “deontological theories” (Callahan, 1988). Deontological theories hold that the ethical value of decisions is not a “function of the consequences” of those decisions (Callahan, 1988). For deontologists, once something is determined to be right or wrong, the ethical question of what to do, or what not to do, is answered.

Prioritizing curriculum within schools demands addressing mandates such as core content, for any other choice would result in eventual detrimental issues concerning survival in a global society. Choosing to place PE in an inferior position, as indicated by administrative responses within the study, has enhanced an already societal issue concerning citizen health and welfare nation-wide. Whether such choices are supported morally and ethically by these
administrators, none-the-less, a choice between the two must be made. When a society fails to follow its duty, it is behaving immorally. When society makes choices resulting in unfortunate consequences, then it is acting morally. Concerning the ethical dilemma of what to do concerning all elements needed within education to address the physical, mental, and social needs of individuals, holistic effects are realized by leaving any element out of the choice made.

Instructors’ dialogue in this study revealed a concern for the overall development of their students regardless the delivery method. Both instructors revealed that where and how students received instruction was not as important as if they were receiving instruction toward become physically literate, healthy individuals with skills enabling a lifetime of wellness. While instructors interviewed in this study openly expressed such passion and concern, there were no participants that hinted toward anything other than an ideal of physical literacy promoting a lifetime of health and happiness. A dividing element between hinting about the need for physical literacy and fitness and actually embracing and embodying such attributes became apparent, as results have suggested.

One of the original definitions of physical literacy proposed by Morrison (1969) introduced a holistic approach by stating that physical literate individuals not only move creatively, competently, and with enthusiasm. Further, Whitehead (2013) described physical literacy as a disposition to capitalize on our human-embodied capability wherein the individual has the motivation, confidence, physical competence, knowledge, and understanding to value and take responsibility for maintaining purposeful physical pursuits and activities throughout the life course. Finally, Mandigo, Francis, Lodewyk, and Lopez (2012) recognized that competent movers do not move in isolation of their social environment. This suggests that individuals who are physically literate have the knowledge, skills, and attitudes to live a healthy lifestyle for
themselves while also assisting others to acquire these skills (Roetert & Jefferies, 2014, p. 38).

In summary, Beck describes the purpose of caring by equating care for an individual with the act of helping the person “grow and actualize” (Beck, 1994). Starratt (1991) supports this idea by adding that the ethic of caring “postulates a level of caring that honors the dignity of each person and desires to see that person enjoy a fully human life”. Neither author infers nor suggests that one method of educational delivery trumps another. What matters is the final product.

Limitations of the Study

“Integrate what you believe into every single area of your life. Take your heart to work and ask the most and best of everybody else. Don’t let your special character and values, the secret that you know and no one else does, the truth – don’t let that get swallowed up by the great chewing complacency.”

~ Meryl Streep

Embedded passion and beliefs may lead, strengthen, or drive a researcher to examine an area of interest with great earnest. The same passion and belief system holds the potential to be a limiting factor. According to Creswell (2012), limitations are potential weaknesses or problems with the study identified by the researcher. A potential limitation may be due to the nature of the research questions, as well as general scope of this study based upon my present and former HPE professional roles. Passion for my profession may be expressed emotionally through my verbal and non-verbal language and participant interpretation. I have a firm belief in the power of physical literacy and fitness to others’ holistic well-being. This is a common limitation associated with the interview process, as it is related to researcher bias and reactivity. Maxwell (2005) suggested that bias denotes subjectivity on the part of the researcher in the form of beliefs
held and the perceptual lenses through which the researcher examines the issues involved. Further, reactivity entailing influence of the researcher over participants in the study, may exist due to the same bias and emotional passion.

A second limitation of this study is specific to the sample size and its type. This study, utilizing a case study, interview protocol, consisted entirely of a white, middle-class sample. While the sample size (15 participants) was appropriate for the interview process (Maxwell, 2005) the homogenous sample may not be generalized to the larger population.

**Opportunities for Future Research**

The case study approach was necessary for this study in order to gain insight through information-rich experiences of online PE participants, as well as insight from others aiding in the decision for credit completion through online PE education rather than traditional face-to-face classes. Opportunities continue to exist for research to explore the relationship between the physical aspects of health and fitness and the mode of course delivery (whether online, face-to-face, or hybrid).

Research has consistently demonstrated a positive relationship between physical fitness, and positive mental and social skills, as well as physical skill acquisition (CDC; 2010, Goudas & Magotsiou; 2009, McHugh; 1995, Tremblay, Inman, & Willms; 2000). Researchers need to continue to explore the link between physical education, mode of course delivery (online, face-to-face, hybrid), and the various positive outcomes to the physical, mental, and social elements collectively defining human beings.

**Concluding Thoughts**

Embarking upon this journey, I embraced a mentality that online PE could not and should not be an alternative to traditional PE classes and could not appropriately address physical
literacy. The research outcomes collectively examined would suggest otherwise. NASPE (2004) challenged PE professionals to consider alternative ways to engage individuals in lifetime PA. Even this organization has reconsidered standards and its opinion concerning delivery methods of those standards. Meeting the National Standards via technology is now being addressed by SHAPEAmerica (2014) not as a stand-alone measure or mode of delivery, but rather to enhance, motivate, and instill in today’s youth meaningful, adaptable, and transferrable knowledge and skills to reinforce lifelong habits concerning positive health and well-being. Accountability, regardless the delivery method, continues to be an unanswered and vital topic regarding PE programs, methods of instruction and societal health and wellness outcomes. Dr. Pangrazzi (2014) summed up the challenge to the PE profession with these words:

I hate when I see my profession reduced to games. That is not PE. Yet, when time is taken for assessment of skills, what are kids learning? Data will not change the state of societal fitness. We must DO and teach others to DO fitness. Physical fitness is the experience, not the score. It is the process, not product. Fitness skills and activities should be experienced and a part of every lesson, but kids must learn how to evaluate their fitness. Test them. But teach them to be accountable for their own fitness by teaching them how to effectively test and monitor themselves.
REFERENCES


Centers for Disease Control and Prevention (CDC). (2011). Retrieved from [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6023a1.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6023a1.htm)


Silver, Burdett & Company.


Rethinking the Profession in the Postmodern Era, Albany: SUNY Press.


National Association for Sport and Physical Education (NASPE). (2010). Physical education is an academic subject. Retrieved from

http://www.sophe.org/Sophe/PDF/SummerWebinarSeries/


Ohio Department of Education (ODE). 2014. What’s changing in Ohio education:

Ohio’s new learning standards. Retrieved from


Ohio Department of Education (ODE). 2014. What it takes to earn an Ohio diploma:

Graduating classes of 2014 and beyond. Retrieved from


APPENDIX A. INTERVIEW QUESTIONS

(QUESTIONS FOR STUDENTS, PARENTS, INSTRUCTORS, ADMINISTRATORS)

1. How important do you consider physical education to be in schools today?
2. What was your experience like in traditional, face – to – face PE courses?

(QUESTIONS FOR STUDENTS AND PARENTS)

1. Why did you decide to complete your PE requirement online?
2. What accountability was in place for your participation in online PE?
3. How were you (your child) graded in online PE?
4. What did you need to provide for verification of completion in your online course?
5. What activities/tasks were included in online PE?
6. What activities were provided in your traditional PE classes?
7. How long did it take you to complete your online PE program?
8. Would you recommend an online PE program to friends and/or family? Why? Why not?
9. Would you consider taking a course like calculus online? Why? Why not?

(QUESTION FOR PARENTS)

1. What was your role in the online PE program your child participated in for credit?

(QUESTION FOR ADMINISTRATORS)

1. Do you encourage students to complete their required PE classes in traditional class settings or online settings? Why?

(QUESTION FOR INSTRUCTORS)

1. What are your concerns for the PE profession?
2. How does/has the addition of online programs and other alternatives for PE credit completion affected your classes?
APPENDIX B. HUMAN SUBJECTS REVIEW BOARD APPROVAL

DATE: June 27, 2014
TO: Joyce Jackson, Ed.D.
FROM: Bowling Green State University Human Subjects Review Board
PROJECT TITLE: [610149-2] An Examination of the Perceptions of Online Physical Education: How "Fit" is Online PE?
SUBMISSION TYPE: Revision
ACTION: APPROVED
APPROVAL DATE: June 25, 2014
EXPIRATION DATE: June 14, 2015
REVIEW TYPE: Expedited Review
REVIEW CATEGORY: Expedited review category # 7

Thank you for your submission of Revision materials for this project. The Bowling Green State University Human Subjects Review Board has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

The final approved version of the consent document(s) is available as a published Board Document in the Review Details page. You must use the approved version of the consent document when obtaining consent from participants. Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Federal regulations require that each participant receives a copy of the consent document.

Please note that you are responsible to conduct the study as approved by the HSRB. If you seek to make any changes in your project activities or procedures, those modifications must be approved by this committee prior to initiation. Please use the modification request form for this procedure.

You have been approved to enroll 24 participants. If you wish to enroll additional participants you must seek approval from the HSRB.

All UNANTICIPATED PROBLEMS involving risks to subjects or others and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office. All NON-COMPLIANCE issues or COMPLAINTS regarding this project must also be reported promptly to this office.

This approval expires on June 14, 2015. You will receive a continuing review notice before your project expires. If you wish to continue your work after the expiration date, your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date.

Good luck with your work. If you have any questions, please contact the Office of Research Compliance at 419-372-7716 or hrsb@bgsu.edu. Please include your project title and reference number in all correspondence regarding this project.
This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Bowling Green State University Human Subjects Review Board's records.
APPENDIX C. INVITATIONS TO PARTICIPATE IN THE STUDY

Invitation to Participate in the Study

June 2014

Dear Student,

I am currently the Health and Physical Education program director and an assistant professor in the College of Health Professions at the University of Findlay in Findlay, Ohio. I am also a doctoral student in Leadership Studies at Bowling Green State University in Bowling Green, Ohio. I am conducting a study on your perception of online physical education as an option to fulfill academic requirement for physical education. In order to do so, I would like to invite you to participate by being personally interviewed by myself. Your entire commitment would not involve more than 1½ hours in face-to-face interviews.

Please understand that your participation is completely voluntary and confidential and there are no anticipated risks to you. Your decision to participate or not will not impact your relationship to Bowling Green State University, your school district of residence, or myself. You are free to withdraw from the study at any time, should you agree to participate.

There is no personal benefit directly from participating in this study, nor is there any known risk involved with participation in the study. However, since you recently decided to participate in online physical education rather than traditional, face-to-face PE classes for your high school credit requirement, the reasons behind your decision to do so may provide valuable information. Future students may pursue similar options, and your insight may become a part of valuable information for those choosing to do likewise.

If you are interested in participating in this valuable study, please reply to this email by (insert date). I will then contact you with more information regarding this project.

I would be happy to answer any questions you have about the study. You may contact me at Jackjoy@bgsu.edu (419-722-1060), or my research chair, Dr. Mark Earley at earleym@bgsu.edu (419-372-0247). You may also contact the Chair, Human Subjects Review Board at Bowling Green State University (419-372-7716 or hsrbrb@bgsu.edu) if any problems or concerns arise during the course of the study.

Sincerely,
Joyce M. Jackson
The University of Findlay
Bowling Green State University
June 2014

Dear Student,

I am currently the Health and Physical Education program director and an assistant professor in the College of Health Professions at the University of Findlay in Findlay, Ohio. I am also a doctoral student in Leadership Studies at Bowling Green State University in Bowling Green, Ohio. I am conducting a study to see how those choosing online physical education as an alternative to attending PE classes during the school day feel about the online programs.

Recently, I have become aware that many students are taking online courses as alternatives to regular, face-to-face classes in their home schools, including physical education. Since you have chosen to take a physical education course online, I would be interested in learning about that experience. Your input would provide me with valuable information to complete my study. The information collected from your participation, combined with that of others agreeing to participate, might benefit other students and parents looking for alternative ways to earn physical education credit. Your participation would also help me in teaching future students in the areas of health and physical education how to teach PE courses.

While many students like you are choosing online physical education, there is very little information to help plan such programs.

Please understand that your participation is completely voluntary and confidential and there are no anticipated risks to you. Your decision to participate or not will not affect your relationship to Bowling Green State University or myself. You are free to withdraw from the study at any time, should you agree to discuss your online PE experience with me.

There is no personal benefit directly from participating in this study, nor is there any known risk involved with participation in the study. However, your discussion with me might help others who are thinking about an option to take PE online rather than during the school day. If you are interested in participating in this valuable study, please reply to this email by (insert date). I will then contact you with more information regarding this project.

I would be happy to answer any questions you have about the study. You may contact me at jackjoy@bgsu.edu (419-722-1060), or my research chair, Dr. Mark
Earley at earleym@bgsu.edu (419-372-0247). You may also contact the Chair, Human Subjects Review Board at Bowling Green State University (419-372-7716 or hsrbi@bgnet.bgsu.edu) if any problems or concerns arise during the course of the study.

Sincerely,
Joyce M. Jackson
The University of Findlay
Bowling Green State University
Invitation to Participate in the Study

June 2014

Dear Parent/Guardian,

I am currently the Health and Physical Education program director and an assistant professor in the College of Health Professions at the University of Findlay in Findlay, Ohio. I am also a doctoral student in Leadership Studies at Bowling Green State University in Bowling Green, Ohio. I am conducting a study on the perceptions of online physical education as an option to fulfill academic requirements for physical education in Northwest Ohio K-12 education. The purpose of this study is to gain information to inform those within my profession concerning the implications for the future of physical education programming. Data is being collected through face-to-face interviews that will take no more than 1 1/2 hours to complete.

Parents/guardians of high school students play key roles in the decision making process of high school scheduling choices. Your input into the choice for online PE as an alternative credit option for your child could provide valuable information that will assist other parents and their children considering a similar option.

Please understand that your participation is completely voluntary and confidential and there are no anticipated risks to you. Your decision to participate or not will not impact your relationship to Bowling Green State University, your school district of residence, or myself. You are free to withdraw from the study at any time, should you agree to participate.

There is no personal benefit directly from participating in this study, nor is there any known or perceived risk involved with participation in the study. However, future administrators, instructors, parents, and students may benefit from the study.

If you are interested in participating in this valuable study, please reply to this email by July 3, 2014. I will then contact you with more information regarding this project.

I would be happy to answer any questions you have about the study. You may contact me at JackJoy@bgsu.edu (419-722-1060), or my research chair, Dr. Mark Earley at earleym@bgsu.edu (419-372-0247). You may also contact the Chair, Human Subjects Review Board at Bowling Green State University (419-372-7716 or hsrhb@bgsu.edu) if any problems or concerns arise during the course of the study.

Sincerely,
Joyce M. Jackson
The University of Findlay
Bowling Green State University
Invitation to Participate in the Study

June 2014

Dear PE Instructor,

I am currently the Health and Physical Education program director and an assistant professor in the College of Health Professions at the University of Findlay in Findlay, Ohio. I am also a doctoral student in Leadership Studies at Bowling Green State University in Bowling Green, Ohio. I am conducting a study on the perceptions of online physical education as an option to fulfill academic requirements for physical education in Northwest Ohio K-12 education. The purpose of this study is to gain information to inform those within my profession concerning the implications for the future of physical education programming. Data is being collected through face-to-face interviews that will take no more than 1½ hours to complete.

Your role in preparing individuals for a lifetime of physical fitness by educating them physically, mentally, and socially in your physical education classes is admirable. Your insight is being sought to better understand the impact that physical education in general has upon adolescents. Further, your input concerning implications for the future of physical education, including online PE may become valuable for all within the PE profession, including future educators.

Please understand that your participation is completely voluntary and confidential and there are no anticipated risks to you. Your decision to participate or not will not impact your relationship to Bowling Green State University or myself. You are free to withdraw from the study at any time, should you agree to participate.

There is no personal benefit directly from participating in this study, nor is there any known or perceived risk involved with participation in the study. However, future administrators, instructors, parents, and students may benefit from the study.

If you are interested in participating in this valuable study, please reply to this email by (insert date). I will then contact you with more information regarding this project.

I would be happy to answer any questions you have about the study. You may contact me at JackJoy@bgsu.edu (419-722-1060), or my research chair, Dr. Mark Earley at earleym@bgsu.edu (419-372-0247). You may also contact the Chair, Human Subjects Review Board at Bowling Green State University (419-372-7716 or hsrb@bgsnet.bgsu.edu) if any problems or concerns arise during the course of the study.

Sincerely,
Joyce M. Jackson
The University of Findlay
Bowling Green State University
Invitation to Participate in the Study

June 2014

Dear Administrator,

I am currently the Health and Physical Education program director and an assistant professor in the College of Health Professions at the University of Findlay in Findlay, Ohio. I am also a doctoral student in Leadership Studies at Bowling Green State University in Bowling Green, Ohio. I am conducting a study on the perceptions of online physical education as an option to fulfill academic requirements for physical education in Northwest Ohio K-12 education. The purpose of this study is to gain information to inform those within my profession concerning the implications for the future of physical education programming. Data is being collected through face-to-face interviews that will take no more than 1½ hours to complete.

Your role in administration is appreciated for the influential decisions that are made for the benefit of all students. Therefore, as online education becomes increasingly popular, and specifically that of online physical education, your input is being sought as it may serve to benefit stakeholders at every level.

Please understand that your participation is completely voluntary and confidential and there are no anticipated risks to you. Your decision to participate or not will not impact your relationship to Bowling Green State University or myself. You are free to withdraw from the study at any time, should you agree to participate.

There is no personal benefit directly from participating in this study, nor is there any known or perceived risk involved with participation in the study. However, future administrators, instructors, parents, and students may benefit from the study.

If you are interested in participating in this valuable study, please reply to this email by July 3, 2014. I will then contact you with more information regarding this project.

I would be happy to answer any questions you have about the study. You may contact me at Jackjoy@bgsu.edu (419-722-1060), or my research chair, Dr. Mark Earley at earleym@bgsu.edu (419-372-0247). You may also contact the Chair, Human Subjects Review Board at Bowling Green State University (419-372-7716 or hsrbc@bgsu.edu) if any problems or concerns arise during the course of the study.

Sincerely,

Joyce M. Jackson
The University of Findlay
Bowling Green State University
APPENDIX D. INFORMED CONSENT

Bowling Green State University
School of Educational Foundations, Leadership and Policy Studies
Educational Administration and Leadership Studies

Dear Student:
Re: Consent Form for Perceptions of Online Physical Education Interviewees

You were previously invited by myself Joyce M. Jackson to participate in a research study entitled “An Examination of the Perceptions of Online Physical Education: How "Fit" is Online PE?” as part of my work in completing a doctoral degree in Education.

Purpose of Study: The purpose of this study is to gain information and inform those within my profession concerning the implications for the future of physical education programming. These stakeholders include students such as yourself, as well as your parent(s)/guardian(s) who may have been a part of your high school scheduling decision-making process. Further, current and future PE instructors who will teach and assess these programs may benefit from the study. Additionally, school administrators, responsible for curriculum decisions may also benefit. Finally, the study may guide preparation of individuals seeking licensure in the area of physical education.

While participation in online education in general continues to increase, the literature is scarce on online physical education. With obesity on track to overtake the use of tobacco as the number one cause of preventable death in the United States, less rather than more time is being spent in physical education and physical activity among adolescents in America’s schools. Unfortunately, the literature is void of studies on how the online learning community accounts for this dilemma within its offerings.

Procedures: I am requesting that you participate in two face-to-face interviews. The first interview would last no longer than 1 hour, while the second interview would terminate in 30 minutes or less. These interviews will be scheduled for June and July of 2014. This qualitative research method will allow you to share your decision making process in choosing online rather than traditional face to face physical education classes. Further, stories and experiences with online physical education and any other information regarding online physical education programming may be shared. A mutually agreed upon time and location for the interview would be selected. You are free to withdraw from the study at any time, and may refrain from answering any questions that makes you uncomfortable. Your decision to participate will not affect your relationship to Bowling Green State University or myself.
After all the data have been analyzed, you will receive an executive summary of the research results.

**Potential Risks and Benefits:** The risk of participation is no greater than that experienced in daily life. I will not release any information that can identify you. All information will be kept strictly confidential. As a way of securing anonymity, the information that you provide will be assigned a code. With your permission, these interviews will be tape recorded to accurately document the interviews. The transcripts will be returned to you for review, revision, and additions to your recoded responses. The audio tapes will be transcribed verbatim. Taped recordings as well as my research field notes and reflection notes will be stored in a secured locked box and placed in a locked cabinet in a secure location with only my supervisor Dr. Mark Earley and me having access to that data. We will make all reasonable efforts within the scope of the law to protect your privacy. I will retain this data for a period of 5 years.

There is no personal benefit directly from participating in this study, nor is there any known or perceived risk involved with participation in the study. However, future administrators, instructors, parents, and students may benefit from the study.

If you have any questions related to this study, you may contact me at Jackjoy@bgsu.edu (419-722-1060), or my research chair, Dr. Mark Earley at earleym@bgsu.edu (419-372-0247). You may also contact the Chair, Human Subjects Review Board at Bowling Green State University (419-372-7716 or hsrb@bgsnet.bgsu.edu) if any problems or concerns arise during the course of the study.

If you agree to participate in the study, please sign herein and return to me in the stamped and addressed envelope provided. The extra copy is for you to keep.

I voluntarily agree to participate in this study. I confirm that I am at least 18 years of age.

__________________________________________  __________________________
Signature                                      Date
Dear Student:

Since you have indicated that you would like to participate in my study, "An Examination of the Perceptions of Online Physical Education: How "Fit" is Online PE?", before I can sit down with you for an interview, I need you to sign this form if you agree that everything you read has been thoroughly explained to you.

**Purpose of Study:** I have learned that many students are taking online courses rather than attending classes in their home schools, including physical education classes. Since you have chosen to take a physical education course online, I am interested in learning about your experience with the online PE class. You could provide me with valuable information to complete my study. The information you supply may be valuable to others trying to decide how to complete their physical education credit as well. Your participation would also help me in teaching future students in the areas of health and physical education. While many students like you are choosing online physical education, there is very little information to help plan online PE programs.

**Procedures:** I would like to ask questions related to your online physical education experience. If you agree to participate, I would interview you for approximately 1 hour. After you have had time to think about your responses, I would contact you again to see if we could briefly chat a second time (30 minutes or less) to add any additional thoughts that might have come to mind since our first meeting. Again, if you agree to participate, I would meet you at a location of your choice. You are free to withdraw from the study at any time. Your decision to participate will not affect your relationship to Bowling Green State University or myself. You do not have to answer any questions that make you uncomfortable. When I am finished interviewing all who participate, I will give you a copy of the results.

**Risks and Benefits:** There is no risk to you for participating in these interviews. I will not release any information that can identify you. All information will be kept confidential. To make certain that you cannot be identified, rather than using your name, I will use a code. With your permission, I will tape record the interviews. The recordings will be returned to you in order for you to make sure what you actually have said to me was understood. Taped recordings as well as notes taken during our discussion will be stored in a secured locked box and placed in a locked cabinet in a secure location with only my supervisor Dr. Mark Earley and me having access to that data. We will do everything possible to make certain your discussions with me
are kept safely. I will keep the information from our meetings/interviews for a period of 5 years.

You will not receive any personal benefit directly from participating in this study, but there are no known risks involved with being a part of the study. However, many future students may benefit from the study, as well as their parents whose input into choosing class schedules during their high school years is important. Again, might benefit from your participation in my study.

If you have any questions about the study, you might contact me at jackjoy@bgsu.edu (419-722-1060), or my research chair, Dr. Mark Earley at earleym@bgsu.edu (419-372-0247). You may also contact the Chair, Human Subjects Review Board at Bowling Green State University (419-372-7716 or hsrb@bgsnet.bgsu.edu) if any problems or concerns should come up during the study.

I have read the information contained in the letter/memo about the study, which describes what I will be asked to do if I decide to participate. My parent/guardian has given me permission to participate. I have been told that the decision is up to me, and that I do not have to participate, even if my parent/guardian says that it is okay. I have been told that I can stop participating at any time I choose, and no one will be mad at me.

☑ Yes – I want to participate in the study.
☐ No – I do not want to participate in the study.

_____________________________   ____________________
Child's Signature                Date
Bowling Green State University
School of Educational Foundations, Leadership and Policy Studies
Educational Administration and Leadership Studies

Dear Parent/Guardian:
Re: Consent Form for Perceptions of Online Physical Education Interviewees

You were previously invited by myself Joyce M. Jackson to participate in a research study entitled "An Examination of the Perceptions of Online Physical Education: How “Fit” is Online PE?" as part of my work in completing a doctoral degree in Education.

**Purpose of Study:** The purpose of this study is to gain information and inform those within my profession concerning the implications for the future of physical education programming to all stakeholders. These stakeholders include students, as well as their parents who may be a part of their high school scheduling decision-making process. Further, current and future instructors who will teach and assess these programs may benefit from the study. Additionally, school administrators, responsible for curriculum decisions may also benefit. Finally, the study may guide preparation of individuals seeking licensure in the area of physical education.

While participation in online education in general continues to increase, the literature is scarce on online physical education. With obesity on track to overtake the use of tobacco as the number one cause of preventable death in the United States, less rather than more time is being spent in physical education and physical activity among adolescents in America's schools. Unfortunately, the literature is void of studies on how the online learning community accounts for this dilemma within its offerings.

**Procedures:** I am requesting that you participate in two face-to-face interviews. You must be 18 years old or older to participate. Further, if you are the parent/guardian of a student under the age of 18, you must also confirm that you agree to your child’s participation in this study prior to said child being contacted for his/her own assent for participation. The first interview would last no longer than 1 hour, while the second interview would terminate in 30 minutes or less. These interviews will be scheduled for June and July of 2014. This qualitative research method will allow you to share your decision making process in choosing online rather than traditional face to face physical education classes. Further, stories and experiences with online physical education and any other information regarding online physical education programming may be shared. A mutually agreed upon time and location for the interview would be selected. You are free to withdraw from the study at any time, and are free to withdraw your child from the
study at any time. Your decision to participate will not affect your relationship to Bowling Green State University or myself. You are free to refrain from responding to any question(s) which make you feel uncomfortable.

After all the data have been analyzed, you will receive an executive summary of the research results.

**Potential Risks and Benefits:** The risk of participation is no greater than that experienced in daily life. I will not release any information that can identify you. All information will be kept strictly confidential. As a way of securing confidentiality, the information that you provide will be assigned a code. With your permission, these interviews will be tape recorded to accurately document the interviews. The transcripts will be returned to you for review, revision, and additions to your recoded responses. The audio tapes will be transcribed verbatim. Taped recordings as well as my research field notes and reflection notes will be stored in a secured locked box and placed in a locked cabinet in a secure location with only my supervisor Dr. Mark Earley and me having access to that data. I will retain this data for a period of 5 years.

There is no personal benefit directly from participating in this study, nor is there any known or perceived risk involved with participation in the study. However, future administrators, instructors, parents, and students may benefit from the study.

If you have any questions related to this study, you may contact me at Jackjoy@bgusu.edu (419-722-1060), or my research chair, Dr. Mark Earley at earleym@bgusu.edu (419-372-0247). You may also contact the Chair, Human Subjects Review Board at Bowling Green State University (419-372-7716 or hsrb@bgusu.edu) if any problems or concerns arise during the course of the study.

If you agree to participate in the study, please sign here and give the signed copy to Joyce M. Jackson in person, prior to the first interview. The extra copy is for you to keep.

I voluntarily agree to participate in this study

__________________________
Signature

__________________________
Date

I voluntarily agree for the Principal Investigator, Joyce M. Jackson, to contact my minor (under age 18) to be invited to participate in this study.

__________________________
Signature

__________________________
Date
Dear PE Instructor:
Re: Consent Form for Perceptions of Online Physical Education Interviewees

You were previously invited by myself Joyce M. Jackson to participate in a research study entitled *An Examination of the Perceptions of Online Physical Education: How “Fit” is Online PE?* as part of my work in completing a doctoral degree in Education.

**Purpose of Study:** The purpose of this study is to gain information and inform those within my profession concerning the implications for the future of physical education programming to all stakeholders. These stakeholders include students, as well as their parents who may be a part of their high school scheduling decision-making process. Further, current and future instructors who will teach and assess these programs may benefit from the study. Additionally, school administrators, responsible for curriculum decisions may also benefit. Finally, the study may guide preparation of individuals seeking licensure in the area of physical education.

While participation in online education in general continues to increase, the literature is scarce on online physical education. With obesity on track to overtake the use of tobacco as the number one cause of preventable death in the United States, less rather than more time is being spent in physical education and physical activity among adolescents in America’s schools. Unfortunately, the literature is void of studies on how the online learning community accounts for this dilemma within its offerings.

**Procedures:** I am requesting that you participate in two face-to-face interviews. The first interview would last no longer than 1 hour, while the second interview would terminate in 30 minutes or less. These interviews will be scheduled for June and July of 2014. This qualitative research method will allow you to share your decision making process in choosing online rather than traditional face to face physical education classes. Further, stories and experiences with online physical education and any other information regarding online physical education programming may be shared. A mutually agreed upon time and location for the interview would be selected. You are free to withdraw from the study at any time. Your decision to participate will not affect your relationship to Bowling Green State University or myself. You are free to refrain from answering any question(s) which may make you feel uncomfortable.
After all the data have been analyzed, you will receive an executive summary of the research results.

**Potential Risks and Benefits:** The risk of participation is no greater than that experienced in daily life. I will not release any information that can identify you. All information will be kept strictly confidential. As a way of securing anonymity, the information that you provide will be assigned a code. With your permission, these interviews will be tape recorded to accurately document the interviews. The transcripts will be returned to you for review, revision, and additions to your recoded responses. The audio tapes will be transcribed verbatim. Taped recordings as well as my research field notes and reflection notes will be stored in a secured locked box and placed in a locked cabinet in a secure location with only my supervisor Dr. Mark Earley and me having access to that data. We will make all reasonable efforts within the scope of the law to protect your privacy. I will retain this data for a period of 5 years.

There is no personal benefit directly from participating in this study, nor is there any known or perceived risk involved with participation in the study. However, future administrators, instructors, parents, and students may benefit from the study.

If you have any questions related to this study, you may contact me at Jackjoy@bgsu.edu (419-722-1060), or my research chair, Dr. Mark Earley at earleym@bgsu.edu (419-372-0247). You may also contact the Chair, Human Subjects Review Board at Bowling Green State University (419-372-7716 or hsr@bgsu.edu) if any problems or concerns arise during the course of the study.

If you agree to participate in the study, please sign here and return to me in the stamped and addressed envelope provided. The extra copy is for you to keep.

I voluntarily agree to participate in this study

_________________________  ______________________
Signature                  Date
Dear Administrator:
Re: Consent Form for Perceptions of Online Physical Education Interviewees

You were previously invited by myself Joyce M. Jackson to participate in a research study entitled "An Examination of the Perceptions of Online Physical Education: How "Fit" is Online PE?" as part of my work in completing a doctoral degree in Education.

**Purpose of Study:** The purpose of this study is to gain information and inform those within my profession concerning the implications for the future of physical education programming to all stakeholders. These stakeholders include students, as well as their parents who may be a part of their high school scheduling decision-making process. Further, current and future instructors who will teach and assess these programs may benefit from the study. Additionally, school administrators, responsible for curriculum decisions may also benefit. Finally, the study may guide preparation of individuals seeking licensure in the area of physical education.

While participation in online education in general continues to increase, the literature is scarce on online physical education. With obesity on track to overtake the use of tobacco as the number one cause of preventable death in the United States, less rather than more time is being spent in physical education and physical activity among adolescents in America's schools. Unfortunately, the literature is void of studies on how the online learning community accounts for this dilemma within its offerings.

**Procedures:** I am requesting that you participate in two face-to-face interviews. The first interview would last no longer than 1 hour, while the second interview would terminate in 30 minutes or less. These interviews will be scheduled for June and July of 2014. This qualitative research method will allow you to share your decision making process in choosing online rather than traditional face to face physical education classes. Further, stories and experiences with online physical education and any other information regarding online physical education programming may be shared. A mutually agreed upon time and location for the interview would be selected. You are free to withdraw from the study at any time, and may refrain from answering any question(s) that make you feel uncomfortable. Your decision to participate will not affect your relationship to Bowling Green State University or myself.
After all the data have been analyzed, you will receive an executive summary of the research results.

**Potential Risks and Benefits:** The risk of participation is no greater than that experienced in daily life. I will not release any information that can identify you. All information will be kept strictly confidential. As a way of securing confidentiality, the information that you provide will be assigned a code. With your permission, these interviews will be tape recorded to accurately document the interviews. The transcripts will be returned to you for review, revision, and additions to your recoded responses. The audiotapes will be transcribed verbatim. Taped recordings as well as my research field notes and reflection notes will be stored in a secured locked box and placed in a locked cabinet in a secure location with only my supervisor Dr. Mark Earley and me having access to that data. We will make all reasonable efforts within the scope of the law to protect your privacy. I will retain this data for a period of 5 years.

There is no personal benefit directly from participating in this study, nor is there any known or perceived risk involved with participation in the study. However, future administrators, instructors, parents, and students may benefit from the study.

If you have any questions related to this study, you may contact me at Jackjoy@bsu.edu, 419-722-1060 or my research chair, Dr. Mark Earley at earleym@bsu.edu, 419-372-0247. You may also contact the Chair, Human Subjects Review Board at Bowling Green State University (419-372-7716 or hrsb@bsu.edu) if any problems or concerns arise during the course of the study.

If you agree to participate in the study, please sign herein and return to me prior to beginning our first interview session. An extra copy of this consent form will be provided for you to keep.

I voluntarily agree to participate in this study

________________________________________  ______________
Signature                                      Date