The Future of Physical Education in Higher Education: A Delphi Investigation

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Abstract

Despite the profound and widespread concern for the future of higher education physical education, there has been little systematic study on the topic. This research investigated the future by utilizing a two-round interview Delphi method. Five international experts were asked to project possible, probable, preferable and undesirable futures of the academic discipline in fifteen years time; specifically in regards to issues within the undergraduate degree programs, and the research sub-disciplines. The results of quantitative descriptive statistics and qualitative content analysis reveal an everchanging higher education environment in the postmodern information age, which presents a complicating future for the academic discipline. The experts expressed concern that some disciplinarians will be a-futuristic and unable to operationalize the vast potential of the discipline at the institutional level, by continuing to use outdated and inappropriate frameworks of a modern era gone by.

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CHAPTER ONE: INTRODUCTION

"Conflict" (Lawson, 2007, p. 226)

"Crisis" (Melnychuk, Robinson, Lu, Chorney, & Randall, 2011, p. 161)

"Chaos" (Newell, 1990a, p. 227)

"Marginalized" (Rink, 2007, p. 101)

"Endangered" (Siedentop, 1990b, p. 252)

"Extinction" (Kirk, 2010, p. 36)

The dramatic words listed above are just a few of the many that inundate the literature describing the past, present, and future of physical education. Despite the significant strides that physical education and the field at large have made in the past century, there is still much concern about the present and future of physical education as it exists within elementary and secondary schools (Kindergarten to Grade 12 [K-12]), as well as within higher education (Dunn, 2009).

Physical Education in Context: K-12 and Higher Education The Future of K-12 School Physical Education

In the case of K-12 school physical education, Sanders and McCrum (1999) have described the situation as "peaks of excellence, [and] valleys of despair" (p. 3). A decade later, Ayers and Housner (2008) reported there was still reason to have "great concern over the quality of school based K-12 physical education programs" (p. 62). Moreover, since the 1980s researchers such as Siedentop (1982), Dodds and Locke (1984), and Stier, Kleinman, and Milchrist (1994) have predicted the demise of K-12 school physical education, beginning with secondary school programs and followed by elementary school programs. Many years after these grave predictions were made, Kirk (2010), in his book

Physical Education Futures, reported that the bleak forecast for K-12 school physical education had not improved.

The Future of Higher Education Physical Education

The prediction of future demise for K-12 school physical education is a current reality for higher education physical education. Not only are the numbers of physical education degree programs and faculty members decreasing, but entire university departments, schools, and colleges of physical education are also being eliminated (Lawson, 1998; Melnychuk et al., 2011; Newell, 2007; Rikli, 2006). For example, in the state of California, "the field of [physical education and] kinesiology, as an academic discipline in doctoral institutions ... no longer exists" (Rikli, 2006, p. 295). This elimination occurred despite the fact that these institutions were once considered "on the cutting edge in pursuing academic excellence" and were home to some of the first physical education degree programs (Rikli, 2006, p. 295).

Interrelation of Subjects in K-12 Schools and Higher Education

The existence of similar trends between K-12 school physical education and higher education physical education is consistent with curriculum specialist Ivor Goodson's theory that school subjects and their forms in higher education are interrelated (Goodson, 1987). More specifically, Goodson (1987) asserts that the future of a school subject is largely dependent on its higher education counterpart. Goodson's (1987) research findings conclude that school subjects require an anchor within higher education, and without such an anchor these subjects struggle for "legitimacy and survival" in the education system (p. 36). Therefore, when studying the future of a subject area, focusing on its form in higher education is likely the most appropriate emphasis, as

universities exert significant influence on shaping the future of a field. This influence includes the responsibility of universities to educate the future scholars and professionals of a field, who in turn "play a major role in defining the subject matter" (Goodson, 1987, p. 191).

In accordance with Goodson's (1987) theory, physical education scholar John Massengale (1987) states in his book Trends Toward the Future in Physical Education that "any concern for the future of physical education must be within the context of higher education" (p. 4). Unfortunately, there is currently profound concern for higher education physical education. Numerous conflicts have been identified as plaguing the academic discipline (Lawson, 2007). These conflicts put higher education physical education programs and departments at risk of decline, or worse, elimination from the university (Lawson, 2007). These conflicts are listed here only in brief, but are discussed in great detail in the Review of Literature in chapter 4. To begin, a lack of unified focus has been identified as a core conflict within higher education physical education (Gill, 2007; Penney & Chandler, 2000; Wade, 2007). It is considered that this core conflict precipitates and maintains a variety of secondary conflicts within the physical education undergraduate degree program and the research sub-disciplines (Greendorfer, 1987). The secondary conflicts within the physical education undergraduate degree program are considered to include conflicts over curriculum (Henry, 1964; Lawson, 2007; Rink, 2007; Siedentop, 2002) and program location within the university (Newell, 2007). The secondary conflicts within the research sub-disciplines are considered to include conflicts over the name (Custonja et al., 2009; Lawson, 2007; Mason, 2010; Newell, 1990b; Rikli, 2006), organizational framework (Gill, 2007; Lawson & Morford, 1979; Lawson, 2007;

Rikli, 2006; Vertinsky, 2009), and profession–discipline dynamic (Corbin, 1993; Lawson, 2007; Rink, 2007). Figure 1 depicts the core and secondary issues within the academic discipline.

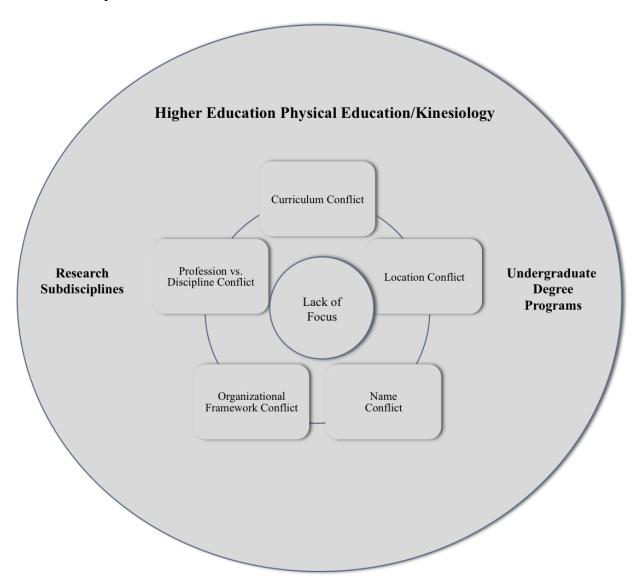


Figure 1. The core and secondary issues within the academic discipline.

The Magnitude of the Problem

The jeopardized future of higher education physical education is neither a small nor contained issue. While this issue is predominately debated in North America, it is

"not merely a North American phenomenon" (Lawson, 2007, p. 226) but is "indeed global, with similarities more prominent than local differences" (Kirk, 2010, p. 34).

The Need for Research

Despite the profound and widespread concern for the future of higher education physical education, there has been little systematic study on the topic (Kirk, 2010). This lack of research threatens the future of physical education, because without systematic consideration of the future, physical education will be forced to adjust and react to the actions of other fields that have proactively studied their futures (Massengale, 1988). Over the past several decades, physical education scholars have called for researchers to undertake the study of the future of physical education (Kirk, 2010; Laker, 2003; Massengale, 1987; Welsh, 1977). These future-oriented individuals cite the study of the future as critical in preventing physical education from being influenced by such whims, fads, and circumstances as it has in the past (Massengale, 1988). Physical education 'futurist' David Kirk (2010) advocates the study of the future as a method of gaining some degree of control over the fate of the field.

As previously outlined, the study of the future appears to be an exercise of great potential; this may be because "any consideration of alternative futures automatically rejects the notion of a single inevitable future, thereby setting the stage for the creation of tomorrow" (Massengale, 1988, p. 109). In other words, engaging physical education scholars in the process of studying alternative futures ensures that the future of physical education will not be predestined, but instead could be desirably created.

Purpose and Research Questions

The purpose of this research is to investigate and seek answers to the following research question:

• What do experts within higher education physical education believe to be the possible, probable, preferable, and undesirable futures of the focus of the academic discipline, the physical education undergraduate degree program (i.e., the B.PhEd.), and the research sub-disciplines?

The above research question will be investigated through the following specific research questions:

- Focus of the academic discipline:
 - What do experts within higher education physical education believe to be the possible, probable, preferable, and undesirable futures of the focus of the academic discipline?
- Physical education degree program:
 - What do experts within higher education physical education believe to be the possible, probable, preferable, and undesirable futures of the undergraduate physical education degree program in terms of the program curriculum, and the location of the program within the university (i.e., housed within the Faculty of Kinesiology or parent Faculty of Education)?
- Research sub-disciplines:
 - What do experts within higher education physical education believe to be the
 possible, probable, preferable, and undesirable futures of the research subdisciplines of physical education and kinesiology in terms of the name (of the

academic discipline and its academic units within higher education), the organizational framework (interdisciplinary or cross-disciplinary), and the profession versus discipline conflict?

Rationale

There is ample rationale justifying the undertaking of this research. First, the study of the future is considered to be a valuable scholarly endeavor, which many institutions and academics support (Massengale, 1988). More specifically, studying a field's future is viewed as a wise strategy for future success in that field, and is highly recommended for groups within higher education in particular (Ishee, 2003). In fact, many groups within higher education have studied their future, including "educational technology (Harper, 1991), health care (Kodner, 1996), library science (Medina, 1984), and nursing (American Nurses' Association, 1981; Warnick, 1988)" (as cited in Ishee, 2003, p. 4). Moreover, there have been a number of groups closely related to physical education who have studied their future, including recreation (Miller, 1990), sport management (Costa, 2005), education (Slaughter, 2004), and adult fitness (Murray, 1987).

Second, despite the evident value of studying the future, and the successful study of the future by other groups, this work is seldom done in physical education (Kirk, 2010; Massengale, 1988). Of the very limited research that has been conducted regarding the future of physical education, few studies have taken a systematic or empirical approach. In addition, few studies have consulted the opinions of experts within the field, and have instead relied on the singular perspective of the author (Kirk, 2010). This gap in the literature is cause for concern, since notable scholars within physical education, such as

Kirk (2010) and Penney and Chandler (2000), believe it is the responsibility of the field's members to conduct research on the future of physical education.

Therefore, this research does not simply expand upon existing literature on the future of higher education physical education, but instead provides the much-needed perspective of a systematically derived, and expert-consulted, approach.

Significance of the Study

The condemning forecasts for the future of higher education physical education have sparked some debate as to whether or not it is worth 'saving'. Gill (2007) acknowledges this question of whether higher education physical education is "relevant in the world of today and tomorrow?" and responds by emphatically stating "the answer is yes!" (p. 273). The view that higher education physical education is of value and should be maintained and strengthened has also been endorsed by Kirk (2010), Lawson (1998), Melnychuk et al. (2011), and Penney and Chandler (2000). Therefore, part of the significance of this research is that the systematic study of the future aids in the development of a more successful future for higher education physical education, an academic discipline that many scholars argue is of great importance.

Second, the current sentiment is that "physical education in higher education is unprepared for its future" and if research on the future is not conducted then "at best physical education will be able to strategically posture itself to react to the actions of other interest groups who are determining their futures" (Massengale, 2000, p. 107). Research that proactively considers the future eventualities of a field enables the members of that field to develop contingency plans (Ellis, 1998; Ishee, 2003). In the event that any of these hypothesized eventualities come to be, contingency plans may

better prepare that field to react in a timely and effective manner (Ellis, 1998; Ishee, 2003). Therefore, part of the significance of this research is that it may better prepare those within higher education physical education to be primed to meet the future more opportunely, and negotiate that future in a favorable manner.

Tone and Context of the Research

To enhance the reader's understanding of the material presented in this thesis it is important to provide some pertinent context as well as to issue some relevant disclaimers. First, many of the conflicts discussed in this research are quite controversial for the groups involved (for reasons which will be discussed later in this document). However, the tone of this research is not to engage in any of the argumentation, dissension, or negativity that often surrounds this topic, but rather to simply investigate this complex issue from the perspective of physical education, and to do so with the utmost respect for all members of opposing groups and proponents of differing viewpoints.

Second, although the dramatic conflicts and grave future of the field are discussed at length in this thesis, this is not done out of pessimism or negativity, but rather out of necessity in order to describe the reality. In fact, the nature of research on the future is that of optimism, aspiration, and ambition for a successful future. As such, this research is intended to align with Rikli's (2006) comment that "we need to stop talking about [the problems] ... and start strategizing" about the future (p. 294), as well as Naisbitt's (2006) sentiment that "problem solvers are necessarily dealing with yesterday... the focus on the problem and not the opportunity is limiting" (p. 92).

In sum, this research is designed to investigate the future by entering, and asking the research participants to enter, Bernstein's (2000) "primary field of knowledge

production" where we will attempt to bring to light futures that, as of yet, are unknown and unimagined to us (Kirk, 2010).

CHAPTER TWO: DEFINITIONS

Regular contributors to the literature on the future of higher education physical education have acknowledged plaguing definitional issues within the literature. Lawson (1998) explains that "communication is increasingly difficult, because even the most basic terms must be redefined each time they are employed" (p. 230). Possible explanations as to why definitional issues exist so profoundly in this literature will be discussed.

Definitional Issues

Transient and Diverse Authorship

This body of literature is home to a transient and diverse authorship. There are very few academics that hold this topic as a primary research focus. As a result, there are few regular contributors to this literature, and many more occasional contributors who come from a diversity of backgrounds. These sporadic or even one-time contributors interact with this literature only when their interest is temporarily piqued; this is usually when a secondary issue happens to impact them personally (e.g., a name change proposal in their university department). Often, when the issue is no longer pressing (e.g., the name change decision is settled), their interest wanes as quickly as it arose, and they return to their original and unrelated research agenda. The impact of this transient authorship is that many of these irregular contributors are unversed in the terminology, thus they may be unaware of the definitional contests, and may unknowingly employ the terminology inappropriately.

Definitional Disagreements

Many of the definitions in this literature are not widely agreed upon, even by regular contributors. Consequently, debates over definitional meanings have been a regular occurrence in the literature. One of the many examples of explicit disagreement over terminology is Corbin's (1991) reaction article entitled "Further Reactions to Newell: Becoming a Field Is More Than Saying We Are One." Corbin voices his disagreement with Newell's (1990a, 1990b, 1990c) definitions of the terms: field, discipline, and profession; and offers his own, and other authors', differing meanings of the same terms. The impact of these debates is that the reader is privy to many heavily dissected interpretations of each term, which instead of leading to improved understanding, more likely leads to overwhelming confusion over which view to adopt.

Defining Dynamic Concepts

Some of the terminologies in this literature represent dynamic concepts. For example, the term 'physical education' represents a profession that has been profoundly transformed since its inception. Hence, the dynamic nature of many concepts within this literature makes them increasingly difficult to define.

Defining Abstract Academic Concepts

Some of the concepts defined in this literature are intangible and represent abstract academic constructs, such as the organizational framework of a field's research sub-disciplines. Notwithstanding the other definitional challenges, the theoretical nature of these concepts alone makes them exceptionally difficult to define.

Contests for Discursive Power

As "all kinds of power are directed, mediated, or resisted through language" (Fowler, 2004, p. 28), it is no surprise that definitions, and the impact of their discursive power on the shape of a field, are the subject of much debate. These debates over discourse can be understood as contests for power and control within the field (Lawson, 1998). This is particularly true in the case of this literature, as its subject matter concerns the fate of its authors' life work, and therefore has significant professional and personal impact for those involved. As each author convincingly presents his/her definitions as 'fact,' it can leave the un-versed reader of this literature manipulated, and the well-versed reader overwhelmed and torn.

Therefore, in order to enhance the reader's understanding of the terminologies presented in this thesis, this chapter is dedicated to the explicit clarification of terminologies, so as to avoid any misunderstanding due to ambiguity or double-meanings of the terms discussed. More specifically, this chapter provides the generic definition of each term, as well as the specific definition of each term in the context of this research; furthermore, definitional ambiguities surrounding each term are addressed, and finally, the manner in which each term will be used in this thesis is stated.

Field

Definition

According to *Oxford Dictionaries Online* (2012), a 'field' is "a particular branch of study or sphere of activity or interest" (para. 2). More specifically, "a field is a combination of [academic] disciplines *and* professions. A field has disciplinarians and professionals each fulfilling different important roles while working toward common

goals" (Corbin, 1991, p. 86). A visual depiction of a field incorporating both an academic discipline and a profession is provided in Figure 2.

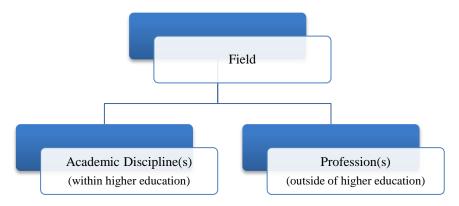


Figure 2. Depiction of a field.

Definition in Context

This research pertains to the field of physical education/kinesiology. Physical education/kinesiology is not considered to be solely an academic discipline, nor solely a profession, but rather a field involving both an academic discipline(s) within higher education and profession(s) outside of higher education (Corbin, 1993). Figure 3 depicts the basic concept of physical education/kinesiology as a field.

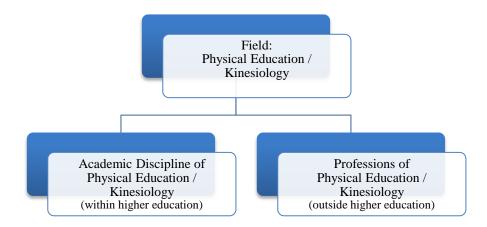


Figure 3. Basic depiction of physical education/kinesiology as a field.

Figure 4 depicts a detailed (although not all-inclusive) concept of physical education/kinesiology as a field.

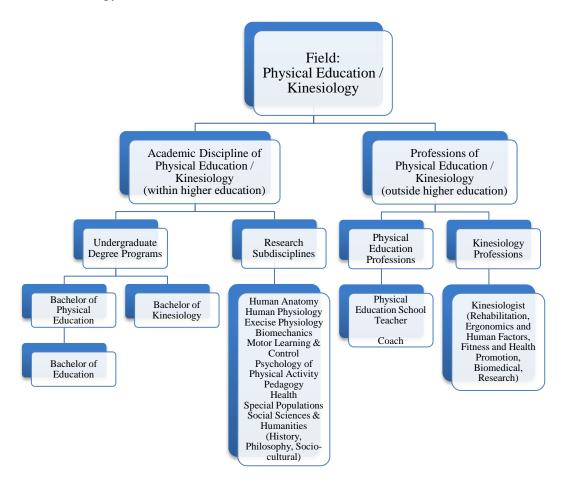


Figure 4. Detailed depiction of physical education/kinesiology as a field.

Definitional Ambiguity

First, within this literature the word 'field' has often been used, without notice, to refer to only the academic discipline within higher education (i.e. the institutional portion of the field), *or* the professional practice existing outside of higher education (i.e. the professional portion of the field), rather than the entire domain involving both.

Second, there is literature that suggests a division of the field as it appears in Figure 3 and 4. In particular, some argue that physical education and kinesiology are, or should be, separate fields; and that physical education is, or should be, within the purview

of the field of education (Katch, 1990; Locke, 1990; Siedentop, 1990a). Figure 5 depicts what these two separate fields might look like.

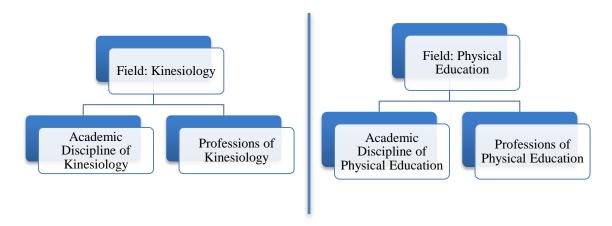


Figure 5. Depiction of kinesiology and physical education as separate fields.

Definitional Use in This Research

The use of the word 'field' in this thesis will refer to the broad and "inclusive" view of the field as involving both physical education and kinesiology academic disciplines and professions, as seen in Figure 3 (Corbin, 1991, p. 224).

Academic Discipline

Definition

Oxford Dictionaries Online (2012) defines an 'academic discipline' as "a branch of knowledge, typically one studied in higher education" (para. 2). An academic discipline in higher education, and its body of knowledge, can be conceptualized as having two components: (a) the *undergraduate degree programs* where faculty deliver content knowledge and students learn content knowledge, and (b) the *research sub-disciplines* where faculty members (disciplinarians) produce new content knowledge through research.

An academic discipline plays an important role in a field because this is where the future professionals of a field are educated, and where the disciplinarians develop new knowledge intended to aid the professionals' delivery of a social service in that field (Corbin, 1993). Disciplinarians are considered to be authorities in the academic discipline's body of knowledge in general, and are usually considered to be experts within a particular subarea of that body of knowledge (Corbin, 1993).

Definition in Context

This research pertains to the academic discipline of physical education/kinesiology, which is conceptualized as having two components: undergraduate degree programs, and research sub-disciplines.

Undergraduate degree programs. There are two major undergraduate degrees granted in the academic discipline of physical education/kinesiology: the bachelor's degree of physical education (i.e., B.Ph.Ed, B.Phe, B.PE, B.Ph.Ed-B.Ed), and the bachelor's degree of kinesiology (i.e., B.Kin, B.K, B.ScKin).

Research sub-disciplines. There are many research sub-disciplines within the academic discipline of physical education/kinesiology, some of which include: human anatomy, human physiology, exercise physiology, biomechanics, motor learning and control, psychology of physical activity, pedagogy, health, special populations, and social sciences and humanities (history, philosophy, socio-cultural) (Canadian Council of University Physical Education and Kinesiology Administrators [CCUPEKA], n.d.).

Definitional Ambiguity

Much of the literature on this topic employs the word 'discipline', or words 'academic discipline', without defining what is meant by these terms. Often times, these

words are used to refer to only the research occurring within the research sub-disciplines in field, and not to the teaching and learning occurring in the undergraduate degree programs.

Definitional Use in This Research

First, the use of the term 'academic discipline' in this thesis will refer to both the undergraduate degree programs and research sub-disciplines. Second, the use of the term 'undergraduate degree programs' will refer to both the bachelor of physical education and the bachelor of kinesiology. Lastly, the use of the term 'research sub-disciplines' will refer to disciplinarians and their research in the various sub-disciplines, some of which include: human anatomy, human physiology, exercise physiology, biomechanics, motor learning and control, psychology of physical activity, pedagogy, health, special populations, and social sciences and humanities (history, philosophy, socio-cultural) (CCUPEKA, n.d.).

Profession

Definition

The *Oxford Dictionaries Online* (2012) defines a 'profession' as "a paid occupation, especially one that involves prolonged training and a formal qualification" (para. 1).

Definition in Context

There are multiple physical education/kinesiology professions. Some of the professions falling under physical education include physical education schoolteachers and coaches. Some of the professions falling under kinesiology include becoming a kinesiologist in such areas as rehabilitation, ergonomics and human factors, fitness and

health promotion, biomedical applications, or research (Canadian Kinesiology Association [CKA], n.d.).

Definitional Ambiguity

Historically, this field had only one profession: physical education teachers in K-12 schools (and later, and to a smaller degree, coaching). Due to this historical precedent, and the relatively new status of the kinesiologist profession, much of the literature has, and often still does, use the word 'profession' in sole reference to teachers of physical education in K-12 schools.

Definitional Use in This Research

In this thesis, unless a particular profession is being referenced, the term 'professions' will be used to refer to all of the field's professions.

K-12 School Physical Education

Definition

The Oxford Dictionaries Online (2012) defines 'physical education' as "instruction in physical exercise and games, especially in schools" (para. 1). The Merriam-Webster.com (2012) defines physical education 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" (para. 1).

Definitional Ambiguity

The above definitions largely focus on the subject matter of what is instructed in school physical education. However, this subject matter has, and will continue to, evolve considerably over the years.

Definitional Use in This Research

For the purposes of this thesis, when 'K-12 school physical education' is referred to, it is in reference to the instruction of physical and health literacy as a school subject in both elementary and secondary schools, rather than the particular activities of the subject matter (e.g., games, gymnastics, etc.).

Higher Education Physical Education

Definition

The academic discipline of 'higher education physical education' includes the physical education undergraduate degree program and physical education-related research sub-disciplines.

Physical education undergraduate degree program. The undergraduate degree program offered within physical education is the bachelor of physical education (i.e., B.Ph.Ed, B.Phe, B.PE). This degree is often followed by, or is offered concurrently with, a bachelor of education (i.e., the professional licensure necessary to be a teacher in the school system).

Physical education research sub-discipline(s). According to the CCUPEKA (n.d.), the research sub-disciplines falling within the purview of physical education include pedagogy, health, and special populations. Furthermore, the following research sub-disciplines fall within the shared purview of physical education and kinesiology: human anatomy, human physiology, exercise physiology, biomechanics, motor learning and control, psychology of physical activity, social sciences and humanities (history, philosophy, socio-cultural). Figure 6 outlines the CCUPEKA research sub-disciplines.

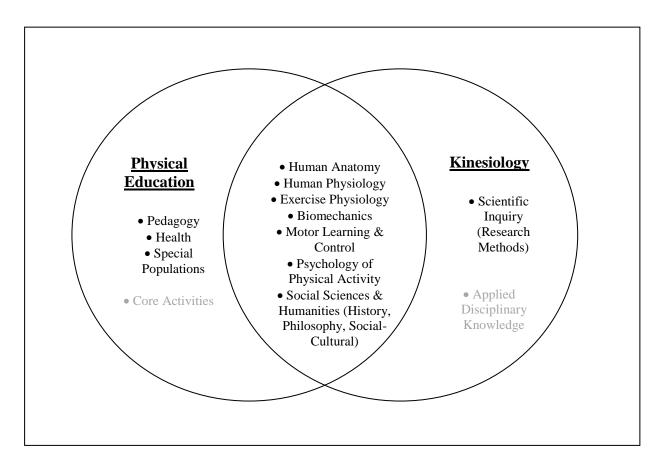


Figure 6. CCUPEKA's organization of the discipline's research sub-disciplines.

Definitional Ambiguities

Before the advent and popularity of the term 'kinesiology', the academic discipline in higher education was referred to as 'physical education', as it was the sole, or primary, focus of the academic discipline at the time. Although physical education is no longer the sole or primary focus of the academic discipline, some continue to use the term to refer to the entire academic discipline, including the kinesiology content.

The advent of the term 'kinesiology' as a label for that which is *not* physical education, has allowed for the term 'higher education physical education' to more clearly denote a singular focus on the subject matter of K-12 school physical education, and the

training of future K-12 school physical education teachers, in a higher education institution.

Definitional Use in This Research

The use of the term 'higher education physical education' in this research will refer to the undergraduate bachelor's degree of physical education, and the research sub-disciplines of pedagogy, health, special populations human anatomy, human physiology, exercise physiology, biomechanics, motor learning and control, psychology of physical activity, social sciences and humanities (history, philosophy, socio-cultural).

Higher Education Kinesiology

Definition

The Oxford Dictionaries Online (2012) defines 'kinesiology' as "the study of the mechanics of body movements" (para. 1). The use of the words "the study of" suggests there is only an academic (i.e. within higher education), not professional (i.e. outside higher education), application of kinesiology. The CCUPEKA (n.d.) provides a definition that corroborates the view of kinesiology as an entity of higher education only, stating "Kinesiology is the study of human movement and factors which effect and affect such movement. It encompasses the study of human movement along a continuum, which ranges from cell structure and function to the place of human movement in the social context" (para. 5). Lastly, the American Kinesiology Association (2010) most explicitly defines kinesiology as an "academic discipline which involves the study of physical activity and its impact on health, human performance, society and quality of life" (para. 2).

Kinesiology undergraduate degree programs. The undergraduate degree program offered within kinesiology is the bachelor of kinesiology (i.e., B.Kin, B.K, B.Sc.Kin).

Kinesiology research sub-disciplines. According to the CCUPEKA (n.d.), the research sub-discipline falling within the exclusive purview of kinesiology is scientific inquiry (research methods). Furthermore, the following research sub-disciplines fall within the shared purview of both physical education and kinesiology: human anatomy, human physiology, exercise physiology, biomechanics, motor learning and control, psychology of physical activity, social sciences and humanities (history, philosophy, socio-cultural).

Definitional Ambiguities

Umbrella term. The term 'kinesiology' has often been used as an umbrella term to refer to the entire academic discipline of this field, including physical education (Newell, 1990b). At present, it appears that much of North America has begun to accept 'kinesiology' as an umbrella term, although it is still a contentious issue and not without controversy.

Definition-through-opposition. In contrast to the use of 'kinesiology' as an umbrella term for *all* content within the academic discipline, the term 'kinesiology' has also been used to define all content within the academic discipline that is *not* physical education (Lawson, 2007). In other words, the term 'kinesiology' has often been defined through juxtaposition to physical education.

Kinesiology as a profession outside of higher education. Kinesiology also exists as profession outside of higher education, and has been growing over the past

several years (Elliot, 2007). Within the Canadian context there have even been lobbies to establish a professional certification process for the kinesiology profession (Elliot, 2007). However, what officially constitutes kinesiology as a profession remains somewhat uncertain. The CCUPEKA (n.d.) states that due to "the great variety of applications and specialties found in the study of human movement, it has been difficult in the past to identify what a kinesiologist should know and do" (para. 5). Contrastingly, the CKA appears certain in its statement that kinesiology exists as a career in such areas as: rehabilitation, ergonomics and human factors, fitness and health promotion, biomedical applications, and research (CKA, n.d.).

Definitional Use in This Research

First, when the term 'kinesiology', or 'higher education kinesiology', is referred to in this thesis it will refer to the undergraduate bachelor's degree of kinesiology and the research sub-disciplines of scientific inquiry (research methods), human anatomy, human physiology, exercise physiology, biomechanics, motor learning and control, psychology of physical activity, social sciences and humanities (history, philosophy, socio-cultural). Second, when the term 'kinesiology as a profession', or 'kinesiologist' is used, it will refer very generally to all the possible career paths of a kinesiologist, including: rehabilitation, ergonomics and human factors, fitness and health promotion, biomedical applications, and research.

Relevant Organizations and Acronyms

Canadian Organizations

 CCUPEKA—The Canadian Council for University Physical Education and Kinesiology Administrators

- CKA—Canadian Kinesiology Association
- PHE Canada—Physical and Health Education Canada
- OKA—Ontario Kinesiology Association

American Organizations

- AAHPERD—American Alliance for Health, Physical Education, Recreation and Dance
- AKA—American Kinesiology Association
- NAK—National Association for Kinesiology
- NAKHE—National Association for Kinesiology in Higher Education

CHAPTER THREE: OVERVIEW OF LITERATURE

This chapter reviews the *context* of the literature on the future of higher education physical education, so that the reader may better understand the *content* of the literature (to be reviewed in chapter 4). As the reader will likely discern by the end of this chapter, in order to accurately understand the content of this literature, it is important to understand the unique context of this literature's methods, geography, timeline, authorship, criteria for publication, and lastly, its tone and modus operandi.

Content and Methods

This section pertains to the categories of content, as well as the methodological types, of literature on this topic.

Content

This literature includes content on the *future* and *issues* within higher education physical education. More specifically, the literature falls into three content categories:

- 1. literature discussing an/the issue(s) (with no content on the future)
- 2. literature discussing an/the issue(s) as well as the future
- 3. literature discussing the future as well as an/the issue(s)

Methods

The overwhelming majority of the literature on this topic is conceptual research, whereas very little is empirical research.

Figure 7 outlines the ratio between conceptual and empirical research on this topic, as well as the particular type or format of literature produced. (Note: Figure 7 was generated with approximate data, and is meant to provide the reader with a relative, not absolute, sense of the literature's distribution).

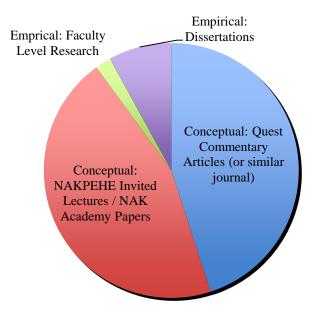


Figure 7. Literature on the issues and future of the academic discipline.

Empirical. Empirical research on the future of higher education physical education is extremely limited (Kirk, 2010). Only eight relevant empirical studies were discovered; only one of which is faculty level research, while the remaining seven are doctoral dissertations.

Even less empirical research has been conducted on the issues surrounding higher education physical education; only three empirical studies were discovered.

Conceptual. As discussed, the majority of literature on the issues and future of higher education physical education is conceptual. Listed, in descending order of quantity, are the types of conceptual work comprising this body of literature: *Quest* commentary articles, NAKHE invited keynote lectures published in *Quest*, NAK Academy Papers published in *Quest*, and lastly, books and anthologies.

Quest commentary articles. Quest is the journal of NAKHE. Quest does not publish empirical research, but instead publishes conceptual and theoretical work (NAKHE, n.d.). In Quest, authors write, often through single-authorship, their personal

"opinions, perspectives and insights" concerning the issues and future of the field (Ishee, 2003, p. 4).

NAKHE invited lectures and NAK academy papers published in Quest. The NAKHE lectures are given at the annual NAKHE conference, and include the Amy Morris Homans, Dudley Allen Sargent, and Delphine Hanna commemorative lectures. These lectures are "invited presentations given by a notable scholar" from higher education physical education/kinesiology and are "reproduced in *Quest* as a significant historical document" (NAKHE, n.d., para. 1). As these lectures are hosted by NAKHE, which considers "itself a future-oriented professional organization with a specialist Future Directions Committee," it is no wonder these lectures have contributed so greatly to the literature on this topic (Kirk, 2010, p. 24).

To illustrate the nature of these conferences, Table 1 lists the NAKHE conference themes over the past five years.

Table 1. NAKHE Conference Themes for the Past Five Years

Year	Theme
2011	The quest for significance: A dialogue on professional impact
2010	Good to great: Success stories in Kinesiology and Physical Education
2009	History to horizons: Understanding our past while constructing our future
2008	Developing leadership for the profession
2007	Leadership for the future of higher education

To illustrate the nature of the lectures in Table 1, Table 2 lists examples of some of the NAKHE commemorative lectures that have contributed to the literature on this topic.

Table 2. Examples of NAKHE Commemorative Lecture Topics.

Commemorative lecture	Year	Author	Title
Dudley Allen Sargent	2009	Jimmy H. Ishee	The time is now and always has been: A mindset for the future
Delphine Hanna	2009	John M. Dunn	The times are a changing: Implications for Kinesiology
Amy Morris Homans	1990	Ann E. Jewett	Tomorrow, tomorrow On the optimistic side of pessimism

The NAK Academy papers are "a printed compilation of presentations given at the NAK annual meeting" and published in a special issue of *Quest* (NAK, n.d.). The NAK considers the Academy Papers to provide "comprehensive coverage of current topics and contributions from the foremost scholars in the field", and therefore it is no surprise that these papers are a significant source of contribution to the literature on this topic (NAK, n.d.).

To illustrate the nature of the NAK meetings, Table 3 lists the themes of the meetings from the past five years.

Table 3. Themes of NAK Meetings for the Past Five Years

Year	Theme
2011	Kinesiology research: Its impact on society
2010	Kinesiology within the academy: Thriving and surviving
2009	Advancing research in kinesiology
2008	Kinesiology into the 21 st century
2007	Kinesiology: Defining the core of our discipline

To illustrate the nature and content of the NAK Academy Papers, Table 4 lists examples of some of the NAK Academy Paper titles that have contributed to this literature.

Table 4. Examples of NAK Academy Paper Titles

Year	Author	Title
2010	Catherine D. Ennis	New directions in undergraduate and graduate education in Kinesiology and Physical Education
2008	David L. Andrews	Kinesiology's inconvenient truth and the Physical Cultural Studies imperative
2007	Michael G. Wade	Quo Vadis Kinesiology

Books and anthologies. Books and anthologies on this topic are few in number, and hence constitute the smallest portion of the conceptual literature on this topic.

Over the past four decades, only four books and anthologies relevant to the future of higher education physical education have been published; including Welsh's (1977) *Physical Education: A View Toward the Future*; Massengale's (1987) *Trends Toward the Future in Physical Education*; Laker's (2003) *The Future of Physical Education: Building a New Pedagogy*; and Kirk's (2010) *Physical Education Futures*.

Although there are few books on this topic, each offers a very comprehensive view of the future of higher education physical education.

Geographical Context

This section pertains to the geographical context in which this literature has been, and is being, produced. As previously discussed, the majority of literature on this topic is published in the American journal *Quest*. Although the majority of this literature is

published in an American journal, and by authors affiliated with American institutions, these issues are not exclusively American (Lawson, 2007). Kirk (2010) explains:

The fact that the USA has a forum in the fora of the NAKPEHE [NAKHE] and the AAKPE [NAK], and a conduit in the form of the journal *Quest* to facilitate discussion around the configuration of the field in higher education may explain in part why the conversations have been centered there. It may also be a consequence that the trend toward academization and disciplinarity was initiated in the USA. And physical education was firmly established in the university sector in the USA long before it found a place in universities in Britain and Australia. The important point to note ... is that the issues debated, predominately in the USA are indeed global, with again, similarities more prominent than local differences. (p. 34)

Although there has not been discussion of a similar magnitude outside of the United States, some international literature has been produced, from locations such as the United Kingdom (Kirk, 2010), Germany (Crum, 1996), Croatia (Custonja, Milanovic, & Sporis, 2011), France (Collinet & Terral, 2007); Australia and New Zealand (Penney & Chandler, 2000; Tinning, 2000), Brazil (Filho, 2000), and Canada (Elliot, 2007; Forbes & Livingston, 2012; Lathrop & Murray, 1998; Melnychuk et al., 2011).

Chronology of Publication

This section pertains to the publication timeline of literature on the issues and future of higher education physical education. This section chronicles only important historical highlights in the *literature*, while a timeline of important historical events is presented in Chapter 4.

In 1964, Franklin M. Henry, a professor at the University of California, published an article entitled "Physical Education: An Academic Discipline", which has since been considered a seminal work in this body of literature. In his article, Henry addressed the issues of the field and the need to establish a formal academic discipline of physical education in higher education in order for the subject area to maintain its place in the university. Henry's (1964) article is considered by many to be a response to the post-1950s political-intellectual climate that spurred a reformist movement in education to emphasize science (Siedentop, 2009; Tweitmeyer, 2012). During this time, school and higher education physical education came under considerable criticism. A notable critic was James Bryant Conant, a former Harvard president, and a leader in the American educational reform movement, whose 1959 and 1964 publications strongly criticized physical education as lacking the academic substance to justify a place in the education system, at either the school or university level (Tweitmeyer, 2012). Today, the work of Conant (1959, 1964) and Henry (1964) are considered to be landmarks in the literature on this topic, and to have sparked other academics' interest in the topic (Kirk, 2010).

After 1964, those within higher education physical education began to build the academic discipline by conducting more research and specializing into research sub-disciplines. This development also meant the building of the literature on the issues and future of the academic discipline. However, as Massengale (1987) has asserted, there is clearly no priority to research on this topic, and the contributions have been sporadic. The most consistent contribution has been the establishment of the annual NAKHE lectures, including the Amy Morris Homans lecture in 1967, the Dudley Allen Sargent lecture in 1980, and the Delphine Hanna lecture in 1992; as well as the NAK Academy Papers in

1967. However, it is important to note that these lectures and papers do not always pertain to this topic.

A deviation from the typical output of literature on this topic was during the late 1980s and early 1990s. At this time, literature on the future and issues of higher education physical education appeared to be at an all-time high. Many important works were published, notably Massengale's (1987) book, and the "Newell epic" (Newell 1990a, 1990b, 1990c). There are a variety of explanations as to why there was a surge in the output of the literature at this time, including: the "identity crisis" higher education physical education faced in the 1980s (to be discussed further in chapter 4); the nearing of the 100-year mark of the profession of physical education (i.e., 1890-1990); the increasing acceptance of futures research as a scholarly endeavor; and an increase in the collective interest of the future due to the nearing of the new millennium (Corbin, 1993).

As for the temporality of which-conflict-was-discussed-when, it is important to note that, as mentioned in chapter 1, the conflicts of the field are interrelated and therefore are often discussed simultaneously in the literature. That being said, depending on the temporal context and historic events at a particular time, at times some conflicts have been discussed more prominently than others (this will be discussed explicitly in chapter 4).

Authorship

This section pertains to the characteristics of the authors who are producing the literature on this topic.

Authorship across Research Sub-disciplines

As discussed previously in chapter 2, few academics hold this topic as a primary research interest, meaning there are few regular contributors to this literature, and many more sporadic contributors. But perhaps what is most significant about these contributors is that they are researchers from across the various research sub-disciplines. Due to the highly specialized nature of research at present-day, contribution from across multiple research sub-disciplines to a single topic is atypical in any field. Authorship from across the research sub-disciplines of physical education/kinesiology is particularly significant as it is an exceptionally broad academic discipline due to its horizontal orientation (to be discussed further in chapter 4), as opposed to the vertical orientation of most traditional disciplines (Lawson & Morford, 1979). For example, in the traditional academic discipline of mathematics, the research sub-disciplines are vertically oriented, and are all categorized as falling within the natural sciences. In contrast, the academic discipline of physical education/kinesiology is horizontally oriented, and includes research subdisciplines that fall within the natural sciences (i.e., biomechanics) as well as the social sciences (i.e., pedagogy). The implication of authorship from across horizontally oriented research sub-disciplines to a single topic is that contributors from the natural sciences, and contributors from the social sciences, likely come from very different ontological, epistemological, and axiological perspectives; some of which are fundamentally antithetical to one another. The consequences of "scientists, pedagogists, artists and management and humanities scholars" all discussing the same issue, is that it predisposes discussion on the topic to include more disagreements and to be more controversial (Block & Estes, 2011, p. 189). Vertinsky (2009) explains that the research sub-disciplines of physical education/kinesiology have "quite distinct cultures, organizational values, and professional associations. The result has often been a heady mix of scholarly alienation and disciplinary nationalism that has shaped the questions asked and the ways in which they were asked" (p. 41).

Enlightened Self-Interest

Kirk (2010) suggests that some authors may be motivated to contribute to this body of literature because the topic and its outcome have a direct effect on them professionally. Kirk (2010) describes this motivation for contribution as acts of "enlightened self-interested" (p. 40).

Publication Criteria

The type, quality, and amount of literature produced on the future of higher education physical education is impacted by the previously mentioned fact that few academics hold this topic as a primary research interest. Academics may not wish to invest time and energy into this topic because it is not a strategic choice for a successful academic career (Lawrence, 2008). To be specific, one of the dominant values impressed upon doctoral students and junior faculty as they are socialized into the world of academe is the importance of publication in the evaluation of their performance (Hellison, 1992; Lawrence, 2008). Not only must academics "publish or perish" (Wilson, 1942, p. 197), they must publish in prestigious journals with high impact factors in order to achieve "most things that matter", read: publication, employment, promotion, tenure, grants, and recognition (Lawrence, 2008, p. 1). Unfortunately, the future of higher education physical education is not a topic that lends itself to many opportunities for prestigious publication. Andrews (2008) shares a personal vignette that poignantly captures this reality:

I was a PhD student at Illinois when we were introduced to the "Newell epic... I can vividly remember that the cohort of graduate students of which I was a part was entirely convinced, and indeed enthused, by Newell's argument. Conversely, I did not feel that the faculty, or should I say some of the faculty, were in any way stirred by it; discussions of the future of kinesiology were apparently not worthy of drawing them away from what we perceived to be their self-aggrandizing research endeavors. Having scorned the faculty for their egomaniacal attitude, on graduation and matriculation into the tenure track regimen—and I suspect like the rest of my cohort—I soon lost my concern for the future of the field, and retreated to my own self-aggrandizing pursuits. The existential relief created by tenure, promotion, and doubtless membership of the Academy has encouraged me to reengage my collective conscience regarding the state and fate of kinesiology in general. Thus, I must confess, I awoke from 13 years of (self- and systemically induced) relative kinesiological slumber... (p. 46)

Tone and Modus Operandi

Tone

Due to the fact that the topic of this literature is about the career and life work of its authors, the voices of the authors are often present in the (conceptual) literature, and the tone of which is often highly personal. For example, the transcribed NAKHE lectures and NAK papers have been "accused of sounding like AAHPERD Convention hallway conversations" (Hellison, 1992, p. 399). Dudley Allen Sargent lecturer Don Hellison says he "plead[s] guilty to this charge"; he explains:

I am an integral part of what I am writing about; I cannot distance myself from it... I could of course change the language so that it would sound more objective and scientific, but that would only be an effort (feeble at best) to fool the reader. (p. 399)

Modus Operandi

Far from merely academic. A prevalent characteristic of the literature on this topic is that it is "far from merely academic" (Kirk, 2010, p. 34). Consider the "Newell Epic" as a notable example (Andrews, 2008, p. 46). Karl Newell published three articles in a 1990 edition of *Quest*, entitled "Kinesiology: The Label for the Study of Physical Activity in Higher Education"; "Physical Activity, Knowledge Types, and Degree Programs"; and "Physical Education in Higher Education: Chaos Out of Order." The numerous responses to Newell's articles were immediate, polarized, and often highly personal. A review of the titles of these reaction articles alone provides a sense of the literary battle. Examples of those vehemently disagreeing with Newell include: Locke's (1990) "Commentary: Conjuring Kinesiology and Other Political Parlour Tricks"; and Siedentop's (1990a) "Commentary: The World According to Newell". Whereas, those in support of Newell offer equally provocative titles, such as Spirduso's (1990) "Commentary: The Newell Epic—A Case for Academic Sanity." Interestingly, the argument did not end there; Newell responded timely with his (1990c) "Kinesiology: Further Commentary on the Field of Study." Yet again, reaction articles were published, including Corbin's (1991) article entitled "Further Reactions to Newell: Becoming a Field Is More Than Saying We Are One." Each of these articles is littered with strongly

worded comments, sometimes reaching far beyond academic discussion and directed at the authors as individuals.

Locke (1990) likens this back-and-forth debate to "rounds" of a boxing match; he wonders as to "when the readers will cry out, 'Enough already!'" (p. 323). Locke (1990) appears displeased about what he describes as an ongoing debate in which "there is little new in the tired litany... [and] the ripostes inevitably seem anything but fresh" (p. 323).

Mobilization of bias. Another common characteristic of the literature on this topic is the authors' implicit or explicit promotion and defense of their own interests (Newell, 1990). As Locke (1990) points out, "perceptive readers will detect there is a not very hidden agenda in all this... though never explicit, the power to control curricular turf is often the ultimate target" of much of this literature (p. 324). As previously mentioned in the discussion of the 'Newell epic' and its reaction articles, authors commonly identify each other by name in their articles, and write at length about their perceptions of one another's hidden agendas and bias.

Important Considerations for the Reader

In conclusion, there are a number of important considerations the reader should be mindful of when interpreting the literature on this topic. First, the majority of this literature is conceptual, and the presence of opinion, rather than objectivity, is common. Second, although the majority of the literature is written by American authors affiliated with American institutions it can still be understood to have truth within many international contexts. Third, the interest in, and contribution to the literature began in the late 1950s and 60s and has since been sporadic. This topic is not considered to be a priority among researchers within this academic discipline, and is often only produced

when the author comes to experience the conflicts firsthand. Fourth, this literature has been written by a diverse authorship of both social and natural science academics whose identities and philosophies are often not aligned, but rather in competition. Furthermore, many authors contribute to this literature not out of expertise or research interest in the sociology of higher education, but rather out of self-interest due to the profound impact the subject matter has on them professionally. Fifth, there is likely valuable insight on this topic that goes un-published as academics are not willing, or able, to spend time on a topic that does not lead to prestigious publication. Lastly, much of this literature is characterized by: the presence of the authors' voices and use of personal tone; debate between authors moving beyond the academic, and into the personal, realm; and lastly the authors' implicit and explicit mobilization of bias and agenda.

CHAPTER FOUR: REVIEW OF LITERATURE

"There is a tendency on the part of those who are engaged in professional tasks to forget the past, concentrate on the present, and dabble in the future. The tendency to forget or pass over what has gone before, and yes, even to reject problems of the present is commonplace. And yet the answer to many of the problems of the present is to be found in a better knowledge and understanding of the past. We must use the knowledge of the past history of physical education to understand the development in the present, while we constantly should contemplate the needs of the future in terms of what is happening in the present"

-Hart Devenney, Past PHE Canada President (Guerney, 1983, p.ix)

The purpose of this chapter is to provide the reader with a review of the literature on the future of higher education physical education. More specifically, this review aims to provide important historical context of the past, the core and secondary issues of the present, as well as hypothesized projections for the future.

The Past

"A thorough understanding of past experience is one of the most valuable tools when attempting to forecast the future" (Massengale, 1988, p. 111)

In the vein of the old adage: 'one cannot know where they are going, if they do not know where they have been', this section briefly reviews important historical events that have shaped the present landscape of higher education physical education/kinesiology. More specifically, a timeline of relevant Canadian and American events and literature trends from the 1800s to present day is included in Table 5.

Following Table 5, a narrative elaboration of how these events influenced the development of the conflicts within higher education physical education/kinesiology is provided. However, the entire history and development of physical education in these two nations cannot be done justice in this brief review, instead important contextual highlights are provided.

Justification for the inclusion of both Canadian and American historical events comes from conclusions such as Van Vliet's (1965) assertion that "Canada has been, is, and will continue to be influenced in the development of its physical education program by American developments" (p. 99). More specifically, Guerney (1983) explains that because the United States had physical education teacher training programs fifty years before Canada; many of the first Canadian physical educators were graduates of American programs, and thereby largely influenced the Canadian physical education context. Furthermore, the events listed in Table 5 have been widely reported in the literature (Canadian, American, and international) as critical in the development of the core and secondary issues of higher education physical education worldwide.

Table 5. Historical Events in the Development of the Academic Discipline's Issues

Historical Events

- 1825 US Charles Beck is the first teacher of physical education in the United States (Massachusetts) (Siedentop, 2009)
- **1846** CA Ontario's first superintendent of Education, Egerton Ryerson, recommends the inclusion of physical training in schools, following international trips to the United States and Europe (Van Vliet, 1965)
- **1847** CA Toronto Normal School is established for the training of teachers, including the teaching of physical training and hygiene. Similar institutions are developed elsewhere in Canada shortly thereafter (Cosentino & Howell, 1971)
- **1851** US The first YMCA is established in Boston, following an earlier YMCA movement in England in 1844 devoted to character education and physical activity (Siedentop, 2009)
- **1860** US *Establishment of higher education physical education programs in the United States*. First collegiate physical education and hygiene program at Amherst College (Massachusetts) (Amherst College, 2011)
- **1861** US First Hygiene and Physical Culture department at Amherst College (Massachusetts) (Siedentop, 2009)
- 1865 CA The Canadian government offers a grant to every school conducting drill and gymnastics (Van Vliet, 1965)
- 1861 US Boston Normal Institute for Physical Education founded by Dio Lewis (Siedentop, 2009)
- **1866** US First state legislation requiring physical education in schools passed in California (Siedentop, 2009)

- **1881** US YMCA Training School for physical education teachers started at Springfield College (Massachusetts) (Siedentop, 2009)
- **1885** US *Establishment of the profession of physical education*. Adelphi Conference held; Association for the Advancement of Physical Education formed (New York) (Siedentop, 2009)
- 1885 US Professional physical education program at Oberlin College started by Delphine Hanna (Ohio) (Siedentop, 2009)
- 1888 US First physical education department organization at the University of California (Park, 2009)
- 1891 US Physical education recognized as a curricular field by the National Education Association (Siedentop, 2009)
- **1892** CA A government regulation making physical education and gymnastics compulsory in Canadian schools is enacted (Van Vliet, 1965)
- **1897** US *Establishment of physical education degree-granting programs in the United States*. First major unit in physical education for men and women at the University of California (Park, 2009)
- **1900** CA The University of Toronto offers a three-year diploma program in gymnastics and physical drill (Cosentino & Howell, 1971)
- **1901** US *Establishment of physical education graduate degrees in the United States*. First master's degree program in physical education started at Teachers College (Columbia University, New York) (Siedentop, 2009)

- **1901** CA The School of Expression at The Margaret Eaton School is established, and includes the objective of the promotion of physical education (Toronto, Canada) (Van Vliet, 1965)
- 1904 US Luther Halsey Gulick creates the Academy of Physical Education (to later become the National Academy of Kinesiology) (NAK, n.d.)
- **1908** CA The Strathcona Trust Fund is established to "support the preparation of teachers of military drill and physical training throughout" Canada (Forbes & Livingston, 2012, p. 64)
- 1911 CA McGill University offers a four-week summer school for physical education professional preparation (Forbes & Livingston, 2012, p. 64)
- 1924 US First doctoral programs in physical education offered by Teachers College (Columbia University) and New York
 University (New York) (Siedentop, 2009)
- 1930 US Research Quarterly journal is first published by Education Association (Siedentop, 2009)
- 1930 US Journal of Health and Physical Education first published (Siedentop, 2009)
- 1933 CA Canadian Physical Education Association (to later become CAHPER(D), and then PHE Canada) formed by Dr.

 Arthur S. Lamb of McGill University and Florence Somers of the Margaret Eaton School (at a meeting at the Margaret Eaton School at the University of Toronto) (Guerney, 1983)

- **1940** CA *Establishment of physical education undergraduate degree programs in Canada*. First Bachelor of Physical (and Health) Education degree program offered in Canada at The University of Toronto (Van Vliet, 1965)
- 1943 US The Physical Educator journal is published (Siedentop, 2009)
- 1943 CA National Physical Fitness Act passed by Canadian Federal Government (Van Vliet, 1965). This act "conveyed the notion that physical fitness was vital part of daily life and provided the impetus for physical education as a field to grow... including new university degree programs with a primary focus on the preparation of elementary and high school teachers" (Forbes & Livingston, 2012, p. 67)

The 1950s "*The Professional Years*" (Corbin, 1993, p. 79)

- 1954 CA & US Kraus-Weber report that North American children fared significantly worse in fitness testing than European children (Forbes & Livingston, 2012)
- **1957** The unanticipated Russian launch of Sputnik (Siedentop, 2009)
- Post-1950s Educational Reform Movement (Siedentop, 2009)
- **1959** CA *Establishment of physical education graduate degree programs in Canada*. First master's programs in physical education offered at the University of British Columbia (Glassford, 1992, p. 15)

- 1959 CA The Duke of Edinburgh addresses the Canadian Medical Association concerning the "poor results of the Kraus-Weber tests of fitness for North American youth" (Forbes & Livingston, 2012, p. 67)
- US James Bryant Conant publishes *The American High School* in which he criticizes school physical education **The 1960s** *Critique and Change* (Corbin, 1993)
- 1961 CA Bill C-131 An Act to Encourage Fitness and Amateur Sport is enacted. "The act stimulated the growth of new university degree programs across [Canada], provided funds for research, and provided bursaries and fellowships for the academic preparation of the university professoriate" (Forbes & Livingston, 2012, p. 68)
- US The Fisher Act is passed, requiring all departments in state universities to have an academic base or face elimination (Siedentop, 1990)
- US James Bryant Conant publishes *The Education of American Teachers* in which he criticizes higher education physical education programs
- **1964** US Franklin M. Henry's publishes *Physical Education: An academic discipline* which is widely discussed and debated at the time, and has since been considered a seminal work in this body of literature
- The formal establishment of the academic discipline of physical education (Corbin, 1993; Siedentop, 2009)

- **1966** US Big Ten Western Conference Meeting: organized the academic discipline into six specific areas of specialization: exercise physiology; biomechanics; motor learning and sports psychology; history, philosophy, and comparative physical education and sport; and administrative theory (Ziegler, 1967)
- 1967 CA First doctoral programs in physical education in Canada offered at the University of Alberta (Glassford, 1992)
- **1967** CA The world's first Bachelor of Kinesiology degree program is offered at Simon Fraser University and University of Waterloo (Elliot, 2007)
- 1967 US NAK establishes The Academy Papers (NAK, n.d.)
- 1967 US NAKHE establishes Amy Morris Homans Commemorative Lecture (NAKHE, n.d.)
- **1960s Trends in the literature:** Discussion of the need for, and development of, an academic discipline of physical education
- **The 1970s** "*The disciplinary years*" (Corbin, 1993, p. 84)
- **1971** CA The Canadian Association of Deans and Directors of Faculties, Schools and Departments of Physical Education is founded (i.e. to become CCUPEKA in 1995) (CCUPEKA, n.d.)
- **1972** US Title IX is passed, providing females with equal access to sport, fitness and physical education opportunities (Siedentop, 2009)

- **1974** US One of the first articles explicitly pertaining to the study of the future of physical education is published by Hal Lawson, and is entitled "Physical education and sport: Alternatives for the future"
- **1970s Trends in the literature:** The nature of the academic discipline and its organizational framework dominates the literature; as well as discussions, predictions, and scenarios of the future of the field
- **The 1980s** "*A time of identity seeking*" (Corbin, 1993, p. 84)
- **Top-down model**: Higher education is characterized by research and graduate education at the top, and undergraduate and service programs at the bottom (Corbin, 1993)
- **Specialization**: Also known as a time of "scientization" of academia, including physical education. Grant dollars measure success, therefore the sciences succeed, while the professions fail. Curricular focus shifts to the training of sub-discipline specialists (Corbin, 1993)
- **Late 1980s** US "Name Game" over 100 different names in use for academic units of higher education physical education in the United States (Corbin, 1993, p. 85)
- **1980s Trends in the literature:** Many issues of the academic discipline are discussed, including: degree program curricula and location within the university; the name, organizational framework, and profession versus discipline conflict of the academic discipline.

The 1990s - Call for unity

- 1990 US 'Newell Epic' is published, in which Karl Newell writes about the issues of the academic discipline. Many reaction articles (both in support and disagreement) are also published (Katch, 1990; Locke, 1990; Spirduso, 1990; Siedentop, 1990)
- Mid-1990s CA & US Kinesiology is widely used as the umbrella name of the academic discipline
- 1990s Trends in the literature: There is widespread concern for the present state of the field at large (and especially for that of higher education physical education), specifically in regards to the information explosion, the modern-to-postmodern transition, and globalization. There are many calls discussing the need to strengthen the academic discipline.

The 2000s - The Great Divide

- 2000 CA CCUPEKA establishes accreditation standards for undergraduate programs in physical education and kinesiology (Livingston & Kidd, 2008)
- **2006** CA Kinesiology and Human Kinetics programs outnumber physical education programs in Canada by more than 2 to 1, with another 20% of the programs adopting a shared designation (Elliot, 2007, p. 154)
- **2007** CA Kinesiology becomes a regulated health profession in Ontario (Ontario Government, 2007)

2008 - Financial Crisis of 2007-2008

2000s Trends in the literature: Concern over physical education effectively maintaining relevance within a postmodern higher education context; significant divide between physical education and kinesiology

The 2010s - ?

Schools and universities are socially responsive institutions (Spirduso, 1993, as cited in Forbes & Livingston, 2012). Thus, social, political, and economic happenings have influenced developments in the field of physical education in identifiable ways.

1800-1850

Although physical education as we know it, "is by and large a twentieth century phenomenon" (Bookwalter & VanderZwaag, 1969, p. 44) certain "attitudes and institutions" were developing in first half of the 19th century that allowed for the later development of modern physical education (Siedentop, 2009, p. 27). For instance, the earlier exploration of, and immigration to, North America by Europeans during the Western Frontier Expansion and beyond, translated to a significant presence of European gymnastics systems in early physical education programs (Siedentop, 2009). As well, the philosophical shift from away from conservative Puritanism, and its prohibitions against exercise and play, toward Christianity, and its notion of muscular Christianity, led to the idea that "exercise and fitness were educationally important... [and] allowed physical education to become part of the school and college curriculum" (Siedentop, 2009, p. 26).

1850-1900

The second half of the 19th century is considered a "transition time between local games and institutionalized sport" (Siedentop, 2009, p. 26). Of note during this time frame is "the birth of the profession" of physical education (Siedentop, 2009, p. 25). By and large, the meeting of American medical doctors William Anderson, Edward Hitchcock, Dudley Sargent and others, at the Adelphi Academy in 1885, and their establishment of the Association for the Advancement of Physical Education, is considered pivotal in the origins of North American physical education (Siedentop,

2009). The birth of the physical education profession to medical parents is considered to have been made possible by: the previously mentioned "decline of religious opposition to sport and exercise" and European immigration to North America; as well as increasing industrialization "that produced wealth... that helped to develop sport, fitness and physical education... and created technologies for the development of facilities and equipment"; urbanization that led to the development of new activities "to meet the needs of an urban population"; the movement toward free, universal, and compulsory public education; and increasing access to higher education (Siedentop, 2009, p. 30-31).

During this time frame, physical education programs were still gymnastics-based, although there was conflict between proponents of different gymnastics systems (e.g. German, Swedish, Beecher, Dio Lewis, Hitchcock, and Sargent systems), so much so that the time frame is referred to as "the battle of the systems" (Siedentop, 2009, p. 30).

Also of note during this time period is "the emergence of organized sport" as "an increasingly industrialized [and] urbanized culture in which increasing wealth, transportation, communication, and an emerging middle class provided the framework for such developments" (Siedentop, 2009, p. 33).

1900-1945

During the pre-war years of 1900-1914, a "greater awareness for the need of physical education became evident and programs were developed in various institutions" including teacher training and diploma programs in Canada, and master's degrees in the United States (Van Vliet, 1965, p. 3). The "academic prestige" of physical education programs was "raised appreciably" as the programs began to be associated with established universities (Forbes & Livingston, 2012, p. 63).

In Canada, the content of physical education programs shifted from gymnastics systems to physical training and military drill as a result of the Strathcona Trust Fund, which provided funds to "support the preparation of teachers of military drill and physical training throughout the country" (Forbes & Livingston, 2012, p. 64). This military emphasis was "understandable given Canada's membership within the British Empire, and hence the political expectation that it be responsive to wars and threats of war" (Forbes & Livingston, 2012, p. 64).

Similarly in the United States, "new physical education" was advocated and marked the "end of the era in which gymnastics dominated the physical education curriculum" to a broader physical education (Siedentop, 2009, p. 36). Siedentop (2009) explains that "the industrial revolution of the 19th century had created a national concern about health, especially about the health of children", and therefore physical education "embraced a number of growing movements, including, dance... playgrounds, recreation, outdoor education, sport, fitness, health education, and intramurals" (p. 38).

During the First World War "enthusiasm for military drill [in school physical education] was high", and instruction on "massage", "remedial gymnastics", "physiotherapy" and "hydrotherapy" were added to university physical education programs (Cosentino & Howell, 1971, p. 36). In terms of teachers, "one of the effects of the war was the substitution of women for the non-available male teachers... undoubtedly this disparity would affect the type of physical education program to be implanted in the postwar years" (Cosentino & Howell, 1971, p. 36-37).

The 1920s was "an active period for the sport, fitness, and physical education professions" (Siedentop, 2009, p. 40). The industrial economy in North America was booming, and

A middle class was emerging. People had money and wanted diversions. National interest in sports grew at all levels. The radio and the automobile had come within the means of many people – and each was important to the growth of sport.

(Siedentop, 2009, p. 40)

In regards to school physical education, "by the end of the First World War, many people had developed an aversion to anything of a military nature" (Cosentino & Howell, 1971, p. 43). Hence, there was a shift in physical education away from military drill and toward fitness (Cosentino & Howell, 1971). Fitness became an "index" of physical education, and "furthermore, the means whereby fitness was attained was changing from drill to games and gymnastics" (Cosentino & Howell, 1971, p. 44). This was reflective of "the major philosophical debate among physical education professionals" at the time, whether physical education should be *of* the physical (i.e. "main emphasis on the development of the body and its systems for both health and skill") or *through* the physical (i.e. "the mind and body are a unit and that physical education contributed to mental, emotional, and social development as well as physical") (Siedentop, 2009, p. 41).

In regards to physical education in the university, Teachers College (Columbia University) in the United States offered the first doctoral programs in physical education in 1924 (Siedentop, 2009). This marked a beginning of the "research movement within [physical education] as doctoral candidates were trained in research methods" with an emphasis on measurement and fitness test data (Siedentop, 2009, p. 41). The beginnings

of research in physical education "was vital for [its] increasing acceptance in university programs and as an important educational subject matter" (Siedentop, 2009, p. 42). In Canada there was some decline in interest in the University of Toronto's diploma program, "as a result, the men's course was withdrawn in 1924 and in 1927 the name, in keeping with the times, was changed from a Diploma in Physical Training to a Diploma in Physical Education"; while the Margaret Eaton School of Literature and Expression, and its physical education program, expanded and hired a staff of graduates from such American institutions as the Sargent School of Boston and The Chicago Normal School of Physical Education (Cosentino & Howell, 1971, p. 43).

Despite all of the expansion occurring during the 1920s it is important to note "access and equity remained restricted to, and dominated by, white males" (Siedentop, 2009, p. 42).

The Great Depression that followed the stock market crash of 1929, had "definite effects on physical education" in schools, higher education, as well the larger physical culture (Van Vliet, 1965, p. 6). As financial resources were limited, "some boards considered physical education a frill and had it dropped from the school curriculum" (Van Vliet, 1965, p. 6).

In regards to physical education in higher education, in Canada "the movement towards the degree course... had its beginnings in the depression" (Cosentino & Howell, 1971, p. 44). While in the United States, which already had physical education degree programs, "the National Education Association organized a committee to evaluate teacher education in physical education, leading to a national code of standards in 1935, which

exerted influence over teacher preparation in physical education for years to come" (Siedentop, 2009, p. 45).

In terms of the larger physical culture, the Great Depression spurred many social problems, therefore, both Canada and the United States developed youth programs (the Youth Training Act and the National Youth Administration, respectively) to "attempt to alleviate this condition, [these programs] provided for the training of young people to fit them for gainful employment" (Van Vliet, 1965, p. 7). Also, spectator sport saw a decline, as few could afford to attend these events, while "youth sport, family sport, and informal kinds of participation increased substantially" (Siedentop, 2009, p. 44).

At the commencement of the Second World War in 1939, both Canada and the United States conducted medical examinations of male and female army inductees; these tests revealed that a significant portion of men and women were unfit for military service (Siedentop, 2009; Van Vliet, 1965). Thus, fitness became an immediate priority (Siedentop, 2009; Van Vliet, 1965). This resulted in such legislative actions as the Canadian National Fitness Act, passed in 1943, and the American War Fitness Conference, also in 1943.

During the war "physical education was once again considered to be an important part of the school curriculum; it had outlived the 'frill' problem it had encountered when school budgets had been cut so drastically during the Depression" (Siedentop, 2009, p. 46). The content of physical education programs once again shifted to include such things as "formal calisthenics, obstacle courses, endurance activities, and cadet training" (Van Vliet 1965, p. 8). However, this revival of physical education meant an increased demand for physical education teachers, and universities met this call by establishing degree

programs in physical education (i.e. University of Toronto's first bachelor of physical education degree program in Canada in 1940), for men, *as well as* women (Van Vliet, 1965, p. 10). World War II also marked the "beginning of research specialization" as there was "great pressure" for physical education research on fitness testing, motor control, adapted physical education, and rehabilitation; which "set the stage for the later period in which the specialized research fields would develop more fully into a discipline" (Siedentop, 2009, p. 46).

In regards to the sporting culture, "spectator sport continued in the holding pattern it had entered during the Depression... participant sport on the other hand, continued the growth it had begun during the Depression" (Siedentop, 2009, p. 46).

Following the end of World War II in 1945, the most significant postwar development was the "baby boom"; a startling "population explosion" that occurred as many couples that had delayed marriage and/or children during the war began to start families (Siedentop, 2009, p. 47). As these baby boomers reached school age, the education system experienced a shortage of teachers, coaches, and facilities (Van Vliet 1965, p. 10). In response to this, there was a pragmatic emphasis on teacher education, and many more physical education degree programs emerged (Forbes & Livingston, 2012; Van Vliet, 1965). These postwar years have been characterized as the "professional years" of physical education in higher education (Corbin, 1993, p. 83), as education committees recommended that "the best young people" should be recruited to the teaching profession, and that special grants should be given to school boards which hired qualified professionals (Cosentino & Howell, 1971, p. 64-65). Physical education was often administratively housed with Athletics departments, "as the business of collegiate

athletics for men thrived", and because of this housing, struggled to form an identity separate from athletics, health, and recreation (Corbin, 1993, p. 83). Physical education degree programs, although still quite general in content, included "acquiring motor skills and methods of teaching these skills, planning curriculum, and the organization and administration of programs in athletics, health, and recreation as well as physical education" (Corbin 1993, p. 83-84).

Although fitness had "reigned supreme" in physical education during the war, interest in fitness began to taper off postwar (Siedentop, 2009, p. 48). Instead, there was a shift toward the inclusion of "lifetime" activities, such as "golf, tennis, and bowling"; as well as the embodied and student-centered approach of movement education, a European developed philosophy transported to North America through postwar immigration (Siedentop, 2009, p. 48). However, this all changed once again as the 1954 Kraus-Weber study reported significantly lower fitness levels of North American children in comparison to European children (Forbes & Livingston, 2012; Siedentop, 2009). This resulted in "strong pressures [in North America] for school physical education programs to focus more on fitness" (Siedentop, 2009, p. 48).

There was also a "marked shift back to spectator sport", as everything from intercollegiate sport to the Olympics thrived (Siedentop, 2009, p. 47). Not only did attendance at sporting events increase, but the "the widespread broadcasting of events on the radio, and the beginning of televised sports were ushering in an era when mass-media attention to sport of all kinds would become commonplace" (Siedentop, 2009, p. 48).

1945-1970

International political tensions were heightened for North Americans in the midto late-1950s, as they were presented with 'failures' in comparison to Europeans (in such arenas as children's fitness [i.e. Kraus-Weber's 1954 study] and science, technology, and space advancements [i.e. Russian launch of Sputnik in 1957]). In response to these events, a "post-1950s reformist movement in education" began (Siedentop, 2009, p. 52), in which "science became the password" and a political-intellectual climate was cultivated (Cosentino & Howell, 1971, p. 58). Fortunately for physical education, Canada's government responded to this scientific pressure fittingly by granting "hundreds of thousands of dollars... to physical education and recreation students for scholarships and fellowships... and for research", through such conduits as Bill C-131 An Act to Encourage Fitness and Amateur Sport in 1961 (Cosentino & Howell, 1971, p. 67). Hence, "universities moved to populate their academic units in the 1960s" often by hiring graduates from the United States who "valued the increasingly scientific orientation of the field, and now more than ever possessed the skills to design, conduct, analyze and publish the results of research" that was required at the time (Forbes & Livingston, 2012, p. 71). However, along with provision of money came accountability. Academic units within higher education were challenged by educational reformists and "forced to justify the academic nature of their programs" or face elimination from the academy (Siedentop, 2009, p. 52). As previously mentioned, some of the most noteworthy challenges to physical education came from James Bryant Conant's 1959 and 1964 publications that argued physical education lacked the academic substance to justify a place in the education system at either the school or university level. It was difficult for those within

higher education physical education to refute this claim by "relying solely on the teacher education program [which was] undergirded by an education through the physical philosophy" (Siedentop, 2009, p. 54). Therefore, "physical educators were forced to... redefine their field as an academic discipline rather than as an applied, professional enterprise. It was within this political-intellectual climate that programs" of kinesiology developed (Siedentop, 2009, p. 52). This disciplinary movement was spearheaded by such individuals as Franklin Henry in the United States, who explicitly suggested "that there is an increasing need for the organization and study of the academic discipline herein called physical education" (Henry, 1964, p. 69), and Norm Ashton in Canada, who proposed a "nonprofessional study of human physical movement" in 1966 (Elliot, 2007, p. 155). The building of the academic discipline was fervently taken up, and "signaled the beginning of the separation of [the] field into distinct professional versus disciplinary (and sub-disciplinary) camps" (Forbes & Livingston, 2012, p. 68). Criteria for the hiring of new faculty members changed from that of generalists, who could "simultaneously contribute to the academic program, the teaching of activity courses, and coaching of varsity teams", to specialists, who could focus primarily on research programs (Forbes & Livingston, 2012, p. 71). This timeframe also saw the development of the world's first kinesiology degree program at the University of Waterloo in 1967 (Elliot, 2007).

1970-1990

The "disciplinary thrust" that had begun in the 1960s continued into the 70s (Corbin, 1993, p. 84). The continuation of this disciplinary movement has been attributed to: developments in scientific research agendas due to advancements in technology; "the lingering cold war, Canada's near brush with failure in the 1972 Canada-Russia Hockey

Summit Series, the hosting of several major games (e.g. 1976 Montreal Olympic Games, 1978 Edmonton Commonwealth Games, 1988 Calgary Olympic Games), and the federal government's propensity to use sport to legitimize the government of the day [that] led to a major investment in sport-related research" (Forbes & Livingston, 2012, p. 72); and a teacher surplus as the baby boomer population grew beyond school-age (Macintosh & Whitson, 1990). All of this forced those in higher education physical education to "embrace the discipline concept and to extol the virtue of the study of human movement as a legitimate end in itself, while at the same time constructing and promoting new professional roles for their graduates" (Forbes & Livingston, 2012, p. 70). As the disciplinary thrust progressed, departments of physical education separated from athletics and stood on their own (Corbin, 1993). Faculty members became increasingly specialized in their area of research and began to affiliate less with a common physical education organization (i.e. AAHPERD or PHE Canada), and more with specialized organizations stemming from parent/cognate disciplines (Forbes & Livingston, 2012, p. 71; Harrigan, 2004).

Other important happenings occurring during this time frame include: the passing of Title IX which created a "framework within which girls and women might finally have equal access to sport, fitness, and physical education opportunities" (Siedentop, 2009, p. 49); the civil rights movement which "provided the framework for the further collapse of racial barriers in sport" (Siedentop, 2009, p. 49); the "fitness renaissance" and "aerobics era" in which "fitness became fashionable" and "the private sector became involved" (Siedentop, 2009, p. 50); the initiation of the certification process for personal trainers and group fitness instructors; and lastly, the prominence of sport-based models of

physical education in schools, such as Teaching Games for Understanding, and Sport Education (Siedentop, 2009).

During the 1980s, factors such as the global economic recession and economic liberalization, resulted in a reduction in operating grants to universities and hence a tightening of university budgets (Corbin 1993; Forbes & Livingston, 2012). Universities were required to seek additional external funding sources to counteract this reality, "including research dollars from the Tri-Councils and other granting agencies, as well as multi-university, industry and government collaborations" (Forbes & Livingston, 2012, p. 73). Within this new financial landscape a "top-down" model emerged in the university; the areas with the greatest potential to generate grant dollars received primary emphasis at the "top" (read: natural sciences research and graduate education), while those areas with limited grant generating potential received secondary emphasis at the "bottom" (read: social sciences research, teaching, and undergraduate education) (Corbin, 1993, p. 84).

The rapid and extreme specialization into sub-disciplines during the 1970s markedly changed the composition of the academic discipline, and eventually resulted in an "identity crisis" among faculty members during the 1980s (Corbin, 1993, p. 84). This crisis over professional identity manifested itself in a variety of conflicts within higher education physical education, including the heightening of new and existing debates over the name and organizational framework of the academic discipline/field, the academic unit location and curricula of physical education and kinesiology degree programs, as well as the dynamic between professional and disciplinary groups. These issues were debated veraciously in the conceptual literature at this time.

1990-2010

By the 1990s it appeared that society was coming to grips with the 'new times' that had been evolving over the last several decades (Fernandez-Balboa, 1997). Tinning (2000) explains that:

In defining these [new] times, it is common to read of the information explosion, the increased pace of material and institutional change, globalization, information technologies, increased reliance on experts and abstract systems, the end of permanent structures of knowledge or meaning, reflexive modernization, the risk society, and a heightened level of increased anxiety. (p. 32)

Furthermore, there was a widespread notion that the modern era was ending and a new era was beginning (Tinning, 2004). People had become dissatisfied with the assumptions of modernity, or as Fernandez-Balboa (1997) put it, "disenchanted with the modern project", that was characterized by "the image of a coherent, rational 'man', who through positivistic science and technology, has sought to control Nature and constitute a totalizing and universal Truth" (p. 3). The tenets of modernity translated to hierarchies that were "beneficial only for those at the top" and "as a result many groups [at the bottom] now share a sense of deep alienation, despair, and uncertainty" (Fernandez-Balboa, 1997, p. 4). At this point it was clear that people had "begun to wish for a new era – an era in which equality, dignity, and hope... are more the norm than the exception" (Fernandez-Balboa, 1997, p. 5). At this time people began to challenge the modern constructs of the past, and the following actions and events were observable:

A redefinition of gender roles, the changing nature of marriage and the family, the changing nature of work, the acceptance of rising unemployment, a changing

work ethic, the popularity of invisible money, the decline of the middle class, the expanding gap between rich and poor, and increased cynicism related to the changing nature of modern politics (Mackay, 1997)... a clash of values caused by the declining influence of traditional socialization agents such as the church, the family, and the school, in favor of unconventional media and popular culture. (Massengale, 2000, p. 104)

Such actions and events show a transition into a new era most commonly called "postmodernity", which is understood as "widespread rejection of objective truths and grand narratives" (Block & Estes, 2011, p. 180).

Institutions of higher education, including the academic discipline of physical education/kinesiology, were not immune to the impact of these new times. Tinning (2000) lists some of the changes these new times brought to higher education, including:

- The development of university education as a layer of mass education
- The push for more client-centered and more flexible forms of delivery
- The increase in the use of communications and computer-based technologies
- The requirement for universities to derive more of their funds from nongovernment sources
- The shift from collegial to corporate management approaches. (p. 41-42)
 Unfortunately, by the year 2000, Massengale had lamented that physical
 education/kinesiology was failing to meet the challenges of these new times due to "an
 inadequate understanding of the process of institutional change" (p. 103).

By 1998 historian Roberta J. Park had stated this academic discipline had become a "house divided" (p. 213); physical education and kinesiology were now quite decidedly

viewed as "distinct and unequal entities" (Forbes & Livingston, 2012, p. 74). By 2006, "kinesiology and human kinetics programs outnumbered physical education programs in Canada by more than 2 to 1" (CCUPEKA, 2006; as cited in Elliot, 2007, p. 154). This divide has been attributed to a variety of drivers, including but not limited to the following (in no particular order). First, the retirement, without replacement, of those faculty members educated and hired in the 1960s and 1970s as physical education generalists or pedagogists (Elliot, 2007; Forbes & Livingston, 2012). Second, the "greying" of the baby boomers, shifting research foci from school-age populations, to a more pragmatic focus on the aging population (Forbes & Livingston, 2012). Third, the view that kinesiology degrees were/are "the best preparatory degree program for professional training in medicine, and physical and occupational therapy" (Elliot, 2007, p. 158). Fourth, new employment opportunities for kinesiology graduates as kinesiology became a regulated healthcare profession in some places (Ontario Government, 2007). Fifth, funding agencies' changing grant requirements to an "emphasis on multiinstitution, multidisciplinary, and interdisciplinary research teams", which resulted in some "exercise scientists increasingly looking beyond the colleagues found within their own academic areas of expertise for opportunities to establish or join interdisciplinary research teams... with colleagues from medicine, public health, business, industry and the cognate disciplines" (Forbes & Livingston, 2012, p. 74). Sixth, growing concern over the "obesity epidemic" occurring in the Western world, and resultant proposals for health-based school and university programs (Gard & Wright, 2001, p. 539).

A significant development during this time frame was the financial crisis of 2007-2008, which had worldwide impact. Dunn (2009) describes, "The current economic crisis is real, and the implications on all of society, including its social institutions such as schools and universities are substantive" (p. 271). More specifically, Dunn (2009) explains that as a result of this crisis, universities were forced to enact a variety of cost-saving measures including "freezing hiring, eliminating sabbaticals, employing furloughs, rolling back salaries, laying off faculty and staff... [as well as] program eliminations" (p. 271).

2010-2012

The events of 2010 to present-day are described in the subsequent section entitled 'The Present'.

Reading Between the Historical Lines

While it is important to acknowledge the impact of social, political, and economic events on the developments in physical education/kinesiology, there has been an observed tendency by some to over-simplify or overstate the link between particular events and developments (Tweitmeyer, 2012). For instance, many place great emphasis on James Bryant Conant's criticism of physical education in the development of the academic discipline of physical education/kinesiology. Interestingly, sport historian Nancy Struna (1996) writes "no history of a sub-discipline to which physical educators have contributed can ignore James Conant"; however, she continues "whether Conant's charges, and the subsequent intellectual and political parrying, had the transformative impact on the sub-disciplines that some people have attributed to this episode remains in question" (p. 165). This view is seconded by Tweitmeyer (2012) who argues "Conant's impact on the field, even if significant, is overstated" (p. 11). Tweitmeyer (2012) eloquently expands his argument:

The headlines of the New York Times, which announced Conant's reforms, did not scold physical education. Rather, they lamented, "Teacher Training Scored by Conant as U.S. Scandal" (Heichner, 1963, p. 1). In truth, no mention of physical education appears in the text of the newspaper articles. This suggests that the reaction of physical educators to Conant's criticism, says more about what the discipline thought about itself than about outside pressure causing reform. Indeed, Conant's (1963) criticisms of physical education amount to only a few paragraphs out of the two hundred pages in the book. Such sensitivity on the part of physical educators implies a far deeper vein of disquiet than could have been instigated solely by Conant. Conant himself recognized this insecurity when he wrote,

As I have talked to teachers and professors active in the four areas [P.E., Art, Music, Foreign Language] I am here exploring, I have become impressed with an attitude something like an inferiority complex that seems to arise out of the lively competition for the high school student's time and interest. (p. 181)

Such insecurity was reflected, not created by Conant, and was born from the tenuous and contested nature of the discipline's philosophic foundation(s). The problem, it would seem, is that in 1963, just as today, the philosophic foundations of physical education and kinesiology were insecure. (p.11)

Therefore, although many linkages between historical events and developments in higher education physical education/kinesiology are outlined in this thesis, it appears that there is more than meets the eye. The literature reviewed in this chapter is described *as it was written*, yet it is important to critically question that which was *not* written. For

instance, the contributions of women, as well as the developments in health and hygiene, are notably absent from much of the historical literature regarding this academic discipline.

In sum, while not often explicitly implicated in the literature, it can be argued that the real impetus for many of these developments has "and continues to be fuelled by multiple forces internal [unsettled foundations of the field and insecurities of its members] and external [certain social, political, and historical events] to the university" (Forbes & Livingston, 2012, p. 70).

The Present

"Any study of the future must begin with a critique of the present" (Polak, 1973, p.19)

In the following section the present state of higher education physical education will be discussed. More specifically, the current context of higher education, as well as the core and secondary issues of the academic discipline of physical education/kinesiology will be discussed.

Current Higher Education Context

According to Lawson (1998) and Slaughter and Leslie (1997), the crisis facing the academic discipline of physical education/kinesiology does not stem solely from the issues *within* the discipline itself, but also from the larger context of higher education in general. Andrews (2008) echoes this sentiment, and argues that in order to fully understand the tensions within the academic discipline of physical education/kinesiology, one must understand the nature of the higher education institutions in which this discipline operates. Therefore, this section addresses the complex and political nature of higher education institutions, and more specifically the impact of the top-down model and scientization.

The Complex and Political Nature of Higher Education

Higher education is a complex organization (Baldridge, 1971a; Block & Estes, 2011; Massengale 2000). Sociologist of higher education Victor Baldridge (1971a) explains there is a "complex, fragmented social structure of the university, drawing on the divergent concerns and lifestyles of hundreds of subcultures. Many of these groups articulate their interests in many different ways" (p. 12). Baldridge (1971a) further explains that beyond the various and diverse interests of internal groups, there are also

many external groups applying pressure to the university, and all of this is governed by only a "few kings in the system who can enforce cooperation and unity" (Baldridge, 1971b, p. 107). It becomes clear that "the university is best understood as a politicized institution" (Baldridge, 1971a, p. 12).

Within the political institution of the university, Baldridge (1971) explains that conflict is not atypical but rather is expected. This is due to the fragmented nature of the university into various academic units, thereby resulting in many power blocs and interest groups. It is only natural that these groups try to influence policy so that their interests will be given primary consideration. However, it is important to note that this conflict means there is "little peace in academia; warfare is common, and no less deadly because it is polite" (Baldridge, 1971b, p. 107). Massengale (2000) explains this point in the context of the physical education/kinesiology academic discipline, stating that this warfare is an:

Often discussed, seldom documented, component that all too often accompanies this environment. It is the situation where faculty members promote bitter ideological differences, launch personal vendettas, undermine their colleagues and leaders, and do all of this under the guises of professional loyalty and academic freedom. This has been found to be a common thread when examining the demise of physical education units and programs at many of the nation's leading universities. (p.107)

The Top-Down Model And Academic Capitalism

To add to the complexity of higher education, Lawson (1998) explains that all of the above occurs in a "turbulent environment" which revolves around resources in a time of economic hardship (p. 226). More specifically, one of the most distinguishing factors of higher education since the 1980s has been what Corbin (1993) calls the "top-down model" (p. 84). This top-down model is a result of universities competing with each other for rank and prestige; using grant dollars from external research funding as a measure of success and status (Corbin, 1993). This top-down model translates to emphasis on research and graduate education (i.e. the 'top'), due to their potential for acquiring external funding; and de-emphasizes undergraduate education and service programs (i.e. the 'bottom'), due to their lack of potential for external funding (Corbin, 1993). Furthermore, in the culture of a top-down model of higher education, Slaughter and Leslie (1997) state that there exists an ethos of "academic capitalism" (p. 226). This means that when there is "venture capital" required (i.e. money needed for new initiatives that will require resources but will then bring in further resources), it is sometimes acquired through the reduction or elimination of existing programs (read: that which is at the 'bottom') (Slaughter & Leslie, 1997, p. 226).

Scientization

In academe today, specialization to a particular subarea of an academic discipline is a necessity for academic success (Lawson, 2007). Furthermore, in the climate of the top-down model and academic capitalism, specialization to a *scientific* sub-discipline is a necessity for status within higher education (Corbin, 1993). This is due to the fact that the natural sciences have more lucrative funding potential than the social sciences (Andrews, 2008; Corbin, 1993). This scientization is what Andrews (2008) calls the "inconvenient truth" of higher education today (p. 46). This "scientific hegemony" or "epistemological hierarchy that privileges positivist over nonpositivist ways of knowing" (Andrews, 2008,

p. 46) has not only impacted the physical education/kinesiology academic discipline; the humanities, social sciences, and helping fields across higher education have experienced a significant decline (Corbin, 1993; Mason 2010, Lawson, 1998).

Impact Of The Top-Down Model, Academic Capitalism, And Scientization

Beyond the decline of the social sciences, there are further consequences of the top-down model, academic capitalism, and scientization with higher education. First, this culture further fragments the university and its faculty as gaps grow between the "academic haves" (i.e. those with external funding, often within the natural sciences), and the "academic have-nots" (i.e. those without external funding, and who may focus on other things such as teaching) (Lawson, 1998, p. 229). Cooperation, communication, and even respect, becomes difficult in such a climate (Lawson, 1998).

Second, competition is a natural extension of this culture of higher education (Block & Estes, 2011). Block and Estes (2011) explain "as acceptance from the wider society is sought, the university competes for resources, grants, academic programs, faculty, students, prestige, and sadly, knowledge itself" (p. 190). Furthermore, this competition exists internally between faculty, research sub-disciplines, and academic disciplines, and also externally between universities. This competition has been found to become "intensely competitive" in some cases, particularly when pertaining to resources (Lawson, 1998, p. 226).

Current Higher Education Physical Education/Kinesiology Context

The complexity of higher education today presents many challenges to academic disciplines. Block and Estes (2011) suggest that the academic discipline of physical education/kinesiology can be considered to be

A microcosm of the super-complex nature of higher education. The discipline is made up of scientists, pedagogues, artists, and management and humanities scholars that interact in multiple ways in the wider society. Those scholars who are able to focus on academic integrity and appropriately network with the wider society, understand the business model, and keep abreast of the changing phenomena of super-complexity will be successful. Further, kinesiology departments that hire professional academic administrators who are part of the professoriate and understand the complex nature of scholarship in the world of super-complexity will also be successful. Those scholars and administrators who insist on a modernist mindset, and who are inflexible, will not. (p. 189)

The current core and secondary issues within higher education physical education/kinesiology will be addressed in this section. More specifically, each of the issues will be defined and described in terms of its: development over time, present reality, relation to other issues, and impact to the field.

Core Issue

What Is The Core Issue?

The core issue precipitating the problematic state of higher education physical education is considered to be elusive (Greendorfer, 1987; Kirk, 2010). Unfortunately, this elusiveness is not conducive to the study of the future. Kirk (2010) asserts that it is of upmost importance that we do not "bungle" our opportunity to successfully study the future by not truly understanding the problem; unfortunately he concedes, "the problem is not fully or widely understood" (p. 40). Kirk himself takes chapters, if not the entire book, in *Physical Education Futures* to develop his own theory of the core issue plaguing

this academic discipline. Greendorfer (1987) is one of the few other authors to acknowledge the academic discipline's widespread ignorance of the existence of a core issue. In the aptly named article "Specialization, fragmentation, integration, discipline, profession: What is the real issue?", Greendorfer argues that a multitude of

Secondary debates has made diagnosis of the problem more difficult because the primary issue has never been fully or clearly developed in the literature... the emergence of each secondary issue has confounded the primary problem because each has acquired its own set of advocates, who in turn have developed a literature of supporting position papers. (p. 57).

The secondary issues Greendorfer (1987) is referring to include conflicts over: the curriculum of physical education degree programs; the location of physical education degree programs within the university; the name of the academic discipline and its academic units within higher education; the organizational framework of the academic discipline, and the profession versus discipline dynamic.

There are a variety of reasons as to why there has been more focus on the secondary issues of the academic discipline rather than the core issue. For instance, Greendorfer (1987) suggests that the core issue "has been ignored in lieu of more attractive arguments" regarding secondary issues (p. 58). These secondary issues may be more attractive to debate because they are more observable and tangible conflicts that overtly affect the members of the academic discipline (i.e. the current name of their department); and are issues over which members have some degree of control (i.e. can be involved in name change proposals). It may be the case that members of the academic discipline are unaware that the secondary issues are symptoms of a core issue, or perhaps

they are uninterested in the core issue and wish to directly address the secondary issue that is of most relevance to them. As Newell (1990) points out, most academics involved in the debates seem to be "more concerned about promoting and defending" their particular interests and research sub-disciplines than considering the overall and deeper core issue (p. 337).

Figure 8 depicts the distribution of literature on the core and secondary issues of higher education physical education/kinesiology. Figure 8 provides evidence of the overwhelming focus on the secondary issues, and the underwhelming focus on the core issue.

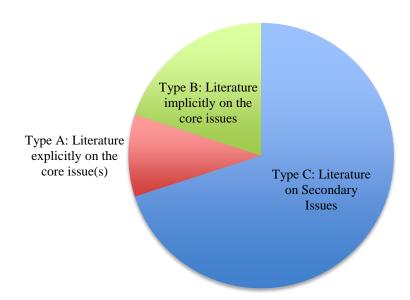


Figure 8. Types of literature on the issues in the academic discipline.

The small subset of authors who explicitly discuss the core issue largely offer the same diagnosis: *the core issue is a lack of unified focus within the academic discipline* (Gill, 2007; Kirk, 2010; Penney, 2000; Wade, 2007). It is important to note that some authors offer this same diagnosis yet substitute the word 'focus' for other terms,

including: agenda (Newell, 2007), mission (Rikli, 2006), body of knowledge (Greendorfer 1987; Newell, 1990; Park, 1998), and subject matter (Lawson, 1979).

If a lack of unified focus is indeed the core issue plaguing this academic discipline, it is important to fully understand what is meant by "focus". Newell (2007) offers a particularly comprehensive explanation of focus, stating it to be "the scholarly foci or emphases in teaching, research, or service programs... themes that help organize the field of study explicitly or implicitly and give emphases to it with respect to its content and impact in society" (p. 5). Therefore, the diagnosis of a lack of unified focus infers that the academic discipline of physical education/kinesiology is not unified in its scholarly foci or emphases in teaching, research, and service programs.

In the past, the academic discipline was considered to have had a unified focus on physical education and the preparation of physical education teachers; however, this is no longer the only focus (Gill, 2007; Kirk, 2010; Penney & Chandler, 2000; Wade, 2007). Instead there are numerous foci, including the variety of foci of each diverse research sub-discipline. When these various foci are considered comprehensively, it is clear there that they are not unified, and that there is little coherence between them (Gill, 2007; Kirk, 2010; Penney & Chandler, 2000; Wade, 2007).

Newell (2007) identifies two considerable impediments to obtaining a unified focus in this academic discipline. First, Newell (2007) argues the sheer breadth of knowledge across the research sub-disciplines makes coherence difficult. Second, Newell (2007) argues the excessive lean by some within the academic discipline toward a parent/cognate discipline results in physical activity being drawn out of the focus; instead

physical activity is used "merely as the dependent variable, and worse, in some cases only a covariant" (p.18).

While most authors who explicitly address the core issue of this academic discipline share the same diagnosis of a lack of unified focus, there are others who offer alternative diagnoses of the core issue, such as: scientific hegemony (Andrews, 2008; Mason, 2010) indefensible values (Hellison, 1992), and irrelevance or misalignment of higher education physical education/kinesiology in the postmodern era (Massengale, 2000).

Despite the differences in diagnoses, it may be understood that all these diagnoses "revolve around what is considered to be legitimate knowledge in the first place" (Greendorfer, 1987, p. 60).

Figure 9 depicts the distribution of core issue diagnoses pertaining to higher education physical education.

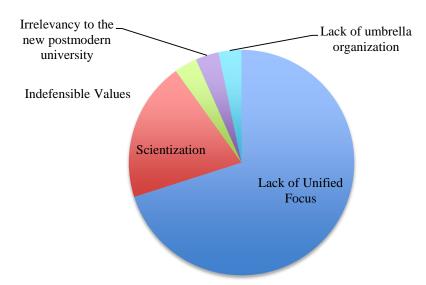


Figure 9. Core issue diagnoses.

Development of The Lack of Focus Issue

Although there is currently a lack of focus within higher education physical education/kinesiology, it has not always been this way. To be specific, prior to the mid-1960s there was no doubt that the focus of academic units in this field was the subject of physical education and the training of K-12 school physical education teachers (Newell, 2007; Rikli, 2006). However, physical education is no longer the only, or even primary, focus of most higher education academic units in this field (Newell, 2007). It was the formal establishment of the academic discipline of physical education/kinesiology in 1964 that is acknowledged as the turning point after which the focus began to broaden (Rikli, 2006). During the Cold War post-1950s educational reform movement, physical education was highly criticized as lacking sufficient academic content to maintain its place in the academy (Siedentop, 2009). In response to these criticisms, scholars within the field advocated for the development of an academic discipline to bolster the academic content of the subject area, and maintain its place within higher education (Corbin, 1993). This disciplinary movement was met with great enthusiasm and spawned the establishment of a variety of research sub-disciplines (Andrews, 2008; Corbin, 1993; Wiegand et al., 2004). In order to be successful in this high-stakes climate of higher education, members of these research sub-disciplines strove for success through specializing and scientizing as such success required (Andrews, 2008). Over time, such specialized and scientized work resulted in physical education and physical education teacher education becoming just one of many foci within this academic discipline (Greendorfer, 1987).

Impact of the Lack of Focus Issue

A lack of unified focus within the academic discipline of physical education/kinesiology has significant impact on both the academic discipline and the field at large.

First, the lack of focus within the academic discipline precipitates and maintains a variety of secondary issues, including conflict over: the curriculum of physical education degree programs; the location of physical education degree programs within the university; the profession versus discipline dynamic within the academic discipline; the name of the academic discipline and its academic units within higher education; and lastly, the organizational framework of the academic discipline (Greendorfer, 1987). These secondary issues, and the significant impact of each, will be discussed later in this section.

Second, the lack of focus within this academic discipline has begun to be noted by those outside of the physical education/kinesiology, and the perception is largely negative. To illustrate this, Rikli (2006) describes the example of

Stephen Portch, a chancellor of the Georgia state-wide system of universities and colleges, and a well-known leader in higher education... in a recent keynote speech to a kinesiology/physical education audience... [Portch] commented that as an outsider looking in.... he noted that interesting work appears to be happening in isolated areas, but that there is no common focus or vision for this work. (p. 302)

Rikli (2006) asserts that it is dangerous for those outside the field to hold such negative perceptions because "although the primary reason for program reduction/elimination has

varied across different universities, a common theme has been the lack of central and important focus as perceived by university administrators" (p. 292).

In sum, as Armour and Jones (1998) succinctly state, this academic discipline has "failed to identify a specific focus within its huge potential" and as a result "may be trying to do too much" (p. 85).

Secondary Issues

The Curriculum Conflict

"One does not take for granted that curricular knowledge is neutral. Instead, one looks for social interests embodied in the knowledge form itself. The social conflict within the subject is central to understanding the subject itself" (Goodson, 1992 p. 67)

What is the Curriculum Conflict?

The debate about what should, and should not be included in physical education undergraduate degree program curricula, has been referred to as the 'curriculum conflict' (Lawson, 2007). Of relevance to this conflict are disagreements over:

- What is core knowledge and what is inert knowledge? (Rink, 2007)
- What content is academically rigorous enough to merit inclusion and what is not?
 (Henry, 1964)
- What content is relevant and what is irrelevant? (Rink, 2007; Siedentop, 2002)

 Judith Rink (2007) asks perhaps the most important question concerning the curriculum conflict: "What knowledge is of most worth?" (p. 100).

The curriculum conflict has been articulated several ways in the literature; however, the debate can largely be categorized into two perspectives that argue for a type of curriculum contrary to the other. This is demonstrated in Table 6.

Table 6. Two Perspectives of the Curriculum Conflict

Perspective A	Perspective B	Discussed by*
Liberal/broad education	Professional/applied	Rink, 2007
(i.e. based on basic and pure	education (i.e. based on	
research)	applied research)	
Discourses of Performance:	Discourses of Participation:	Mason, 2010
Scientific and objective	Qualitative and subjective	Melnychuk, 2011
(i.e. exercise physiology,	(i.e. inclusion, equity, social	Rarick, 1967
anatomy, sports medicine)	justice)	Tinning, 2004
		Tinning, Macdonald,
		Wright & Hickey, 2001
Study about physical	Study for mastery of	Locke, 1977
education (i.e. the sociology	physical education (i.e.	Siedentop, 2002
of physical education, the	advanced knowledge and	
psychology of physical	skills of school K-12	
education)	physical education content)	
Interdisciplinary content (i.e.	Cross-disciplinary content	Henry, 1964
content from each research	(i.e. thematic content)	Lawson, 2007
sub-discipline)		Lawson & Morford, 1979

*The authors listed in Table 6 have written about the curriculum conflict employing these arguments; however, this chart is not meant to indicate which perspective they align themselves with.

The arguments supporting and refuting each perspective fit within four categories.

These categories are listed below, along with examples of supporting arguments for each perspective.

Arguments for perspective A.

- The pursuit of theoretical knowledge is worthy in and of itself, without any practical application.
 - o "The academic discipline of physical education is an organized body of knowledge collectively embraced in a formal course of learning; the acquisition of such knowledge is assumed to be an adequate and worthy objective as such without any demonstration or requirement of practical application; the content is theoretical and scholarly rather than technical and professional" (Brooks, 1981, p. 3).
 - o "Pursuit of knowledge in the academic discipline of physical education is a worthy objective in and of itself. In this context, the study of physical education is consistent with the philosophy of liberal education. That is, knowledge pursued for the sake of knowledge is an established principle which colleges and universities operate upon" (Brooks, 1981, p. 4).

Arguments against perspective A.

- Sub-disciplinary content knowledge is not aligned, or even compatible, with the content and nature of K-12 school physical education.
 - "Programs ... organized around knowledge pertaining to biomechanics, exercise physiology, or motor control may not be conducive to the development of the sophisticated understanding of some sociology or

- health-related outcomes that underpin many recently developed physical education curricula across Canada and abroad" (Melnychuk et al., 2011, p. 150).
- "The discipline of kinesiology is not taught in schools and, therefore, that discipline cannot logically serve as the content knowledge base for preprofessional preparation in physical education" (Siedentop, 2002, p. 374).
- Sub-disciplinary content knowledge does not prepare quality, or even adequate,
 K-12 school physical education teachers.
 - o "If men and women who aspire to be teachers of physical education study, as the core of their content knowledge, the discipline of kinesiology, and have increasingly fewer academic credit hours devoted to developing direct expertise in sport forms, they will fail as teachers of physical education no matter how well they are eventually prepared in the pedagogical domain. They will fail because they have little command of the content they will need to teach, no ability to take students beyond that introductory unit that seemingly gets taught again and again and again." (Siedentop, 2002, p. 372).
- Sub-disciplinary content knowledge is largely irrelevant to future K-12 school physical education teachers.
 - "Practicing physical educators have failed to apply sub-disciplinary knowledge because it is basically irrelevant to their work in school settings" (Wiegand, Bulger, & Mohr, 2004, p. 48).

- Sub-disciplinary content knowledge better prepares its graduates to become teachers of kinesiology rather than teachers of physical education.
 - o "The kinesiology major with a certification in physical education who will be graduating from some of our universities in the near future will be better prepared, from a content point of view, to teach a kinesiology curriculum than he or she will be to teach an exercise and sport curriculum" (Siedentop, 2002, p. 372).

Arguments for perspective B.

- Students, as well as the public, want, and are coming to expect, undergraduate degrees to lead to gainful employment.
 - "A shift is occurring in the public's expectation for university degrees.

 This reflects a change from an academic to a more utilitarian purpose...

 Many of our students (and their parents), however, view an undergraduate degree as a ticket to a career, and, more specifically, a job" (Ennis, 2010, p. 77).
- K-12 school physical education teachers need to achieve competence and mastery
 of the skills and knowledge they are expected to teach.
 - "The correct analog would be to extend and intensify their study of sport and exercise by insisting that they practice sport and exercise—by doing it! We should insist that our students acquire a range of movement skills far more extensive than they would be called upon to teach in the public school" (Locke, 1977, p. 38).

Arguments against perspective B.

- The development and knowledge of physical skills and activity content, while valuable, are not justified as legitimate academic content.
 - "The development of personal skill in motor performance is without question a worthy objective in itself. But it should not be confused with the academic field of knowledge" (Henry, 1964, p. 33).
 - "Learning the rules and strategy of sports may well be intellectual, but it is doubtful if a course on rules and strategy can be justified as a major component of an academic field of knowledge at the upper division college or university level" (Henry, 1964, p. 33).
 - "The question is sometimes raised: Is one justified in including the execution of a motor skill in and of itself as an integral part of a discipline? The mechanics of the skill can be observed and studied, the physiological responses monitored, the feelings states noted. These are areas of legitimate study and research. On the other hand, do we need to clarify for ourselves the level of cognition that is required in learning and executing semi-automatic motor skills? Can we justify as part of our discipline behavioral responses which are for the most part automatically controlled even though there is conscious direction of certain aspects of the movement and interpretative and affective controls which give to the movement refinement, meaning, and beauty?" (Rarick, 1967, p. 51).
- It is not the responsibility of a discipline to apply, or make relevant, its content knowledge to the student.

- "It is good for students to be broadly educated in the field and to understand the underlying mechanisms and theories of each of the disciplines. It is not the job of the disciplines to apply discipline knowledge to any profession and not a necessary condition for knowledge to be relevant" (Rink, 2007, p. 107).
- The purpose of undergraduate education is not to prepare professionals.
 - o "There are faculty who advocate that the field, or, at a minimum, certain academic units in the field, should not be involved at all in the direct training and certification of professional, clinically relevant skills that relate to physical activity" (Newell, 1990a, p. 235).
 - "The training of professionals at the undergraduate level is counter to the letter and spirit of many university manifestos" (Newell, 1990c, p. 339).

The Development of the Curriculum Conflict

This curriculum conflict did not exist prior to the 1960s; before this time the physical education "major was decidedly singular", and its curriculum professionally prepared its students to become teachers of school physical education (Lawson, 2007, p. 222). However, this all changed during the Cold War post-1950s educational reform movement, which required subjects to be academically rigorous and scientific in order to justify their place in higher education (Siedentop, 2009). Physical education degree programs were criticized as lacking such qualities of academic rigour and scientific content (Conant, 1959, 1964). James Bryant Conant (1964) notably reviewed the higher education physical education curriculum and stated:

I am far from impressed by what I have heard and read about...work in the field of physical education. If I wished to portray the education of teachers in the worst terms, I should quote from the descriptions of some... courses in physical education. To my mind, a university should cancel... programs in this area". (p. 201)

This criticism was quickly followed by a call from Franklin M. Henry, also in 1964, to establish an academic discipline of physical education and reorganize the curriculum of the degree program. In an example of Henry's (1964) argument, he describes what he considers the inadequacies of the curriculum at the time as a justification for curricular change:

The student who majors in mathematics must have an upper division major in advanced mathematics, and even his most elementary freshman course in mathematics will be at an advanced level in comparison with the usual high school mathematics courses. In marked contrast, the student who obtains a bachelor's degree in physical education typically has a major that is evaluated and oriented with respect to what he is to teach in the secondary schools, and how he is to do the teaching or how he is to administer the program. (p. 32)

Following this, members of the academic discipline welcomingly embraced a more broad, scientific, interdisciplinary curriculum (perspective A) (Wiegand, et al., 2004, p. 47). However, shortly thereafter, debate critiquing this form of curriculum arose. An example of such critique is Locke's (1977) argument, which included the following analogy:

Those 30 hours of math are academic, are abstract, and are a difficult test of intellect, but transcripts reveal that the focus is not on study *about* math. Those hours do not consist of the history of math, the sociology of math, or the neurophysiology of math. Most of the 30 hours are spent in the doing of math, in the acquisition of progressively higher levels of command over the performance of operations. Mastery of the logic of derivation, facility in calculation, skill in the analysis of problems, and the ability to fit solutions correctly—all demand direct, participatory involvement in the stuff of the subject. For the physical educator, then, the correct analog for the situation in math would not be to insist our students take more courses about sport and exercise. The correct analog would be to extend and intensify their study of sport and exercise by insisting that they practice sport and exercise—by doing it! We should insist that our students acquire a range of movement skills far more extensive than they would be called upon to teach in the public school. (p. 38)

Despite this critique, interdisciplinary curricula (perspective A) has become entrenched over the years (Ayers & Housner, 2007; Ennis, 2010; Melnychuk et al., 2011). Elliot (2007) explains consistency of such a curricular model may be the result of the introduction of accreditation agencies. An example of such an organization in Canada is CCUPEKA, which provides curricular standards for physical education and kinesiology degree programs (CCUPEKA, n.d.). While accreditation is not required of physical education programs, the existence of such standards becomes a general guideline for the degree programs in Canada (Melnychuk et al., 2011). CCUPEKA is not devoid of its own curriculum debate. It has been found that some Canadian higher education

physical education/kinesiology faculty members believe that CCUPEKA's standards encourage programs to "hold steadfast to the performance-oriented discourses", and therefore these members "do not believe CCUPEKA accreditation enhances the quality of physical education degree programs in Canada" (Melnychuk et al., 2011, p. 163).

In the wake of the 2008 financial crisis, the curriculum conflict has flared up once again (Ennis, 2010). As a result of high unemployment rates during such an economic down-turn, there is a heightened sense of austerity; the public's expectation for university degrees has shifted from an academic purpose to a more utilitarian purpose of securing employment (Ennis, 2010). This new public expectation strains the curriculum conflict, as some faculty still wish to continue with a curriculum of perspective A and prepare students for graduate education, and others wish to advance a curriculum of perspective B, in an effort to maintain the relevance of the physical education degree program curriculum to today's reality (i.e. professional), and compete with the new for-profit universities offering "quick degrees linked directly to a job in high demand" (Ennis, 2010, p. 77).

Present Reality of the Curriculum Conflict

The current curricula within North American physical education degree programs appear to reflect that of perspective A; a curriculum characterized by a broad, liberal, performance-oriented discourse based largely on the scientific research sub-disciplines within the interdisciplinary organizational framework (Ayers & Housner, 2008; Ennis, 2010; Melnychuk et al., 2011). Recent studies investigating current physical education degree program curricula in North America are presented below.

Ayers and Housner (2008) surveyed 116 physical education teacher education programs in the United States. This study reported that these physical education degree programs were, in descending order, most credit-heavy in:

- The disciplines of sport and physical education (e.g., anatomy, sport sociology/psychology, motor learning),
- Pedagogical studies (e.g., methods, curriculum, skill analyses),
- Sport skills and physical activities (e.g., basketball, dance, tennis)
- Professional issues (e.g., introductory courses, multicultural courses) (p.
 57).

Ayers and Housner (2008) concluded that "in a profession where teaching sport and physical activities is a primary objective, it is perplexing that this area continues to be underemphasized" in the degree program curricula (p. 61).

Melnychuk et al. (2011) surveyed 36 physical education teacher educators from 20 Canadian universities. They asked participants to indicate the current focus of their physical education degree program curricula, and then to indicate what they believe the focus *should* be. The results are indicated in Table 7.

Table 7. Melnychuk et al. (2011) Current and Believed Focus of Curricula

Focus	Current	Believe it should be
Exclusively performance oriented	0	0
Predominately performance oriented	28	0
Predominately participation oriented	8	18
Exclusively participation oriented	8	9
Combined	57	76

Melnychuk et al. (2011) claim that these results indicate the existence of "privileged performance-oriented discourses and undervalued participation-oriented discourses", which they conclude "needs to be addressed immediately" (p. 162).

Furthermore, Melnychuk et al.'s (2011) investigation and comparison of current curricular foci versus preferred curricular foci offers telling insight into the curricula debate. More specifically, Melnychuk et al. (2011) found:

- "Only 57% of the physical education teacher educators work within institutions where both discourses have equal focus", yet "a full fifth of them could only wish for such a scenario" (p. 162).
- "Twenty-eight percent of these educators teach in programs where performance-oriented discourses are privileged, *none* of them believe this should be the case" (p. 163).
- "Twenty-five percent of them believe that participation-oriented discourses ought to be given such privilege" (p. 163).

Furthermore, when physical education teacher educators were asked "what must be included in a PETE program?", thirty percent indicated that "activity courses" (i.e. perspective B) were a necessity, while there was only very minimal mention for inclusion of disciplinary courses (i.e. perspective A) (Melnychuk et al., 2011, p. 159).

Melnychuk et al. (2011) also investigated CCUPEKA's accreditation standards for physical education programs. They found, as also previously stated by Mason (2010), that CCUPEKA accreditation standards lean towards perspective A, or in other words encourage the predominance of performance-oriented discourses (see section two of

Table 8). When Meylnchuk et al. (2011) asked participants whether or not they believed CCUPEKA accreditation enhances the quality of physical education programs in Canada, the majority, fifty-nine percent, did not believe they did; this may be due to the emphasis on performance-oriented discourses.

Table 8. CCUPEKA Curriculum Standards

Kinesiology	Physical Education
1. Program Structure	1. Program Structure
a) Breadth - 50% courses taught by Kin	a) Courses in 4 areas: Arts/Science,
academic unit (20 of 40)	Disciplinary content in Physical Education,
b) Depth – minimum 4 kinesiology courses	Physical activities, (Integrated and B.Ed
offered at the advanced level	programs only)
c) Faculty Complement – 75% Kin courses	b) Breadth – 50% courses offered by Phys.
taught by full-time Kin faculty/staff	Ed. (20 of 40)
	c) Depth – Minimum 4 Phys. Ed. Courses
	offered at the advanced level
	d) Faculty Complement – 75% Phys. Ed.
	Courses taught by full-time PE/Kin
	Faculty/Staff
2. Core Courses: human anatomy, human	2. Core Courses: human anatomy, human
physiology,	physiology,
exercise physiology, biomechanics, motor	exercise physiology, biomechanics, motor
learning/motor control; psychology of	learning/motor control; psychology of
physical activity, and two courses in	physical activity, and two courses in

social science and/or humanities area (total social science and/or humanities area (total of 8 courses) of 8 courses) 3. Scientific Inquiry: research methods, 3. Core Activities: formalized games, stats (2 courses) sports, and physical activities in alternative environments; dance; basic movement (e.g., track and field, gymnastics); recreation and leisure pursuits; and exercise and health related fitness (4 courses or equivalent). The courses should include what is being taught in the provincial school systems. 4. Application Disciplinary Knowledge: lab 4. Health: required courses – health, growth experiences in at least 4 core courses, and development minimum 96 hours 5. Special Populations: required course – Physical Activity for **Special Populations** 6. Course Specialization: follow all provincial regulations for admission to the B.Ed. programs and document an alignment with the programs in the Faculty of Education 7. Pedagogy:

a) B.Ed. and Integrated programs must
offer courses in Instructional
Strategies, Pedagogy of Physical
Education, Analysis of Teaching in
Physical Education, Curriculum Design
and Implementation, and
Special Populations
b) Minimum of 10 weeks teaching practice
in a physical activity environment

Relation of the Curriculum Conflict to the Core Issue

The following quote by Siedentop (2002) demonstrates how the curriculum conflict can been seen as symptomatic of the academic discipline's core issue of a lack of focus; he states:

In math or English or music or art, the task of defining the content knowledge base would be straightforward. That is because the math, English, music, and art that children learn in school is clearly related to the math, English, music, and art that prospective teachers learn in the university as content knowledge in their teacher preparation programs. To be sure, the university versions of these content fields are more sophisticated, complex, and intellectually rigorous than what is taught in schools, but school curricula in these fields are obviously a developmental version of the mature subject fields of study in the university.

The content knowledge domain for physical education is not so easily identified. In fact, it continues to be a source of serious controversy in our field. (p. 368)

In sum, it appears that as long as there continues to be a lack of consensus over the focus of the academic discipline of physical education, there will be conflicts over its curricula.

Impact of the Curriculum Conflict

The curricula of degree programs have tremendous impact on the fate of the school subjects for which they prepare future teachers (Kirk & Macdonald, 2001, p. 36). Siedentop (2002) elaborates on this logic in regards to physical education, stating that under the current curricula those "who will be graduating from some of our universities in the near future will be better prepared, from a content point of view, to teach a kinesiology curriculum than he or she will be to teach an exercise and sport curriculum" (p. 372). This is problematic as Siedentop (2002) quips that surely "few could sort out... what the motor control unit for 2nd-graders or the biomechanics unit for 3rd-graders might look like" (p. 372).

Melnychuk et al. (2011) also comment on the impact of physical education degree program curricula outside of the university, stating:

It is, then, not surprising that the physical education teacher educators' comments reveal a sense of dissonance as they recognize that PE teacher education programs are failing to prepare soon-to-be teachers to engage with children and youth in a post-modern world; they knowingly are sending pre-service teachers into schools without adequate education related to the demands and challenges of the contemporary context. As long as physical education teacher education programs

continue to focus on sciences as dominant disciplinary content at the expense of humanities and social sciences, pre-service teachers will continue to have such a deficit. With this deficit, it is likely that physical education teacher education graduates will continue to experience a disconnect between their teacher preparation courses and the "real" world in which they soon find themselves. (p. 163)

The Location Conflict

What is The Location Conflict?

The location conflict can be understood as the great variation of, and conflict over, where the academic unit of physical education/kinesiology, and its physical education degree program, is located within the university (Newell, 2007). The academic unit of physical education/kinesiology exists in some universities as its own faculty, while in other universities it exists only as a department within a larger parent/cognate, interdisciplinary, or professional faculty, with or without physical education degree programs (Elliot, 2007; Kirk & MacDonald, 2001; Mason, 2010; Meylnchuk, 2011; Newell 2007; Vertinsky, 2009).

Development of the Location Conflict

Corbin (1993) reviews the historical location of physical education/kinesiology academic units in the United States. Corbin explains that in the late 1800s the first academic units of physical education were housed within, or close to, academic units of health or medicine; the units which birthed physical education (Corbin, 1993). During the 1950s physical education units were often housed with athletics, health, and recreation units. However, during the Cold War educational reform movement, physical education

academic units were in search of academic legitimacy that led to a separation from athletics. Since this time the location of physical education/kinesiology academic units has been highly variable (Elliot, 2007).

Elliot's (2007) vignette offers valuable insight into the development of the Canadian location conflict,

Traditionally many physical education programs were intimately linked to the university service programs. This was the case at my university (McMaster University) where in the 1970s and 1980s the School of Physical Education and Athletics was responsible for not only undergraduate and graduate academic programs but also student intramural and recreational services and inter-university varsity athletics. Faculty members were often expected to contribute to the academic program and also teach activity courses and/or coach a varsity team. With academic specialization, this made appointments difficult. No longer was it possible to find someone who, for example, was able to teach biomechanics and coach varsity hockey. At McMaster, this situation fostered an administrative split that resulted in a Department of Physical Education and a new Department of Athletics and Recreation. Physical Education remained in the Faculty of Social Sciences, while Athletics and Recreation was treated as a nonacademic unit under the umbrella of Student Services. This initial split was necessary for what resulted in a shift in academic orientation and a name change to the Department of Kinesiology several years later. A similar process occurred at a number of other Canadian universities.

Other institutions followed different paths. At some schools (e.g., University of Calgary, University of Saskatchewan, University of Windsor, and University of New Brunswick), faculties or colleges of kinesiology/human kinetics evolved that included separate academic and student service programs. At universities in which kinesiology/human kinetics holds departmental/school, as opposed to faculty status, the affiliations are extremely varied. Departments are associated with the Faculties of Education (e.g., University of British Columbia, University of Victoria), Applied Sciences (e.g., Simon Fraser University), Applied Health Sciences (University of Waterloo), Health Sciences (e.g., University of Ottawa, University of Western Ontario), Science (e.g., Wilfrid Laurier University), and Professional Studies (e.g., Lakehead University, Acadia University). Some of the older universities in Canada have chosen to maintain the physical education tradition (e.g., University of Toronto, Faculty of Physical Education and Health; Queen's University, School of Physical and Health Education; Université Laval, Departement d'Éducation Physique) or adopt a dualdesignation (e.g., McGill University, Department of Kinesiology and Physical Education). (p. 158)

Present Reality of the Location Conflict

Despite the fact that the location of an academic discipline and degree program within a university holds significant impact, this issue has gone largely unanalyzed in the literature (Newell, 2007). The literature that does exist on the location conflict is largely theoretical, leaving little empirical evidence to capture the present reality of the conflict. Therefore, the author conducted a scan of 31 Canadian universities by accessing their

institution websites. This scan was analyzed to draw conclusions about the current reality of the location conflict within Canada (Note that this scan is explained in detail in the Name Conflict section).

Table 9 illustrates the scan of the 31 Canadian universities. The three columns on the left contain information taken directly from the institution's websites, including the name of the university, the largest academic unit organization (i.e. Level 1 refers to faculty organization as opposed to Level 2 departmental organization), and the degrees offered within those academic units. The last two columns contain analysis generated by the author. The analysis revealed that the academic units could largely be organized into seven categories and the fourth column indicates these categories. And lastly, the fifth column indicates the underlying archetype of the categories in column four.

Table 9. Physical Education/Kinesiology Academic Units in Canada 2011

University	Faculty Title (Level I Organizer)	Degrees offered	Category of Faculty Title (Level I Organizer)	Academic Unit Archetype
Acadia	Professional	B.Kin.	Professional	Professional
University	Studies		Studies	
Dalhousie	Health	BSc; BSc/BM		
University	Professions			
Laurentian	Professional	BSc.Kin.;		
University	Schools	B.P.H.E; B.A.		
University of	Physical	BARST; BPE;	Kinesiology /	Independent
Alberta	Education and	BPE/BEd; BSc	Physical	

	Recreation	Kin	Education	
University of	Kinesiology	BKin; BSc;		
Calgary		BKin/BEd		
**University of		BASc.		
Guelph-Humber				
University of	Kinesiology and	B.Kin.; B.Kin-		
Manitoba	Recreation	AT; B.P.E.		
	Management			
Memorial	Human Kinetics	B.Kin Co-op;		
University	and Recreation	B.PE Co-op;		
		B.Rec Co-op		
University of	Kinesiology	BscKIN; BRSS		
New Brunswick				
University of	Kinesiology and	BKin; BSRS;		
Regina	Health Studies	BHS		
University of	Kinesiology	B.Sc(Kin.)/B.Ed;		
Saskatchewan		B.Sc(Kin)		
University of	Kinesiology and	BPHE; BKIN;		
Toronto	Physical	СТЕР		
	Education			
University of	Human Kinetics	ВНК		
Windsor				
Brandon	Education	B.A./B.Ed.	Education	Parent /
University				Cognate

University of	Education	B.Kin.		
British				
Columbia				
Vancouver	Education	B.A.	_	
Island				
University				
McGill	Education	B.Sc.; B.Ed.	1	
University				
University of	Arts	B.A.; B.Sc	Arts	Parent /
Victoria				Cognate
University of	Arts	BA; BSc		
Winnipeg				
MacMaster	Science	B.Sc. Kin	Science	Parent /
University				Cognate
University of	Science	B.Sc.		
Prince Edward				
Island				
Simon Fraser	Science	B.Sc.		
University				
Wilfrid Laurier	Science	BA; B.Sc		
University				
Concordia	Arts and	BSc	Arts and	Inter-
University	Science		Science	disciplinary
Lethbridge	Arts and	B.A.; B.Sc.	_	

University	Science			
Queen's	Arts and	BPHE; BSCH;		
University	Science	BA		
Brock	Applied Health	BKin; BSc;	Health	Parent /
University	Sciences	BPhEd/BEd		Cognate
Lakehead	Health and	HBK; HBK/BEd		
University	Behavioural			
	Studies			
University of	Health Sciences	BHK; BScHK		
Ottawa				
University of	Applied Health	BSc		
Waterloo	Sciences			
University of	Health Sciences	BSc; BA		
Western Ontario				

^{*}Information listed in Table 9 is listed exactly as it appears on the institution's website.

Analysis of this scan offers the following conclusions:

Within these 31 Canadian universities, the academic unit of physical
education/kinesiology is located in seven different faculty categories, including
faculties of: Professional Studies, Education, Arts, Science, Arts and Science,
Health, or its own Physical education/kinesiology faculty. These seven categories
of faculties can be further organized by the archetype of the academic unit,

^{**}University of Guelph-Humber is separated by program and not by administrative/academic units

including: professional (professional studies), parent/cognate (education, arts, science, health), interdisciplinary (arts and science), and independent (physical education/kinesiology).

- Within 70% (n=22) of these 31 Canadian universities, physical education/kinesiology academic units hold departmental status, while the remaining 30% (n=9) hold faculty status.
- The faculty category representative of most university physical education/kinesiology academic units in this sample is the independent category (i.e. where physical education/kinesiology hold faculty status), constituting 32% (n=10).
- Within this sample of 31 Canadian universities, eight universities (25%) offer physical education degree programs. Of these eight physical education degree-granting programs, five are located as independent faculties, and one is located in each of the professional, interdisciplinary, and health parent/cognate faculties. (It is important to note that some universities present their Bachelor of Kinesiology degree to have a physical education teaching focus, and to be a precursor to, or combined with, a Bachelor of Education. These kinesiology degree programs were not considered by the author to be equivalent to physical education degree programs and therefore were not included in the tally of physical education degree programs).

Relation of the Location Conflict to the Core Issue

The location conflict can be understood as symptomatic of the core issue of a lack of focus (Newell, 2007; Vertinsky, 2009). More specifically, the breadth of foci in this

academic discipline, results in a breadth of locations where the academic unit may fit. For example, within one academic unit of physical education/kinesiology, foci within the pedagogy research sub-discipline may appropriately fit within the Faculty of Education, while simultaneously foci within the exercise physiology research sub-discipline may appropriately fit within in the Faculty of Science.

Impact of the Location Conflict

The location conflict has many important, and some would argue detrimental, implications for the academic discipline of physical education/kinesiology and its physical education degree programs (Kirk & Macdonald, 2001; Lawson 1991; Tinning, 1991; Whitson & Macintosh, 1990). First, the fact that physical education/kinesiology academic units largely do not exist as independent faculties but rather as dependent departments within a variety of diverse larger faculties, means that units in different faculties are being influenced quite differently depending on the local demands of the faculty. For example, the focus and degree programs of a physical education/kinesiology department housed within a professional faculty would be markedly different than the focus and degree programs of a physical education/kinesiology department housed within an interdisciplinary faculty. These two departments would likely have very different faculty members, courses, degree programs, and administrators. Therefore, the variety of locations for physical education/kinesiology academic units and physical education degree programs only contributes to the academic discipline's lack of focus (Newell, 2007).

Second, the location of a physical education/kinesiology academic unit may have a negative impact on particular faculty members within the academic unit. For example,

if a physical education/kinesiology unit is located within a Faculty of Science, those within the research sub-discipline of pedagogy may feel marginalized as their interests are only marginally aligned with the larger interest of the faculty (Melnychuk, et al., 2011). A study conducted by Melnychuk et al. (2011) provides evidence of this. Pedagogues within Canadian physical education/kinesiology academic units completed questionnaires, and when asked about the location conflict some participants are quoted as saying that they feel "the program is controlled by people who do not know anything about physical education", resulting in the feeling that they are "undervalued" and "fighting for survival" (Melnychuk et al., 2011, p. 161).

Third, the migration of physical education degree programs and the pedagogy research sub-discipline to Faculties of Education has not often been advantageous for the degree programs or pedagogues. As Kirk and Macdonald (2001) found, and is also reflected in the above scan of 31 Canadian universities, "where [physical education] has been located within a faculty of education, it has suffered the same fate as teacher education in other subject areas", that of absorption and homogenization (p. 451). Kirk and Macdonald (2001) further conclude "where [physical education] has been located in physical activity departments, programs have been better able to retain staff and resources" (p. 451).

The Name Conflict

What is the Name Conflict?

The name conflict can be understood as the debate over which name should represent the academic discipline of physical education/kinesiology and its academic units within universities (Lawson, 2007). Contests over the name exist between those

who wish to change the name and those who do not, and also between two or more groups who wish to change the name but disagree over which name to use.

In North America the name conflict has largely centered around the names of 'physical education' and 'kinesiology'. More specifically, the North American name conflict often involves debates over changing the name from 'physical education' (historically the original and universally accepted name), to variations of the name 'physical education', or to other names entirely, the most prominent of which being 'kinesiology' (Custonja et al., 2009; Lawson, 2007; Mason, 2010; Newell, 1990; Rikli, 2006).

Development of the Name Conflict

At the time of the formal establishment of the academic discipline in 1964, the preparation of physical education teachers had been the singular focus, and hence there was no contest over the virtually exclusive use of the name 'physical education' (Lawson, 2007). However, this changed significantly in the following years. In the Cold War educational reform climate, the academic discipline of physical education had to achieve, as all subjects did, high levels of scientific and academic rigor, or face elimination from the academy (Siedentop, 2009). In order to maintain its place in the university, over the next two decades those within higher education physical education passionately developed a productive academic discipline (Wiegand et al., 2004). More specifically, academics in the field specialized into a diverse range of research sub-disciplines and applied parent/cognate discipline techniques to achieve high standards of academic veracity (Corbin, 1993; Greendorfer, 1987). This process has been described as a time of differentiation, as the academic discipline grew in breadth from the singular focus on

physical education, to include a variety of other, largely scientific and nonprofessional foci (Corbin, 1993, Custonja et al., 2009; Kirk & Macdonald, 2001; Lawson, 2007).

Due to the rapid and expansive differentiation, those within the academic discipline of physical education were experiencing a self-proclaimed "identity crisis" by the 1980s (Corbin, 1993, p. 85). It was at this time that conflicts over the name escalated (Corbin, 1993). More specifically, some scholars within the academic discipline who were not involved in pedagogy or physical education teacher education became dissatisfied with the name of 'physical education', as they felt it was no longer an accurate representation of the focus of the academic discipline (Corbin, 1993). Name debates in the literature reached an all time high during the late 1980s and early 1990s (Corbin, 1993). To put the diversity of opinions into context, in 1990, Razor and Brassie identified that there were over 100 different names in use as titles of physical education/kinesiology academic units in the United States.

However, an identity crisis is not the only reason cited for the existence of the name conflict. The following list includes a variety of identified reasons for name change proposals and subsequent debate: changes in academic focus (Corbin, 1993; Lawson 1998), to increase acceptance within the academy (Corbin, 1993); to attract students (Corbin, 1993; Custonja et al., 2009); for grant acquisition (Corbin, 1993); for prestige purposes (Lawson, 2007); desire for an umbrella term to capture breadth of field (Newell, 1990b); and lastly, to avoid the stigma associated with physical education (Melnychuk et al., 2011).

The Present Reality of the Name Conflict

The continual back and forth nature of the name conflict has earned it the nickname of 'the name game' or 'the name change game', by which it is commonly referred to in the literature (Corbin, 1993; Lawson, 2007).

At present, conflicts over the name are often small-scale intra-university debates about the name of a single academic unit, rather than the previous 1980s and 90s large-scale debates about the name of the academic discipline at large.

In 1998, Lathrop and Murray conducted a scan of the names of physical education/kinesiology departments and faculties within 31 universities across Canada. In order to provide a sense of the present reality of the name conflict in Canada, the researcher has repeated this scan in 2012 by accessing each of the institutions' websites. Table 10 outlines the information collected from the 2012 scan, furthermore Figure 10 demonstrates a comparison of the 1998 and 2012 data.

Table 10. Names of Physical Education/Kinesiology Academic Units in Canada 2012

University	Level I	Level II
Acadia University	Faculty of Professional	Department of Kinesiology
	Studies	
University of Alberta	Faculty of Physical	N/A
	Education and Recreation	
Brandon University	Faculty of Education	Department of Physical
		Education
University of British	Faculty of Education	School of Kinesiology
Columbia		

Brock University	Faculty of Applied Health	Department of Kinesiology
	Sciences	
University of Calgary	Faculty of Kinesiology	N/A
Concordia University	Faculty of Arts and Science	Department of Exercise
		Science
Dalhousie University	Faculty of Health	School of Health and
	Professions	Human Performance
University of Guelph-	N/A	N/A
Humber		
Lakehead University	Faculty of Health and	School of Kinesiology
	Behavioural Sciences	
Laurentian University	Faculty of Professional	School in Human Kinetics
	Schools	
Lethbridge University	Arts and Science	Kinesiology and Physical
		Education
Vancouver Island	Faculty of Education	N/A
University (prev. Malaspina		
University)		
University of Manitoba	Faculty of Kinesiology and	N/A
	Recreation Management	
McGill University	Faculty of Education	Department of Kinesiology
		and Physical Education
McMaster University	Faculty of Science	Department of Kinesiology

Memorial University	School of Human Kinetics	N/A
	and Recreation	
University of New	Faculty of Kinesiology	N/A
Brunswick		
University of Ottawa	Faculty of Health Sciences	School of Human Kinetics
University of Prince	Faculty of Science	Department of Applied
Edward Island		Human Sciences
Queen's University	Faculty of Arts and Science	School of Kinesiology and
		Health Studies
University of Regina	Faculty of Kinesiology and	N/A
	Health Studies	
University of Saskatchewan	College of Kinesiology	N/A
Simon Fraser University	Faculty of Science	Department of Biomedical
		Physiology and Kinesiology
University of Toronto	Faculty of Kinesiology and	N/A
	Physical Education	
University of Victoria	Faculty of Arts	Department of Kinesiology
		and Applied Health
University of Waterloo	Faculty of Applied Health	Department of Kinesiology
	Sciences	
University of Western	Faculty of Health Sciences	School of Kinesiology
Ontario		

Wilfred Laurier University	Faculty of Science	Department of Kinesiology
		and Physical Education
University of Windsor	Faculty of Human Kinetics	Department of Kinesiology
University of Winnipeg	Faculty of Arts	Department of Kinesiology
1.6		and Applied Health
		una rippinea ricuiui

*N/A – In the case where the academic unit of physical education/kinesiology held faculty status, there was therefore no further level II department organizer. Furthermore, in the case of the University of Guelph-Humber, this institution had a unique organization where does not appear to have traditional academic units and instead are organized by program.

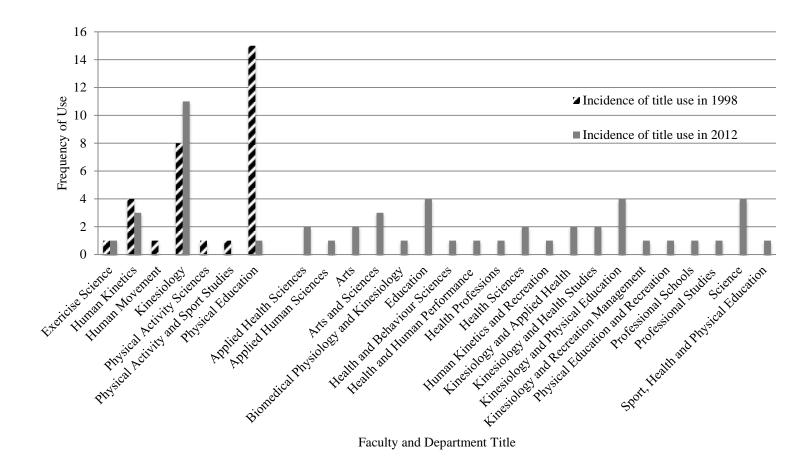


Figure 10. Names of academic units in Canada: 1998 versus 2012.

From this comparison, a few important conclusions can be drawn about the present reality of the name conflict within Canada, such as:

- The use of the name 'physical education' has decreased markedly in frequency. In 1998, 'physical education' was a stand-alone name for 15 (48%) of the 31 university titles. However, in 2012, 'physical education' was the stand-alone name at only one (3%) university, and otherwise appeared as a dual-designation in only three other titles (in conjunction with 'kinesiology' four times, with 'recreation' twice, and 'health' and 'sport' one time each).
- There has been a marked increase in the use of the name 'kinesiology'. As a stand-alone title, 'kinesiology' saw only moderate growth, from eight (26%) of 31 titles in 1998, to 11 (35%) of 31 titles in 2012. However, the use of the term 'kinesiology' as a dual-designation title was noteworthy, more specifically it was used in combination with other terms within five different titles (as the leading term for four out of five of these titles), and for a frequency of 10 (32%) times in total. In sum, the name 'kinesiology' was used both as a stand-alone and dual-designation title in 21 (68%) of 31 university titles in 2012.
- The term 'health' has begun to be used within faculty and department titles with consistent frequency. In 1998, 'health' appeared in no titles, yet by 2012, health appeared in seven different titles, and for a frequency of 10 times (32%).
- The use of names explicitly relating to the body and embodiment has declined from 1998 to 2012. In 1998, the term 'activity' appeared in two titles (6%), and the term 'physical' appeared in 17 (55%) titles; in 2012, these titles appeared zero (0%) and five (16%) times respectively.

- The inclusion of the term 'science' has increased markedly. In 1998, 'science' appeared only two (6%) times in two different titles, whereas in 2012, 'science' appeared 13 (42%) times, in 5 different titles.
- The frequency of dual-designation titles (i.e. the use of two or more terms in a single title combined with 'and') increased markedly. In 1998, only one (3%) title was conjoined, and used at only one university, whereas in 2012, 11 different titles were conjoined, and at 19 (61%) different universities.
- The variety of titles used as academic title names has increased. In 1998, 31
 universities were represented by only seven different titles, whereas in 2012, 31
 universities were represented by 24 different titles. In other words, the total
 number of titles has more than tripled.

In summary, the occurrence of the name 'physical education' and names referring to the body and embodiment decreased in frequency; while the names 'kinesiology', 'health', 'science', dual-designation names, as well as the total number of names, increased in frequency.

The decrease in professional (i.e. 'physical education') and corporeal (i.e. 'physical', 'activity') names, along with the increase in scientific names (i.e. 'kinesiology', 'health', 'science'), may be a testament to the trend of scientization that has been identified within higher education (Andrews, 2008). This can be evidenced in the privileging of discourses relating to basic research and natural sciences over discourses relating to applied research, social sciences, and professions (Andrews, 2008).

A study by Custonja et al. (2009) [Croatia] offered insight into the international reality of the name conflict through their review of the European and American context.

The results of the Custonja et al. study have been combined with the results of the author's 2012 scan of 31 Canadian universities. Table 11 provides the terms used with the most frequency in the names of higher education physical education/kinesiology academic units in Europe, the United States, and Canada.

Table 11. Most Frequently Used Terms in Physical Education/Kinesiology Academic
Unit Titles

	#1	#2	#3
United States of America	Health	Physical Education	Kinesiology
(Custonja et al., 2009)			
Europe	Sport	Physical Education	Exercise
(Custonja et al., 2009)			Sport Science
Canada	Kinesiology	Physical Education	Education
(Author, 2012)			Human Kinetics
			Health Sciences

*Cells in Table 11 which hold more than one name, indicate a tie in frequency.

Consideration of Table 11, along with other results reported in Custonja et al.

(2009), offer a few important conclusions. First, the variety of names and inconsistency of their order of use, indicate that the name conflict is still very much prevalent; and that there is no international agreement on a name. Second, the popularity of the term 'kinesiology' is largely a North American trend, and is actually "quite uncommon in Europe. Currently, there are only three university faculties that use the term kinesiology in their names" (out of 980 surveyed) (Custonja, et al., 2009, p. 143). Third, despite a decrease in the use of the name 'physical education' seen in the author's Canadian scan,

physical education is still a relatively prominent (i.e. 2nd overall) name in both Europe and North America. Lastly, despite the fact that the frequency of terms related explicitly to the body and embodiment decreased markedly in the Canadian scan, these terms (i.e. Sport, Exercise) have a prominent place in European physical education/kinesiology academic unit titles.

Relation of the Name Conflict to the Core Issue

The name conflict can be understood as symptomatic of the academic discipline's core issue of a lack of focus (Greendorfer, 1987; Newell, 1990). As indirectly stated by Melnychuk et al. (2011), "such name changing practices are functionally a front for deep rooted underlying issues" (p. 150). Lawson (1998) explains more specifically that such "name contests and conflicts over language systems are really proxies for a profound identity crisis" resulting from a lack of focus (p. 231). Newell (1990) aptly explains that despite this fairly direct link, "many faculty fail to recognize that the fundamental problem is not the name itself-although the name is at the center of the debate" (p. 270). This attention to the name conflict, and ignorance of the core issue, may be due to the fact that the name conflict is a simpler and more tangible issue to debate, as words function to "symbolize or codify existing debates into simple and comprehensive arguments" (p. 270). It can reasonably be extrapolated that as long as the core issue of a lack of focus exists, the name game will continue.

Furthermore, from the scan of 31 Canadian universities it can be seen that the number of dual-designation names, as well as the total variety of names, increased markedly from 1998 to 2012. It may be concluded that these results are indicative of an even broader academic discipline, and even greater lack of focus, than existed in 1998.

Impact of the Name Conflict

The name conflict has a considerably negative impact on the academic discipline of physical education/kinesiology. The name of a field carries strong political implications, and therefore there is much power and politics inherent in the name conflict (Newell, 1990a). In other words, it is important to acknowledge, "issues of naming and framing fields of knowledge are far from innocent or esoteric word games" (Kirk & Macdonald, 2001, p. 441).

Power. It is important to note, "all kinds of power are directed, mediated, or resisted through language" (Fowler, 2004, p. 28). This notion is significant because different names (and the text it includes and excludes) send different messages about what is of value and power in the academic discipline. Depending on the name, this can have direct impact for faculty in particular research sub-disciplines. For example, a department named 'Physical Education and Kinesiology' suggests that the department includes faculty members from the applied and professional pedagogy research sub-discipline, as well as faculty members from the liberal and scientific research sub-disciplines. Furthermore, this title may suggest that because physical education is listed first, it is considered to be more important, and thereby possesses more power.

Alternatively, a department simply entitled 'physical education' or 'kinesiology' may suggest that the department does not include the other, and that the other is not of significant relevance to the department to warrant inclusion in the name.

The top-down model that has been the nature of the university since the 1980s has placed the faculty who study the more 'scientific' sub-disciplines in positions of greater power over those studying professional content (Andrews, 2008; Corbin, 1993).

Interestingly, it has been reported that members of the education sector, specifically those within higher education, are often less interested in the actual content of an issue, or even the outcome of a decision, and rather to be more interested in "asserting their power and importance in the governance system" (Richman & Farmer, 1972, p. 169). Kirk (2010) argues that due to this power imbalance and apparent desire to assert power, physical education faces the danger of "murder" at the hands of the more powerful disciplinarians that may chose to exercise their power in the name conflict without regard for the importance of the issue, and the severity of the implications for the future of physical education (p. 33).

Furthermore, it is not only the names being debated that are important. It is also important to consider that there is power inherent in a name change itself, regardless of what the name changes from, or to (Baldridge, 1971b). The simple act of changing a name from one to another suggests that one is no longer of relevance, importance, or value, while the new name *is* of relevance, importance, and value. As the original academic units in this field were consistently referred to as 'physical education', the suggestion that the name should be changed calls into question the relevance, importance, and value of physical education.

Prestige. Prestige is a priority for universities, making rankings and disciplinary comparisons a necessity (Lawson, 2007). However, such rankings and comparisons rely heavily on names. For example, it is difficult to make comparisons of academic units across universities when the names of each are different (Lawson, 2007). Different names denoting the same area of study send unfavourable messages to outsiders about the coherence and stability of the academic discipline (Rikli, 2006).

In sum, it is no surprise that a number of physical education/kinesiology scholars have made exasperated calls for an end to the name conflict (Corbin, 1993; Lawson, 1998; Lawson, 2007; Massengale, 2000; Rikli, 2006). This conflict, and the power and politics involved, impacts the current and future status of university departments, programs, and by extension, the entire field (Lawson, 2007). While consensus on a single name would likely aid in the unity of this "chaotic" field (Newell, 1991a, p. 227), at this point agreement does not seem likely (Corbin, 1993). Lawson (2007) offers a chilling forewarning that "a field unable to reach basic agreements on so fundamental an issue as its…nomenclature…may be one engaged in self-defeating and even self-destructive behaviour" (p. 224).

The Organizational Framework Conflict

What is the Organizational Framework Conflict?

The organizational framework conflict can be understood as "disagreement over the structure of the [academic] discipline" of physical education/kinesiology (Lawson & Morford, 1979, p. 222).

To understand the organizational framework conflict, the nature of the physical education/kinesiology academic discipline must first be understood. More specifically, it must be understood that this academic discipline is much broader than a traditional academic discipline (Lawson & Morford, 1979). This breadth is a result of the horizontal, as opposed to vertical, orientation of the physical education/kinesiology academic discipline, which "transcends traditional disciplinary boundaries [such as anatomy, physics, psychology, history, sociology, physiology] in order to generate its thematically integrated subject matter" (Lawson & Morford, 1979, p. 223).

The conflict of which organizational framework should underpin this academic discipline has to do with the current, and highly criticized, interdisciplinary organizational framework, and a proposed alternative cross-disciplinary framework (Gill, 2007; Lawson & Morford, 1979; Lawson, 2007; Rikli, 2006; Vertinsky, 2009). These two organizational frameworks are compared in Table 12. (Footnote: Unfortunately, to complicate this issue further, the terms used to describe the organizational frameworks "have often been used interchangeably and carelessly", therefore a comparison of terminology used in the literature is also provided in the right-hand column [Lawson & Morford, 1979, p. 223]).

Table 12. Inter-Disciplinary versus Cross-Disciplinary Organizational Frameworks

	Description	Terms Used
Type A	"Model relies on the various sub-	• *"Inter-disciplinary"
'Inter-disciplinary'	disciplines" (Lawson, 2007, p. 226).	(Henry, 1974;
(Current	"Sub-disciplines are specialized areas	Lawson 1979; 2007)
Organizational	of study, areas that bear the names of	• "Cognate-
Framework)	parent arts and science disciplines" (i.e.	disciplinary
	psychology of physical activity)	approach"
	(Lawson, 2007, p. 226).	(Newell, 2007)
	• "Consists of aggregation of sub-	
	disciplinary specialists" (Lawson,	
	2007, p. 225).	
	• "Does not promise an integrated	
	language system" (Lawson, 2007, p.	
	226).	

•	"Faculty face the formidable challenges	
	of establishing relevance, credibility,	
	and legitimacy in the parent arts and	
	sciences discipline and, at the same	
	time, offering relevant knowledge and	
	understanding to students and faculty	
	colleagues in their home department	
	and discipline" (Lawson, 2007, p. 226).	
Type B •	"Thematically organized" (Lawson,	• *"Cross-
'Cross-disciplinary'	2007, p. 225).	disciplinary"
(Alternatively	"Do[es] not employ the names of arts	(Henry, 1964; Henry
Proposed	and sciences disciplines, because	1974; Lawson &
Organizational	thematic organization necessitates the	Morford, 1979;
Framework)	integration of two or more disciplinary	Lawson 2007)
	perspectives focused on the field's	• "Inter-disciplinary"
	special phenomena of interest (e.g.	(Newell, 2007;

*The asterisked terms will be used in this research as these terms appear most frequently in the literature.

The conflict over which organizational framework should prevail "carries with it logical guidelines as to how knowledge is to be organized and disseminated, this question of structure is an important one" (Lawson & Morford, 1979, p. 222). Figure 11 has been modified from Corbin (1991), and depicts differing views of the interdisciplinary organizational framework.

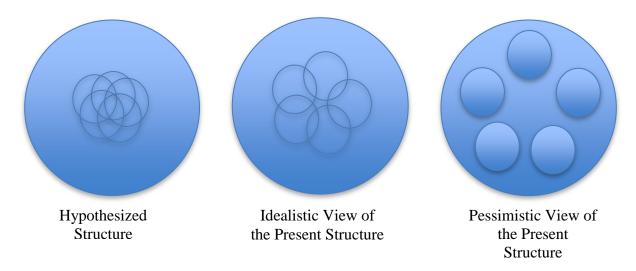


Figure 11. Views of the interdisciplinary organizational framework.

*The circles represent research sub-disciplines within the larger academic discipline.

Figure 12 is reproduced from Lawson and Morford (1979). Figure 12 illustrates what the academic discipline of physical education/kinesiology may look like from a cross-disciplinary organizational framework.

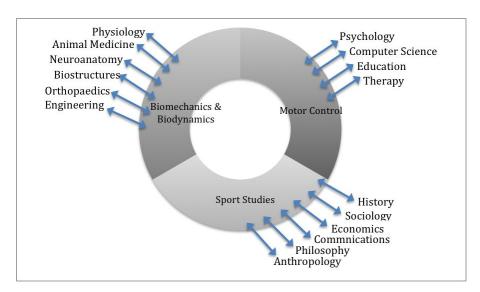


Figure 12. Lawson and Morford's (1979) cross-disciplinary organizational framework.

In sum, the organizational framework conflict is characterized by dissatisfaction with the current interdisciplinary organizational framework, suggested improvements to

this framework, as well as the proposal of the alternative cross-disciplinary organizational framework.

Development of the Organizational Framework Conflict

In 1964 Franklin M. Henry called for the formal establishment of an academic discipline for the field of physical education (Corbin, 1993). More specifically, Henry (1964) called for an "integrated" organizational framework for this academic discipline, that would "not [merely] consist of the application of the disciplines of anthropology, psychology, and the like, to the study of physical activity", but would be "cross-disciplinary" (p. 33).

Henry's (1964) call for the formal establishment of this academic discipline is largely interpreted as a response to the Cold War educational reform critics, such as James Bryant Conant (Siedentop, 2009). At this time, many academic units within the university, and school subjects within the education system, were threatened with elimination for lacking sufficient academic rigor and scientific content (Corbin, 1993). Therefore, the development of a rigorous and scientific academic discipline of physical education was taken up passionately by those within the field, in hopes of maintaining their place within the academy (Andrews, 2008; Corbin, 1993; Wiegand et al., 2004). However, Greendorfer (1987) explains that "what Henry suggested [cross-disciplinary], and what subsequently developed [interdisciplinary], were two entirely different organizational structures of knowledge" (p. 61). The development of an interdisciplinary, rather than cross-disciplinary, framework was likely due to the fact that the development of the academic discipline was occurring during the 1960s, a period where being academically successful required a high degree of specialization in a particular and

narrow area (Andrews, 2008; Corbin, 1993; Wiegand et al., 2004). This climate of specialization was not conducive to the academic discipline unfolding in a cross-disciplinary nature as Henry (1964) had intended; instead, "sub-disciplinary development proceeded in an isolated and uneven fashion, virtually shaped by the pursuit of an instant structure in order to attain academic respectability" (Greendorfer, 1987, p. 61). The need for specialization required physical education scholars to compartmentalize themselves in order to develop prolific vertical knowledge in a particular and narrow area; what can be understood as: a sub-discipline (Greendorfer, 1987). Scholars across this field busily generated an explosion of vertical knowledge in each sub-disciplinary area through the "specialized application of parent discipline concepts and approaches to specific topics... without an eye toward horizontal or thematic integration" (Greendorfer, 1987, p. 62).

Over time, this organization resulted in highly specialized work in one research sub-discipline of physical education/kinesiology becoming largely unrelated to the highly specialized work in another research sub-discipline of physical education/kinesiology (Greendorfer, 1987; Newell, 2007). Furthermore, the application of different parent/cognate disciplinary approaches within each research sub-discipline, each with its own unique nomenclature, techniques, assumptions, and philosophies, meant work in one research sub-discipline was largely incomprehensible to those within a different research sub-discipline (Greendorfer, 1987; Newell, 2007). For instance, the specialized work of the physical activity sociologist and the specialized work of the muscle physiologist have little import, significance, and relation to one another. As a result, instead of an academic discipline "representing a broad-based consortium of perspectives, a splintered vertical knowledge structure emerged" (Greendorfer, 1987, p. 62). By the 1980s, the issues

pertaining to the interdisciplinary organizational framework of physical education/kinesiology was widely discussed and debated within the literature.

Figure 13 is the author's illustration of the vertical knowledge structure resulting from the largely segmented nature of the current interdisciplinary organizational framework.



Figure 13. Vertical knowledge structure of inter-disciplinarity.

In sum, the organizational framework conflict can largely be understood as a result of the fragmented structure of the interdisciplinary organizational framework and increasing specialization within higher education from the 1960s onward.

Present Reality the Organizational Framework Conflict

The organizational framework currently dominating the academic discipline of physical education/kinesiology across the globe is the interdisciplinary organizational framework (Lawson, 2007, p. 226). Despite the controversy and criticism of this organizational framework it remains entrenched, and there is consensus among scholars (Hellison, 1992; Lawson 2007, Massengale, 2000) that this organizational framework is "here to stay and that will not change" (Massengale, 2000, p. 107).

Unfortunately, this interdisciplinary organizational framework has created a largely dysfunctional culture among the research sub-disciplines of higher education physical education/kinesiology (Greendorfer, 1987). The sub-disciplines have "few

common interests, no central questions, different language systems, and basically no unique body of knowledge", making communication, understanding, and even respect, between sub-disciplines difficult (Greendorfer, 1987, p. 63).

Relation of the Organizational Framework Conflict to the Core Issue

The organizational framework conflict is intimately linked to the academic discipline's core issue of a lack of focus. More specifically, the fragmented and specialized research sub-disciplines of the interdisciplinary framework each have their own focus or foci, resulting in a variety of largely unrelated foci across the academic discipline. (Greendorfer, 1987). This is a cyclical issue, because as long as there is no identifiable or common focus, the inclusion of 'any focus' will continue to be justified by the research sub-disciplines (Greendorfer, 1987).

Impact of the Organizational Framework Conflict

"There are, clearly, few winners in this type of academic bifurcation and contestation, and kinesiology as a field is undoubtedly the real loser. In our defense, and from the vantage point offered to us by more than four decades of hindsight, sub-disciplinarity was always going to be an unsustainable project for a field of inquiry seeking to coalesce around a defined empirical locus. The integrative ambitions of kinesiology simply cannot be realized through adherence to rigid sub-disciplinarity because it precludes the type of empirically driven disciplinary synthesis that kinesiology demands" (Andrews, 2008, p.

48).

As stated previously, the organizational framework of an academic discipline "carries with it logical guidelines as to how knowledge is to be organized and disseminated, this question of structure is an important one" (Lawson & Morford, 1979,

p. 222). Therefore, it is no wonder that the current interdisciplinary organizational framework is recognized as having considerable impact on the academic discipline of physical education/kinesiology. Unfortunately, at present this impact is largely negative, and therefore it has been stated that this "may not be the best way to fashion the field" (Newell, 2007, p. 12). The various limitations and consequences of this organizational framework will be discussed as follows.

Fragmentation. The interdisciplinary organizational framework has resulted in dramatic fragmentation of the academic discipline of physical education/kinesiology (Andrews, 2008; Greendorfer, 1987; Lawson, 1998; Lawson, 2007; Mason, 2010; Rikli; 2006). More specifically, this organizational framework has fragmented the research subdisciplines into what Kretchmar (2008) calls "silos", which he argues "divide us, splinter the profession, promote hierarchies, impede unity, create tension, [and] make communication within the field difficult" (p. 4).

One impact of a fragmented academic discipline is that it disadvantages the position of the physical education/kinesiology academic discipline as a whole. For example, these fragmented research sub-disciplines often align themselves with different, rather than common, professional organizations. This lack of commitment to a common umbrella organization means there is no single strong organization to function as an effective political voice for the academic discipline (Houlihan & Green, 2006; Rikli, 2006; Morrow & Thomas, 2010). This leaves those within the academic discipline with no sense of communal identity, which is thought to be a necessary hallmark of a profession (Rikli, 2006; Morrow & Thomas, 2010).

Impedes rich potential of thematic scholarship. The nature of this entrenched interdisciplinary organizational framework is considered to "discourage creative, alternative thinking" (Hellison, 1992, p. 42). Newell (2007) argues that the structure of this organizational framework has "helped hold back the scholarly progress on the development of a theory of physical activity" and "fails to do justice to the potential richness of the scholarship of physical activity" (p. 13). Vertinsky (2009) echoes this sentiment by explaining that physical education/kinesiology is built upon the thematic subject of physical activity, and *not* on a method or "way of knowing", like Mathematics may be for example (p. 32). Therefore, the full potential of the physical education/kinesiology academic discipline "simply cannot be realized through adherence to rigid sub-disciplinarity because it precludes the type of empirically driven disciplinary synthesis that kinesiology demands" (Andrews, 2008, p. 48).

Hellison (1992) further postulates that this organizational framework "eliminates those who will not submit to the dominant values" (p. 402). Hellison (1992) explains that interdisciplinary standards make those who do not submit to the framework unsuitable to be hired, promoted, or tenured.

Separation. As mentioned above, instead of orienting faculty members of physical education/kinesiology inward, the interdisciplinary organizational framework orients faculty members outward to a parent/cognate academic discipline (Lawson, 2007). Within the interdisciplinary framework faculty members "face the formidable challenges of establishing relevance, credibility, and legitimacy in the parent arts and sciences discipline and, at the same time, offering relevant knowledge and understanding to students and faculty colleagues in their home department and discipline" (Lawson,

2007, p. 226). This divided attention may increase the likelihood of sub-disciplinary researchers breaking away from academic units of physical education/kinesiology and migrating to parent/cognate academic units (Kretchmar, 2008; Rikli, 2006).

Furthermore, interdisciplinarity and its application of the approaches of parent/cognate academic disciplines "foster[s] orientations that are more focused to the issues and questions of the cognate discipline than to the field of physical activity" (Newell, 2007, p. 13). Newell (2007) states that without careful selection and discrimination as to what interdisciplinary knowledge is relevant to the academic discipline of physical education/kinesiology, the door opens to "emphases being replicas of segments of the cognate discipline with physical activity used merely as an example of a dependent variable" (p. 15). In sum, under this interdisciplinary organizational framework the various foci within this academic discipline have come to be more relevant to parent/cognate academic disciplines than to the physical education/kinesiology academic discipline, and therefore many academics have moved their appointments to these alternative academic units (Newell, 2007).

From saving grace to albatross. It cannot be doubted that Franklin M. Henry's call for the formal establishment of the academic discipline, and the interdisciplinary organizational framework that emerged, was significant "in the development of the field; the process of sub-disciplinarization was probably the most-strategic means of legitimizing and advancing physical education as a field of intellectual inquiry" (Andrews, 2008, p. 48). However, Rikli (2006) explains that ironically, the interdisciplinary organizational framework that is considered as having once "saved" this

entire field, may now be "the very thing that is jeopardizing the field's continued viability" (p. 292-293).

The Profession Versus Discipline Conflict

What is the Profession Versus Discipline Conflict?

The field of physical education/kinesiology has evolved to the point where it is considered both a profession and a discipline (Dunn, 2009). (Note: although there are now multiple professions within this field, the original profession versus discipline conflict pertains solely to the profession of K-12 school physical education teaching, and therefore will be the only profession referred to here). However, the coexistence of these two groups within higher education has been described as "at best an uneasy relationship. At worst, they are becoming more disconnected and out of sync" (Lawson, 1998, p. 230).

Conflict within the profession versus discipline dynamic appears to be of a bidirectional nature.

On one side, some within higher education physical education/kinesiology who identify with the profession (i.e. the pedagogy research sub-discipline) see the discipline to be of little relevance. While on the other side, some who identify with the discipline (i.e. the research sub-disciplines other than pedagogy) wish to distance themselves from, what they consider, un-academic professions (Corbin, 1993, Lawson, 2007; Rink, 2007).

Development of the Profession Versus Discipline Conflict

Originally, higher education physical education had a singular focus on the profession, and more specifically on preparing future professionals to teach K-12 school physical education (Corbin, 1993; Rink, 2007). However, during the post-1950s educational reform movement, this professional focus was not considered to be academic

enough. Therefore, by the late 1960s, many within higher education physical education passionately supported the "disciplinary movement" (Corbin, 1993, p. 84). These efforts intensified in the 1970s, as subject areas "sought to establish firmer disciplinary foundations, principally to solidify their places as legitimate areas of study in institutions where professional study was now considered to be lower on the academic totem pole than academic or disciplinary study" (Corbin, 1993, p. 84). The impact of this disciplinary movement in the 1960s and 1970s has been considered a time of paradigmatic change, where "a new emphasis on the discipline rather than the profession began" (Corbin, 1993, p. 84).

The development of the profession versus discipline conflict can be further understood through Lawson's (1998) analogous description of the developmental pattern of helping fields. Helping fields "are specialized entities that claim to serve society while providing meaningful work for field members. In addition to [the physical education/kinesiology] field, examples include social work, [and] nursing" (p. 227). Lawson (1998) explains:

Helping fields have historically followed an identifiable developmental pattern with certain pivotal points. For example, after a discipline is proclaimed and basic research is rewarded, a helping field with a discipline(s) and profession(s) is established. At this time, disciplinary knowledge and faculty interests begin to transcend the original missions of the helping profession. Conflicts over these changes are the norm. (p. 228)

Present Reality of the Profession Versus Discipline Conflict

Quantifying the profession versus discipline conflict is difficult, as it is largely an epistemological phenomenon. However, this conflict does manifest itself in some measurable ways.

First, from a review of recent literature it appears that the "vociferous and longheld debate" (Newell, 2007, p. 12) of the profession versus discipline conflict has been documented as existing in: Canada (Elliot, 2007; Melnychuk et al., 2011), the United States (Corbin, 1993; Dunn, 2009; Gill, 2007; Lawson, 1998; Lawson 2007; Newell, 2007; Park, 1998; Rink, 2007), England, (Kirk, 2010), and Australia (Kirk & Macdonald, 2001).

Second, the previously discussed 2012 scan of 31 Canadian universities' physical education/kinesiology academic units, can provide some sense of the current reality of the profession versus discipline dynamic in Canada. More specifically, only three of the 31 universities scanned house physical education/kinesiology within explicitly 'professional' faculties. Four more of these academic units are housed in 'education' faculties, which can also be considered as professionally-oriented. Therefore, seven (23%) of the 31 Canadian universities scanned appear to have explicit connections to the profession. Furthermore, seven (23%) of the 31 universities currently offer the degree (bachelor of physical education) which leads to the profession of teaching school physical education. These results (i.e. less than 25%) indicate that the present Canadian reality of the profession versus discipline conflict is similar to Rink's (2007) description of the American context; she states that "from a purely realist perspective few comprehensive departments of kinesiology exist that include professional groups" (p. 101).

Newell (2007) likened the profession versus discipline conflict to that of a "battle", and from the evidence discussed above, it appears as though the discipline is "winning" (p. 12).

Relation of the Profession Versus Discipline Conflict to the Core Issue.

The profession versus discipline conflict can be understood as intimately related to the core issue of a lack of focus. More specifically, within this academic discipline there are a variety of foci, including both professional foci and disciplinary foci, and resources must be split amongst them all. When resources are limited, this can lead to conflict over the division of resources, and in this case, conflict between the professional and disciplinary groups. This is illustrated in Newell's (2007) description of the profession versus discipline conflict as the "battle" over the core focus of the academic discipline (p. 12).

Impact of the Profession Versus Discipline Conflict

Lawson (1998) speaks to the impact of the profession versus discipline conflict; he states "when they are separated – when the scientist, scholar, and the helping professional disregard citizenship and social responsibility in performing work responsibilities and constructing career identities – challenges and crises will likely develop" (p. 233).

One significant consequence of the profession versus discipline conflict is the "knowledge hierarchy" and "system of social relations" that it perpetuates (Lawson, 2007, p. 233). More specifically, the existence of the profession versus discipline conflict results in a social relationship where

Disciplinary faculty researchers are at the top; they enjoy the most power and authority. Professional faculty rank second because they depend on the disciplinarians. Lowly practitioners and sport performance specialists are on the bottom rung because they depend on both disciplinary and professional faculty for the theoretical knowledge they need for their practice. (p. 233)

Melnychuk et al. (2011) provide evidence of the negative impact the knowledge hierarchy and system of social relations has on some pedagogues and professional faculty. Melynchuk et al. (2011) administered questionnaires to 36 pedagogists in 20 Canadian universities. Analysis of this data reveals feelings of marginalization; one participant felt as though they were "fighting for survival" in their academic unit, while another stated feeling "undervalued" (p. 159, 161). It is not surprising that faculty members aligned with the profession feel threatened; as Newell (2007) points out, most profession versus discipline conflicts have resulted in the elimination of the profession, not the discipline, from academic units.

The Future

This section reviews the explicit and implicit future projections of higher education physical education in the literature. More specifically, this section will review explicit projections made by authors of futures research, as well as implicit projections made indirectly by authors discussing the future impact of the academic discipline's various issues, and lastly an analysis of themes which have been repeated in both these explicit and implicit projections.

Explicit Projections

This section outlines the literature that includes *explicitly* projected futures of higher education physical education. This literature involves projections that are:

- Temporally relevant (i.e. predictions made in the recent past, and the dates of the predictions have not yet passed)
- Topically relevant (i.e. predicting the future of higher education physical education versus school physical education)
- Have been generated purposefully (i.e. projecting the future was the main, not secondary intention of the literature)
- Well-developed (i.e. not merely a single sentence)

As stated previously "there is widespread concern for the future of physical education, though little systematic research or explicit writing on this topic" (Kirk, 2010, p. 39). Consequently, the above exclusion criteria leaves only two works to be reviewed; David Kirk's projections made in his 2010 book *Physical Education Futures*, as well as Jimmy H. Ishee's projections found in his 2003 research article "The Future of Physical Education in Higher Education: A Delphi Study".

Ishee (2003). Ishee (2003) conducted a three round Delphi questionnaire investigation with NAK members, who were approached due to their expert knowledge on the subject, with 18 NAK members participating. The purpose of the study was to identify the major influences and changes on higher education physical education over the next 25 years. In the first round, participants were given an open-ended questionnaire and were asked what they believed the major influences and changes in higher education physical education would be over the next 25 years. In the second round, participants were provided with an executive summary of the first round responses, and were asked to rate the probability of the event occurring, predict the year it would occur, and rate the desirability of its occurrence on a five-point Likert scale. In the third round, participants were given the results of the round two questionnaires and asked to rate all items again.

Select results from Ishee's (2003) study are relevant to this research; including the possible, desirable, and undesirable changes that were predicted. Table 13, 14, and 15, were reproduced from Ishee's article.

Table 13. Ishee (2003) Future Changes in Higher Education Physical Education

Change	% Agree	Year
Physical education and sport in higher education will	97	2005
continue to separate and distance themselves from		
each other		
Physical education activity courses in higher education will	94	2005
emphasize lifetime physical activity		
Physical education in higher education will become closely	91	2005
associated with health, wellness, and fitness		

There will be an increase in interdisciplinary scholarship as	82	2005
physical educators collaborate with other disciplines		
Grant money will direct the focus of research in physical	82	2010
education departments		
Physical education departments in higher education will be	82	2005
held accountable for the preparation of graduates		

Table 14. Ishee (2003) Desirable Changes in Higher Education Physical Education

Change	% Agree	Year
There will be greater emphasis on adequately preparing	94	2005
teachers of physical education		
Physical education activity in higher education will	94	2005
emphasize lifetime physical activity		
Physical education departments in higher education will be	94	2005
held accountable for the preparation of graduates		
There will be an increase in interdisciplinary scholarship as	91	2005
physical educators collaborate with other disciplines		
There will be greater flexibility in scheduling of physical	90	2005
education classes in higher education		
Intramural programs will grow and develop greater	88	2010
opportunities for involvement		

Table 15. Ishee (2003) Undesirable Changes in Higher Education Physical Education

Change	% Agree	Year
Physical education academic units in higher education will	97	2010
be eliminated		
Physical activity courses in higher education will become	94	2010
obsolete		
Physical education in higher education will merge with	90	2020
other disciplines		
There will be significantly fewer faculty positions in	87	2010
physical education in higher education		
The physical education requirements in general education	84	2010
will decrease in higher education		
Sub-disciplines in physical education (sport sociology,	84	2010
sport psychology, physiology) will split or move to		
parent disciplines		

Kirk (2010). Kirk (2010) published a book entitled *Physical Education Futures*, in which he conducts a comprehensive review of literature on the future of physical education in both K-12 schools and higher education. To conclude his book, Kirk offers three projections grounded both in the literature he reviewed as well as his educated opinion. Kirk's (2010) three projections are entitled: "more of the same", "radical reform", and "extinction" (p. 121).

More of the same. This projection is just as it sounds; Kirk (2010) predicts that in the short- to middle-term future K-12 school and higher education physical education will change very little. Kirk (2010) argues that physical education degree programs will remain the same, and future physical education graduates will not be equipped to teach anything other than "physical education-as-sport-techniques" and will continue to "legitimate multi-activity, sport-based programs with the molecularised teaching of techniques informed by the hegemony of biomechanics" (p. 122). Kirk (2010) argues that things will remain the same for the following reasons: the argument by some that physical education can only improve with more of the same kind of content, curriculum time, facilities and teachers; the belief by some pedagogists that skill acquisition is the central task of physical education, despite evidence that this goal is rarely realized; and the evidence that teachers see little benefit to disrupting the status quo, and will likely resist change (Kirk, 2010). Kirk (2010) concludes this projection by stating:

More of the same will persist for a time, but sooner or later events will create the need for change, change that physical educators are unlikely to be prepared for or to be consulted on. The short-term gain for physical education could lead to long-term pain. (p. 125)

Radical reform. Kirk (2010) projects a second future characterized by radical reform, which he presents as preferable and which will be required in the longer-term future (p. 125). In Kirk's (2010) review of physical education futures literature, he concluded that many of the authors he reviewed called for such reform. Kirk (2010) provides a myriad of radical reform possibilities; the most relevant possibility to this research is his support of Lawson's (2007) concept to embrace, rather than resist,

fragmentation of the academic discipline of physical education/kinesiology. Kirk (2010) refers to this as intentional fragmentation; this would result in several academic disciplines out of the current singular, yet fragmented, academic discipline. Kirk (2010) argues this concept would then be extended from higher education to K-12 school physical education, and suggests creating stand-alone programs within K-12 school physical education, based on such models as Sport Education, lifetime activities, dance, and meditative and martial arts. To achieve such a model, Kirk (2010) proposes educating future physical education teachers not to be "specialists in generalism", as he feels they currently are, but rather to be specialists in particular dimensions of physical culture, such as exercise, Sport Education, etc. (p. 133). Kirk's (2010) other radical reform possibilities include: an insurgence of degree-qualified sport coaches into schools, especially primary schools; embracing technology in the physical education classroom; changing to pedagogical models and content related to current physical culture, such as Sport Education, Health-Related Exercise, lifetime activities, and dance; and lastly, the commercialization and outsourcing of physical education.

Extinction. Kirk's (2010) third and final projection is a future where physical education in K-12 schools and higher education becomes extinct. Kirk (2010) explicitly states

One of the strongest forces propelling physical education towards extinction is the form of physical education teacher education that has emerged along with the academization of higher education physical activity programs since the 1970s.

The consequent reduction and marginalization of the experience of practical physical activity has produced teachers better suited to teaching senior high

school examination versions of physical education than the core programs for younger pupils. (p. 137)

Kirk (2010) bases his extinction projection in the following arguments. First, the "ambivalence" about the types of practical expertise undergraduate physical education students receive results in graduates who, in turn, instruct poor K-12 school physical education programs, and whose students achieve low levels of ability (p. 138). Second, the "amorphous" curricula of undergraduate physical education degree programs produce undesirable "specialists in generalism" (p. 138). Third, the entrenched culture of specialization and fragmentation in higher education comprise "the seeds of its own extinction"; these tendencies have, and will, result in the dissolution of academic units in this field and the migration of faculty members to other academic units; creating room for other academic disciplines to encroach on the subject matter territory of physical activity (p. 138). Lastly, it does not appear likely that higher education physical education will make the changes necessary for any type of radical reform necessary to avoid extinction, as such change "would require a different kind of knowledge base from that offered by the academic sub-discipline model", and Kirk (2010) does not perceive that faculty members will undertake such a reform (p. 138).

Kirk (2010) also provides other justifications (less relevant to this research) for his projected future of extinction, including: the erroneous maintenance of industrial-age schools which were created for purposes which are now defunct; and the mounting of financial pressure to the point where governments evaluate the costs of K-12 school-teacher salaries and insist on accountability for their investment in physical education programs. Kirk (2010) concludes by stating:

The radical reform of school physical education rests on a parallel reform of teacher education. The fate of each is so closely intertwined that this process must unfold in tandem. Failure here is the surest indicator that extinction is a longer-term future scenario for physical education. (p. 138)

Implicit and/or Indirect Future Projections

This section outlines the literature that includes *implicitly* projected futures of higher education physical education. Much of this literature includes work that is "concerned only indirectly with projecting the future and more substantively with the process of change and how to make it happen" (Kirk, 2010, p. 27). Furthermore, many of these projections come from literature that is primarily focused on discussing a particular conflict of the academic discipline and which concludes with a projection about the future of that particular conflict. Therefore, these projections are less encompassing than the explicit projections listed above. However, these projections are still valuable, as they offer future projections that are specific to the core and secondary issues of the academic discipline.

Table 16 summarizes implicit future projections of higher education physical education specific to the core and secondary issues of the academic discipline.

Table 16. Implicit Projections Per Issue

Category of Issue	Particular Issue/Conflict	Indirect Future Prediction
Core Conflict	Lack of Focus	-Will maintain the cycle of secondary
		conflicts within the academic discipline,
		including conflicts over curriculum,

		faculty/department location within the
		university, name, organizational
		framework, and profession versus
		discipline conflict (Greendorfer, 1987)
		-Lack of focus will be noticed by
		administrators and may contribute to
		justifications for elimination from the
		academy (Riki, 2006)
		-There will be a lack of a strong lobby
		groups due to lack of focus (Houlihan &
		Green, 2006)
Secondary conflicts	Faculty/department	-The academic discipline will be located
within the physical	location of physical	variably leading to further lack of focus
education degree	education degree	(Newell, 2007)
program	program	-The academic discipline will be located
		variably resulting in marginal and
		undervalued status of higher education
		physical education/kinesiology
		(Melnychuk, 2011; Newell, 2007)
		-The transfer of pedagogy to faculties of
		Education will lead to it being subsumed
		by Education (Kirk & Macdonald, 2001)
	Curricula of	-Future teachers will be better prepared to

	physical education	teach kinesiology rather than physical
	degree programs	education, which is not compatible with
		the developmental age of school children
		(Siedentop, 2002)
		-Future teachers will be unprepared and
		will experience disconnect when entering
		the teaching profession (Melnychuk et al.,
		2011)
Secondary conflicts	Name of academic	-Inability to agree on a name will cause
within the academic	discipline	confusion among outsiders (as well as
discipline of physical		insiders) about the academic discipline.
education/kinesiology		This will complicate university
		comparisons, and sabotage prestige, and
		will result in endangerment of elimination
		from the academy (Lawson, 2007)
	Organizational	-The research sub-disciplines will be
	framework of	further fragmented (Kretchmar, 2008)
	academic discipline	-There will be a lack of communal
		identity and effective political voice
		(Rikli, 2006)
		-Research potential will be stunted as the
		interdisciplinary organizational
		framework will impede high quality

thematic research (Newell, 2007)

-The possibility and probability of
research sub-disciplines separating to
parent/cognate disciplines will be
heightened (Kretchmar, 2008; Rikli, 2006)

Profession versus
-The research sub-disciplines will be
discipline conflict further fragmented (Melnychuk et al.,
within the academic 2011)

discipline
-There will be a knowledge hierarchy
placing professional beneath 'academic'
(Lawson, 2007)

Themes of Explicit and Implicit Projections of the Future

When considering the aforementioned explicit and implicit projections comprehensively, some themes in the literature become evident. These themes and the authors who projected them are summarized in Table 17.

Table 17. Explicit and Implicit Projection Themes

Thematic Projected Future	Author
Negative perception of the academic discipline	Lawson, 2007; Rikli, 2006
by outsiders	
Lack of a strong lobby group, professional	Houlihan & Green, 2006; Rikli, 2006
identity, and political voice for the	
academic discipline	

Knowledge hierarchy placing physical	Lawson, 2007; Melnychuk et al., 2011;
education and professional aspects of the	Newell, 2007
academic discipline at the bottom; where	
they will be marginalized and	
undervalued	
Futures graduates of physical education	Kirk, 2010; Siedentop, 2002
programs will be better prepared to teach	
kinesiology rather than physical education	
The academic discipline will be in danger of	Ishee, 2003; Kirk, 2010; Lawson, 2007;
elimination from the academy	Rikli, 2006
The academic discipline will become further	Kirk, 2010; Kretchmar, 2008; Lawson,
fragmented	2007; Melnychuk, et al.; 2011
The research sub-disciplines of physical	Kirk, 2010; Kirk & Macdonald, 2001;
education will separate and move to	Kretchmar, 2008; Lawson, 2007;
parent/cognate disciplines	Melnychuk, et al., 2011
Physical education degree programs will be	Ishee, 2003; Kirk, 2010
accountable for physical education	
teacher's effectiveness	
Presence of lifetime activity models in K-12	Ishee, 2003; Kirk, 2010
and higher education curricula	

CHAPTER FIVE – METHODOLOGY AND METHODS

This chapter outlines the methodology and methods used to conduct this research.

Purpose and Research Questions

The purpose of the research was to investigate and seek answers to the following research question:

• What do experts within higher education physical education believe to be the possible, probable, preferable, and undesirable futures of the focus of the academic discipline, the physical education undergraduate degree program (i.e., the B.PhEd.), and the research sub-disciplines?

This research question was investigated through the following specific research questions:

- Focus of the academic discipline:
 - What do experts within higher education physical education believe to be the possible, probable, preferable, and undesirable futures of the focus of the academic discipline?
- Physical education degree program:
 - What do experts within higher education physical education believe to be the possible, probable, preferable, and undesirable futures of the undergraduate physical education degree program in terms of the program curriculum, and the location of the program within the university (i.e., housed within the Faculty of Kinesiology or parent Faculty of Education)?
- Research sub-disciplines:

What do experts within higher education physical education believe to be the possible, probable, preferable, and undesirable futures of the research sub-disciplines of physical education/kinesiology in terms of the name (of the academic discipline and its academic units within higher education), the organizational framework (interdisciplinary or cross-disciplinary), and the profession versus discipline conflict?

Brief Overview of Research Design

A brief overview of the research design is outlined here to provide context for the following discussion of methodology; however, the details of the method (i.e. sampling, recruitment, ethical clearance, data collection and analysis) will be discussed later in this chapter.

In brief, this research utilized the Delphi method, and more specifically involved two rounds of one-on-one interviews with five experts of higher education physical education. In the first round of interviews, the expert participants were asked to project 15 years into the future the possible, probable, preferable, and undesirable futures of the core and secondary issues within the academic discipline of physical education/kinesiology. After the first round of interviews, the data was analyzed and participants were provided with feedback of the resulting future projections. During the second round of interviews, participants were asked to respond to the resulting projections of the group, and more specifically asked if they strongly agreed or strongly disagreed with any of the projections. In sum, the research was designed to function as a structured, controlled, and anonymous discussion about the future among experts of higher education physical education.

It is important to note that the researcher completed a pilot study using a simplified version of this design and protocol. More specifically, the researcher completed two rounds of interviews with two members of Brock University's Department of Kinesiology. The pilot study helped the researcher to gain insight into some unexpected limitations and challenges, such as wording of interview questions and formatting of the executive summary, before the commencement of the thesis research.

Methodology

Qualitative Inquiry

This research was concerned with qualitative data, as the aim was to elucidate thick and rich description of the possible, probable, preferable and undesirable futures of higher education physical education. Furthermore, this research aimed to illuminate the nuances of what a select group of experts believe these futures to be. This research did not poll a large sample and produce a list of statistically significant futures, instead, particular experts were purposefully selected and their educated opinions on the future of this academic discipline were gathered in rich detail.

Theoretical Framework

This research was approached through critical, hermeneutic, and constructivist theoretical frameworks.

Critical Theory. Qualitative research methodologist Michael Quinn Patton (2002) describes critical theory as "concerned with particular issues of power and justice" and that furthermore "what makes it critical – is that it seeks not just to study and understand society, but rather to critique and change society" (p. 131). This research was framed by critical theory in the following ways. First, this research was predicated on the

current troubled state of higher education physical education. Second, it is the issues plaguing the marginalized group of higher education physical education that formed the basic structure of this research. Third, this research was not intended to enhance our understanding of these issues, but rather to engage the expert participants in the constructive and productive act of projecting the possible, preferable, probable and undesirable futures of these issues.

Hermeneutics.

Patton (2002) describes that Hermeneutists are:

Clear about the fact that they are constructing 'reality' on the basis of their interpretations of data with the help of the participants who provided data in the study... thus, one must know about the researcher as well as the researched. (p. 115)

This research was based in hermeneutics in the following ways. First, after round one of interviews, the design of this study required the researcher to *interpret* the projected futures of all participants so as to consolidate those various future 'realities' into thematic feedback for round two. Second, the futures projected by participants, as well as the consolidation of those futures by the researcher, are highly influenced by the perspectives of the participants and researcher. More specifically, this research is based upon an acknowledgment and appreciation of the ontological, epistemological, and axiological subjectivities specific to the participants and researcher as physical education scholars interested in the future.

Constructivism. Patton (2002) describes constructivism as "the meaning-making activity of the individual mind" and refers to "constructing knowledge *about* reality" (p.

97). This research was based in constructivism in the following ways. First, participants were asked to engage in the activity of constructing possible futures, and furthermore to assign meaning to those constructed futures (i.e. as probable, preferable, or undesirable). Second, participants were asked to construct knowledge (i.e. futures) about the reality of higher education physical education.

Methods

Futures Research

Prominent futures research methodologist Theodore J. Gordon (1992) explains that futures research can be understood as the systematic study of what might be. More specifically Gordon (1992) states that the purposes of futures research are "to provide early warning about problems that might lie ahead, to help identify and evaluate policies, and to illustrate the futures that are attainable" (p. 26).

Futures research was developed in the 1960s at the RAND Corporation, a "think-tank" in California that primarily researched the future of military issues (Gordon, 2009, p. 1). These landmark studies originated from "economics, statistics, psychology, systems analysis, and operations research" (Gordon, 1992, p. 26).

Over the years, futures research has developed and come to be considered a scholarly endeavor that is widely used to study both objective and subjective phenomena, through both quantitative and qualitative methods (Gordon, 1992).

The Delphi Method

The Delphi method was one of the first methods of futures research developed by members of the RAND Corporation (Gordon, 2009). Gordon (2009) explains the name "was drawn (humourously, they thought) from the site of the Greek oracle at Delphi

where necomancers foretold the future using hallucinogenic vapors and animal entrails" (p. 1). The first published account of a research study using the Delphi method was in 1964, and the method has been widely used since that time (Gordon, 2009).

It is important to note that there is "no 'typical' Delphi; rather the method is modified to suit the circumstances and research question" (Skulmoski, et al., 2007, p. 5). Therefore, defining the Delphi method is quite difficult. However, the following description adapted from Gordon (1992) offers a fairly comprehensive description of the underlying premise of the Delphi.

The Delphi method was designed to facilitate discussion among experts by removing the temporal, geographical and social limitations of conference room meetings (Gordon, 1992). More specifically, the temporal and geographical limitations of a conference room setting are mitigated in the Delphi method by the researcher, who takes on the role of discussion facilitator and collects data from each expert separately, at a time and place of their convenience. After data from all experts is collected, the researcher consolidates the individual experts' data into a cohesive 'discussion' across experts. In round two of data collection the researcher's analysis is fed-back to the participants in a form that allows them to see both the group responses to each question, as well as their individual responses. In this second round of data collection experts are asked, again separately, to re-evaluate their position on each question, as well as offer explanation for their positions that differ greatly from that of the group's. The rounds of data collection, analysis, and feedback can be repeated as many times as suits the nature of the research. Despite the fact that the Delphi method is highly flexible and can be adjusted to suit the needs of the particular research study, Skulmoski et al. (2007) argue

that the cornerstones of participant *anonymity* and *feedback* should always be present in a Delphi study. Furthermore, in terms of the social limitations of a conference room setting, it may be discernable from the process described above that such limitations of: "oratory", "pedagogy", "loudest voice", and "reluctance to abandon a previously stated opinion in front of his or her peers", are mitigated in the Delphi method through its anonymous, structured, and controlled format (Gordon, 1992, p. 28).

In sum, "the Delphi may be characterized as a method for structuring a group communication process so that the process is effective in allowing a group of individuals as a whole, to deal with a complex problem" (Linstone & Turoff, 1975, p. 5).

Research Design and Protocol

To investigate the aforementioned research questions, this research employed the Delphi method through two rounds of in-depth interviews with five experts from higher education physical education.

The sample, ethical clearance, recruitment, data collection, and data analysis are described in the following section.

Sample

Sampling method. The Delphi method is intended to study the opinion of purposefully selected *expert* participants (Gordon, 1992). The reasoning behind the use of expert opinion lies in the finding that "experts, particularly when they agree, are more likely than non-experts to be correct about future developments in their field" (Gordon, 1992, p. 28). Thus, Gordon (1992) states "the key to a successful Delphi study lies in the selection of the participants" (p. 29). Therefore purposeful sampling of experts was applied in this research using the following protocol.

Gordon (1992) explains that expert participants in Delphi studies "are usually identified through literature searches to find those who have published on the subject under study" (p. 29). Therefore, the researcher reviewed the literature on the future of higher education physical education, and those scholars who had published articles explicitly on this topic were identified. The publications written by these scholars were then further reviewed, and only those scholars who discussed the core and secondary issues of the academic discipline in their work (i.e. the basis of this research) were considered. The academic records of these remaining scholars were investigated through an Internet search to reveal which research sub-disciplines these scholars identified with. Those who appeared to be affiliated with the physical education pedagogy sub-discipline were considered. As a result of this process, five individuals were identified as ideal expert participants for this research.

Sample size. A sample size of five experts was selected for a number of reasons. First, the Delphi method is intended for smaller sample sizes as it deals with expert opinion, which is concerned with quality as opposed to quantity (Gordon, 1992). Second, a sample size of five participants has been determined to fall within the desirable sample size range of the Delphi method (Skulmoski et al., 2007). Lastly, this number was considered by the researcher to be a manageable quantity to undertake within the scope of a master's thesis.

Ethical clearance and recruitment. The researcher sought ethical clearance from the Brock University Social Science Research Ethics Board before the recruitment of participants. After ethical clearance was granted, experts were invited to participate in

the research via email, using a letter of invitation specific to the individual (Appendix A). Fortunately, all five ideal experts who were asked to participate agreed to do so.

Demographics of the sample. A considerable amount of demographic details were collected about each participant in order for the researcher to most accurately interpret the perspective of each participant. However, to maintain the ethical consideration of anonymity, neither the participant's identity, nor any discernable identifiers are provided in this document. However, some non-identifiable demographic information about the participants is described below. True to the nature of the Delphi method, which is concerned with the collective discussion among experts, not the prioritizing of experts, the demographic information is reported collectively, rather than by individual.

Sex. All five experts were male.

Current academic capacity. Two of the five experts were Professor Emeritus, yet both were still academically active. The other three experts are Professors currently employed at universities; furthermore, one expert is also currently the Dean of a faculty, while another is a director of a research institute.

Approximate length of higher education career. The five experts have between 30 to 70 years of experience working in higher education, with an average of 44 years.

Education. The five experts earned their undergraduate, master's, and doctoral degrees in the subject areas of physical education/kinesiology, education, and/or the arts. More specifically, two of the experts earned all of their degrees in the area of physical education/kinesiology, one expert earned his degrees in the areas of education and the

arts, and lastly, two experts earned their degrees in the areas of physical education/kinesiology and education.

K-12 teaching experience. Four of the five experts have taught physical education at the K-12 level. Of these four experts with K-12 teaching experience, one taught at the elementary school level, two at the middle school level, and lastly, one at the secondary school level.

Experience as administrators in higher education. All five experts have experience as administrators in higher education. More specifically, four of the experts have been administrators at the departmental level (i.e. department head, department chair); four of the experts have been administrators at the faculty level (i.e. dean, associate dean); two of the experts have been administrators at the university-wide level (i.e. assistant to the vice-president, assistant provost, pro vice chancellor); and lastly, two experts have held alternative administrative roles (i.e. athletic director, research institute director, graduate program coordinator).

Geographical context. All five of the experts have been active as academics on an international scale to varying degrees. Yet, it is still important to acknowledge the geographical differences of each expert, as a result of the location of their educational experiences, academic appointments, and residency. Three of the experts have a primarily American background, one expert has a primarily Canadian background, and lastly, one expert has a primarily British-Australian background. Geographical context and influence will be further discussed later in the document.

Academic relationship to the topic. All of the experts indicated that the topic of the future of the academic discipline is an interest of theirs and they have all published on

this topic in the past. More specifically, two of the experts have authored books on this topic, all the experts have published conceptual articles on the topic, and one expert has published empirical research on the topic.

Self-identified sub-discipline. All of the experts described themselves as 'physical educators', yet their identification with a particular sub-discipline was diverse. One expert identified with the sub-discipline of physical education pedagogy, another identified with the area of tests and measurements, and the other three experts indicated that they drew on multiple sub-disciplines to form an identity, including the areas of: history, philosophy, pedagogy, international aspects of the field, motor development, sport psychology, fitness and sociology.

Pre-Interview Preparation

Prior to the first interview, the researcher provided each participant with a copy of the informed consent form (Appendix B), a brief summary of the topics to be discussed (Appendix C), and the round one interview guide (see following section), for optional review at their convenience.

Data Collection: Round One Interviews

The researcher conducted a one-on-one in-depth interview, lasting approximately one hour, with each of the five participants. Due to significant geographical distance between the researcher and the participants, the interviews were conducted via telephone and/or Skype, depending on the participants' preference. Each of the interviews was audio-recorded, for the purposes of transcription, using the commercially available Lecture-Recorder Pro application on the researcher's MacBook Pro computer.

The interviews were conducted following a semi-structured interview guide (Appendix C). At the beginning of each interview, the researcher gained the informed consent of the participant by reviewing together the consent form, and gaining their verbal consent. The interviews then began by collecting demographic information.

Second, the researcher and the participant reviewed the terminology to be used during the interview in order to ensure they shared a common understanding of these terms.

Third, the participants were asked to provide their expert knowledge and opinion on the present status of the six issues within the academic discipline of physical education/kinesiology, including: the focus of the academic discipline, the curricula of undergraduate physical education degree programs, the academic unit location of undergraduate physical education degree programs, the name of the academic discipline and its academic units within the university, the organizational framework of the academic discipline, and the profession versus discipline dynamic within the academic discipline.

Fourth, the participants were asked to project 15 years into the future the possible, probable, preferable, and undesirable futures specific to each of the six aforementioned issues. The time frame of 15 years was selected due the researcher's review of previously conducted Delphi studies; it was concluded that participants found it difficult to make projections when the time frame was too limited (i.e. less than 15 years) or too long (i.e. more than 15 years). Furthermore, the format of asking for possible, probable, preferable, and undesirable futures, and asking for those futures in that particular order, was intentional. More specifically, asking for possible futures first was done as a

brainstorming exercise to ensure experts were thinking about the full range of possibilities. Then, asking for experts to assign meaning to those possible futures as probable, preferable, and/or undesirable second was done, as it is a common exercise in futures research studies, particularly the Delphi studies conducted within this academic discipline (e.g. Ishee, 2003).

Lastly, the participants were asked if they had any further questions or comments; thanked for their participation; and reminded about upcoming correspondence to schedule a round two interview.

Data Analysis: Round One – Compilation of Executive Summary

After all round one interviews were completed, the researcher transcribed the interviews verbatim.

In order to compile an executive summary of the future projections to feedback to participants in the round two interviews, the following process was completed. First, the verbatim transcriptions were organized by question (i.e. possible, probable, preferable and undesirable futures of each of the six issues), and then reduced for meaning by removing extraneous language. This resulted in a list of projections made by each expert for each issue. Second, within each issue, the reduced projections were then content analyzed by looking for similarities and differences across each expert's projections in order to group similar projections made by different experts into a single summarizing projection. Once the final list of individual and grouped projections was determined, the number of experts contributing to each projection was indicated in a frequency column.

The anonymous round one executive summary is provided in Table 18.

Round One Executive Summary of Delphi Results

Table 18. Round One Executive Summary of Delphi Results

A.I The focus of the academic discipline – Possible Futures

	Projections	Frequency
A.1	Exercise science/bioscience focus	2
A.2	There will be quality discussion/debate about the field (i.e. people	2
	will have the interest, intellect, and education to do so)	
A.3	Research will become more sub-discipline-specific/specialized,	2
	contributing to the lack of focus	
A.4	Local, geographical, and university type differences in focus	2
A.5	Components of the academic discipline will fragment/break away	4
	(e.g. faculty, degree programs, foci)	
A.6	The focus of physical education will be considered purely	2
	professional and will be dropped from the Kinesiology academic	
	discipline/units and exist within the academic discipline of	
	Education	
A.7	The focus of sport management will be within the academic	1
	discipline of Business	
A.8	Faculty in our academic units will have very little in common	1
A.9	The focus of our academic discipline will be defined	1
A.10	The focus of our academic discipline will be defined in a broad and	1
	inclusive way	
A.11	Our academic discipline will be a preparatory place for students to	1
	apply to allied health programs	
A.12	Increasing sport management focus	1
A.13	Three foci of kinesiology, physical education and sport management	1
A.14	The social sciences and humanities will struggle	1
A.15	Exclusive focus on elite performance	1
A.16	Focus on physical activity and its correlates (not simply human	1
	movement) through a social-ecological framework, with particular	

	reference to disenfranchised populations	
A.17	The focus will become more practical and useful, with the exception	1
	of focuses on pre-health/medicine, bio-physical-social, and	
	physiology	
A.18	No cooperation between the discipline and the profession	1
A.19	Disciplinarians and professionals will work together to teach courses	1
	in the disciplinary core meaningfully	
A.20	Experts in a sub-discipline will teach whatever content they like,	1
	regardless of what is relevant	
A.21	Professionals will hire their own instructors for disciplinary courses	1
A.22	No consensus on focus	1
A.23	Ongoing wars between sub-disciplines	1
A.24	New components will enter the academic discipline	1
A.25	Multidisciplinary	1

$A. II\ The\ focus\ of\ the\ academic\ discipline-Probable\ Futures$

	Projections	Frequency
A.1	Exercise science/bioscience focus	1
A.4	Local, geographical, and university type differences in focus	1
A.5	Components of the academic discipline will fragment/break away	1
	(e.g. faculty, degree programs, foci)	
A.6	The focus of physical education will be considered purely	1
	professional and will be dropped from the Kinesiology academic	
	discipline/units and exist within the academic discipline of	
	Education	
A.7	The focus of sport management will be within the academic	1
	discipline of Business	
A.8	Faculty in our academic unit swill have very little in common	1
A.17	The focus will become more practical and useful, with the exception	1
	of focuses on pre-health/medicine, bio-physical-social, and	
	physiology	

A.19	Disciplinarians and professionals will work together to teach courses	1
	in the disciplinary core meaningfully	
A.21	Professionals will hire their own instructors for disciplinary courses	1
A.22	No consensus on focus	1
A.24	New components will enter the academic discipline	1
A.25	Multidisciplinary	1

$A. III\ The\ focus\ of\ the\ academic\ discipline-Preferable\ Futures$

	Projections	Frequency
A.2	There will be quality discussion/debate about the field (i.e. people	2
	will have the interest, intellect, and education to do so)	
A.9	The focus of our academic discipline will be defined	1
A.10	The focus of our academic discipline will be defined in a broad and	1
	inclusive way	
A.13	Three foci of kinesiology, physical education and sport management	1
A.16	Focus on physical activity and its correlates (not simply human	1
	movement) through a social-ecological framework, with particular	
	reference to disenfranchised populations	
A.19	Disciplinarians and professionals will work together to teach courses	1
	in the disciplinary core meaningfully	

$A. IV\ The\ focus\ of\ the\ academic\ discipline-Undesirable\ Futures$

	Projections	Frequency
A.5	Components of the academic discipline will fragment / break away	2
	(e.g. faculty, degree programs, foci)	
A.15	Exclusive focus on elite performance	1
A.18	No cooperation between the discipline and the profession	1
A.20	Experts in a sub-discipline will teach whatever content they like,	1
	regardless of what is relevant	
A.23	Ongoing wars between sub-disciplines	1

B.I Undergraduate Degree Program Curricula in the Academic Discipline – Possible Futures

	Projections	Frequency
B.1	Some consensus and decisions about what undergraduate degree	3
	programs in this field should consist of	
B.2	The various undergraduate degree programs in this academic	1
	discipline will separate to be offered in different academic units, and	
	will have little in common	
B.3	Physical education curricula (i.e. curricula related to teaching	1
	profession) will be moved to faculties of Education	
B.4	Agreement on a science-based national curriculum for kinesiology	1
	undergraduate degrees	
B.5	The undergraduate degree program curricula in this field will	1
	become more scientific and disciplinary	
B.6	The undergraduate degree program curricula in this field will	1
	become more specialized	
B.7	There will be a limited number of physical education undergraduate	1
	degree programs	
B.8	Curricular issues and critiques will be influenced by the popularity	1
	of the undergraduate degree programs	
B.9	The undergraduate degree program curricula will clearly	1
	communicate to external audiences what degree programs in this	
	field are	
B.10	Physical education, kinesiology, and sport management	1
	undergraduate degree programs, students, and curricula will be	
	mixed together	
B.11	There will be a five year degree preparation to become a physical	1
	education teacher in Canada	
B.12	There will be a four year degree preparation to become a physical	1
	education teacher in the United States	
B.13	Physical education professional preparation will occur after an	1

	undergraduate kinesiology degree program	
B.14	Undergraduate degree program curricula in this field will have a mix	1
	of personal performance, cross-disciplinary performance analysis,	
	and aiding others in analyzing their performance	
B.15	Undergraduate degree program curricula in this field will lack a mix	1
	of personal performance, cross-disciplinary performance analysis,	
	and aiding others in analyzing their performance	
B.16	Conflicts over undergraduate degree program curricula will intensify	1
	due to the knowledge explosion and interdisciplinarity	
B.17	Professionals will hire their own instructors for disciplinary courses	1
B.18	There will be professional curricula, not just talk about being	1
	professional	
B.19	The undergraduate degree program curricula in our field will make	1
	claims that will not be achieved	
B.20	Disciplinarians and professionals will work together to teach courses	1
	in the disciplinary core meaningfully	
B.21	Experts in a sub-discipline will teach whatever content they like,	1
	regardless of what is relevant	
B.22	The status quo will continue	1
B.23	Physical education undergraduate degree programs will prepare	1
	future physical educators to teach both the conceptual information	
	about how to move, and the self-management skills to make good	
	life decisions	
B.24	Physical education undergraduate degree programs will include	1
	fitness education courses	
B.25	There will be proliferation of the types of undergraduate degree	1
	programs in the field (i.e. combinations such as Sport Journalism)	
B.26	There will be constant changing and shifting of undergraduate	1
	degree program curricula	

B.II Undergraduate Degree Program Curricula in the Academic Discipline – Probable Futures

	Projections	Frequency
B.1	Some consensus and decisions about what undergraduate degree	1
	programs in this field should consist of	
B.2	The various undergraduate degree programs in this academic	1
	discipline will separate to be offered in different academic units, and	
	will have little in common	
B.5	The undergraduate degree program curricula in this field will	1
	become more scientific and disciplinary	
B.11	There will be a five year degree preparation to become a physical	1
	education teacher in Canada	
B.12	There will be a four year degree preparation to become a physical	1
	education teacher in the United States	
B.16	Conflicts over undergraduate degree program curricula will intensify	1
	due to the knowledge explosion and interdisciplinarity	
B.17	Professionals will hire their own instructors for disciplinary courses	1
B.20	Disciplinarians and professionals will work together to teach courses	1
	in the disciplinary core meaningfully	
B.26	There will be constant changing and shifting of undergraduate	1
	degree program curricula	

B.III Undergraduate Degree Program Curricula in the Academic Discipline – Preferable Futures

	Projections	Frequency
B.1	Some consensus and decisions about what undergraduate degree	3
	programs in this field should consist of	
B.9	The undergraduate degree program curricula will clearly	1
	communicate to external audiences what degree programs in this	
	field are	
B.13	Physical education professional preparation will occur after an	1

	undergraduate kinesiology degree program	
B.14	Undergraduate degree program curricula in this field will have a mix	1
	of personal performance, cross-disciplinary performance analysis,	
	and aiding others in analyzing their performance	
B.18	There will be professional curricula, not just talk about being	1
	professional	
B.20	Disciplinarians and professionals will work together to teach courses	1
	in the disciplinary core meaningfully	

B.IV Undergraduate Degree Program Curricula in the Academic Discipline – Undesirable Futures

	Projections	Frequency
B.2	The various undergraduate degree programs in this academic	1
	discipline will separate to be offered in different academic units, and	
	will have little in common	
B.7	There will be a limited number of physical education undergraduate	1
	degree programs	
B.10	Physical education, kinesiology, and sport management	1
	undergraduate degree programs, students, and curricula will be	
	mixed together	
B.15	Undergraduate degree program curricula in this field will lack a mix	1
	of personal performance, cross-disciplinary performance analysis,	
	and aiding others in analyzing their performance	
B.19	The undergraduate degree program curricula in our field will make	1
	claims that will not be achieved	
B.21	Experts in a sub-discipline will teach whatever content they like,	1
	regardless of what is relevant	
B.22	The status quo will continue	1
B.26	There will be constant changing and shifting of undergraduate	1
	degree program curricula	

 $C.I.Location\ of\ Undergraduate\ Degree\ Programs\ in\ the\ Academic\ Discipline-Possible\ Futures$

	Projections	Frequency
C.1	Academic units will be located variably	4
C.2	Parts of the academic discipline will be located in different	3
	academic units	
C.3	There will be omnibus-model academic units (i.e. including	2
	profession(s) and disciplines)	
C.4	The location of academic units will be determined by the most	1
	popular undergraduate degree programs (i.e. if most popular is	
	physical education – will be located in faculties of Education)	
C.5	Academic units will be located in combination with nutrition	1
C.6	Academic units will be housed in a consistent location	1
C.7	Academic units will be consistently located in health-related	1
	academic units	
C.8	The location conflict will make our academic discipline more	1
	susceptible to be combined or eliminated	
C.9	The location conflict will confuse people as to what our academic	1
	discipline is	
C.10	Physical education will have strong academic units in faculties of	1
	Education	
C.11	Physical education will have undervalued academic units in faculties	1
	of Education	
C.12	Sport management will be located in Business academic units	1
C.13	Academic units of kinesiology will remove practical/professional	1
	components	
C.14	Physical education will move to whichever academic unit location	1
	they can best prepare professionals	
C.15	Large universities will drop physical education	1
C.16	There will be no omnibus-model academic units (i.e. will not	1
	include both profession(s) and disciplines)	

C.17	Omnibus-model academic units (i.e. including both profession(s)	1
	and disciplines) will only exist at small universities	
C.18	Physical education will be located in academic units where it is	1
	considered exotic and unwelcome	

C.II Location of Undergraduate Degree Programs in the Academic Discipline – Probable Futures

	Projections	Frequency
C.1	Academic units will be located variably	3
C.2	Parts of the academic discipline will be located in different	2
	academic units	
C.11	Physical education will have undervalued academic units in faculties	1
	of Education	
C.12	Sport management will be located in Business academic units	1
C.13	Academic units of kinesiology will remove practical/professional	1
	components	
C.15	Large universities will drop physical education	1
C.17	Omnibus-model academic units (i.e. including both profession(s)	1
	and disciplines) will only exist at small universities	

C.III Location of Undergraduate Degree Programs in the Academic Discipline – Preferable Futures

	Projections	Frequency
C.3	There will be omnibus-model academic units (i.e. including	1
	profession(s) and disciplines)	
C.6	Academic units will be housed in a consistent location	1
C.7	Academic units will be consistently located in health-related	1
	academic units	
C.10	Physical education will have strong academic units in Faculties of	1
	Education	
C.14	Physical education will move to whichever academic unit location	1

	they can best prepare professionals	
C.16	There will be no omnibus-model academic units (i.e. will not	1
	include both profession(s) and disciplines)	

C.IV Location of Undergraduate Degree Programs in the Academic Discipline – Undesirable Futures

	Projections	Frequency
C.1	Academic units will be located variably	1
C.3	There will be omnibus-model academic units (i.e. including	1
	profession(s) and disciplines)	
C.11	Physical education will have undervalued academic units in faculties	1
	of Education	
C.18	Physical education will be located in academic units where it is	1
	considered exotic and unwelcome	

D.I Conflict over the name of our academic units and discipline – Possible Futures

	Projections	Frequency
D.1	Kinesiology	3
D.2	Conflicts regarding the name of our academic units and discipline	3
	will continue	
D.3	There will be greater consensus on a single name for the academic	2
	units and discipline	
D.4	The names of our academic units will reflect the most popular	1
	undergraduate degree programs	
D.5	Very few academic unit names will include name physical education	1
D.6	There will be confusion as to what the name kinesiology means	1
D.7	There will be a lack of identity and definition in the academic units	1
	and discipline	
D.8	The variety of names used will confuse people	1
D.9	There will be a common name that embraces both the disciplinary	1
	and professional aspects	

D.10	There will be total separation of the names representing the	1
	academic discipline (kinesiology) and the profession of K-12	
	physical education teaching (physical education)	
D.11	The shorter names for the academic units and discipline will prevail	1
D.12	Physical activity and health education	1
D.13	Physical activity education	1
D.14	Physical education	1
D.15	There will be proliferation of the names used for the academic units	1
	and discipline	

D.II Conflict over the name of our academic units and discipline – Probable Futures

	Projections	Frequency
D.1	Kinesiology	3
D.2	Conflicts regarding the name of our academic units and discipline	1
	will continue	
D.3	There will be greater consensus on a single name for the academic	1
	units and discipline	
D.11	The shorter names for the academic units and discipline will prevail	1
D.15	There will be proliferation of the names used for the academic units	1
	and discipline	

$D. III\ Conflict\ over\ the\ name\ of\ our\ academic\ units\ and\ discipline-Preferable\ Futures$

	Projections	Frequency
D.1	Kinesiology	2
D.3	There will be greater consensus on a single name for the academic	1
	units and discipline	
D.9	There will be a common name that embraces both the disciplinary	1
	and professional aspects	
D.12	Physical activity and health education	1
D.13	Physical activity education	1

D.IV Conflict over the name of our academic units and discipline – Undesirable Futures

	Projections	Frequency
D.2	Conflicts regarding the name of our academic units and discipline	2
	will continue	
D.6	There will be confusion as to what the name kinesiology means	1
D.7	There will be a lack of identity and definition in the academic units	1
	and discipline	
D.8	The variety of names used will confuse people	1
D.15	There will be proliferation of the names used for the academic units	1
	and discipline	

E.I The Organizational Framework of the Academic Discipline – Possible Futures

	Projections	Frequency
E.1	There will be more of the same sub(cross)disciplinary organizational	3
	framework	
E.2	Sub-disciplines will move to parent and/or cognate academic	1
	disciplines	
E.3	The organizational framework will depend on the nature of the	1
	university (i.e. size, type)	
E.4	The organizational framework will communicate a lack of identity	1
	and confuse external audiences	
E.5	There will be separation of that which is related to the profession of	1
	physical education from disciplinary-type areas	
E.6	That which is related to the profession of physical education	1
	teaching will continue to be questioned as a part of the	
	organizational framework of this academic discipline	
E.7	The natural science sub-disciplines will be strong components of the	1
	academic discipline	
E.8	The organizational framework will become less compartmentalized	1
E.9	The organizational framework will be reconsidered	1

E.10	There will be networked communities of practice locally, nationally,	1
	and globally	
E.11	There will be an extreme sub-disciplinary organizational framework	1
E.12	There will be an elimination of some sub-disciplines in the	1
	organizational framework	
E.13	There will be a realization that the full encyclopedia of sub-	1
	disciplines cannot be maintained	
E.14	The academic discipline will move beyond a sub-disciplinary	1
	organizational framework	
E.15	It will be difficult for members of the academic discipline to work	1
	outside of their sub-discipline	
E.16	There will be growing unease with the sub-disciplinary	1
	organizational framework	
E.17	There will be a search for alternative organizational frameworks	1
E.18	There will be flexible arrangements whereby the nature of the	1
	research focus determines how the academic discipline will be	
	organized	
E.19	The disciplinary components of the organizational framework will	1
	dictate to the professional components	
E.20	There organizational framework will draw outside that which is	1
	commonly considered to be the kinesiology academic discipline	
E.21	There will be a radically different interdisciplinary organizational	1
	framework	
E.22	Members of the academic discipline will have the knowledge and	1
	skills to discuss what it is that makes them similar	
E.23	The organizational framework will be structured and focused on	1
	what it is that makes the components of the academic discipline	
	different	
E.24	There will be war between the sub-disciplines of the academic	1
	discipline	
E.25	There will be no acknowledgement of what it is that makes the	1

components of the academic discipline similar

E.26 The organizational framework will be a form of a sub-disiplinary 1 model that acknowledges what it is that makes components of the academic discipline similar

E.II The Organizational Framework of the Academic Discipline – Probable Futures

	Projections	Frequency
E.1	There will be more of the same sub(cross)disciplinary organizational	3
	framework	
E.4	The organizational framework will communicate a lack of identity	1
	and confuse external audiences	
E.7	The natural science sub-disciplines will be strong components of the	1
	academic discipline	
E.12	There will be an elimination of some sub-disciplines in the	1
	organizational framework	
E.13	There will be a realization that the full encyclopedia of sub-	1
	disciplines cannot be maintained	
E.15	It will be difficult for members of the academic discipline to work	1
	outside of their sub-discipline	
E.16	There will be growing unease with the sub-disciplinary	1
	organizational framework	
E.17	There will be a search for alternative organizational frameworks	1

E.III The Organizational Framework of the Academic Discipline – Preferable Futures

	Projections	Frequency
E.3	The organizational framework will depend on the nature of the	1
	university (i.e. size, type)	
E.8	The organizational framework will become less compartmentalized	1
E.9	The organizational framework will be reconsidered	1
E.10	There will be networked communities of practice locally, nationally,	1

	and globally	
E.14	The academic discipline will move beyond a sub-disciplinary	1
	organizational framework	
E.20	There organizational framework will draw outside that which is	1
	commonly considered to be the kinesiology academic discipline	
E.26	The organizational framework will be a form of a sub-disiplinary	1
	model that acknowledges what it is that makes components of the	
	academic discipline similar	

E.IV The Organizational Framework of the Academic Discipline – Undesirable Futures

	Projections	Frequency
E.1	There will be more of the same sub(cross)disciplinary organizational	1
	framework	
E.4	The organizational framework will communicate a lack of identity	1
	and confuse external audiences	
E.11	There will be an extreme sub-disciplinary organizational framework	1
E.19	The disciplinary components of the organizational framework will	1
	dictate to the professional components	
E.23	The organizational framework will be structured and focused on	1
	what it is that makes the components of the academic discipline	
	different	
E.24	There will be war between the sub-disciplines of the academic	1
	discipline	
E.25	There will be no acknowledgement of what it is that makes the	1
	components of the academic discipline similar	

$F. I\ The\ Profession\ versus\ Discipline\ Dynamic\ in\ the\ Academic\ Discipline\ -Possible\ Futures$

	Projections	Frequency
F.1	There will not a profession <i>versus</i> discipline distinction, but rather	4
	some agreement, cooperation, and relationship between the two	

F.2	There will be a profession versus discipline distinction, with little	2
	cooperation between the two	
F.3	The sub-disciplines and profession(s) will separate to parent and/or	1
	cognate academic disciplines	
F.4	The status quo will continue	1
F.5	Members of the field will continue to communicate a profession-	1
	versus-discipline distinction implicitly	
F.6	The professional aspects of the academic discipline will not be well-	1
	regarded	
F.7	The disciplinary aspects of the academic discipline will be	1
	increasingly well-regarded	
F.8	The profession-versus-discipline conflict will be resolved to the	1
	detriment of physical education, the social sciences, and the	
	humanities	
F.9	Doctoral education will prepare future faculty to be stewards of the	1
	field, including the academic discipline and profession	
F.10	The disciplinary components of the academic discipline will dictate	1
	to the professional components	
F.11	There will be a profession-discipline relationship like that in law,	1
	medicine, and engineering	
F.12	Professional components will move themselves to wherever they	1
	can best continue their work	

F.II The Profession Versus Discipline Dynamic in the Academic Discipline – Probable Futures

	Projections	Frequency
F.2	There will be a profession <i>versus</i> discipline distinction, with little	1
	cooperation between the two	
F.4	The status quo will continue	1
F.6	The professional aspects of the academic discipline will not be well-	1
	regarded	

F.7 The disciplinary aspects of the academic discipline will be increasingly well-regarded

F.III The Profession Versus Discipline Dynamic in the Academic Discipline – Preferable Futures

	Projections	Frequency
F.1	There will not a profession <i>versus</i> discipline distinction, but rather	4
	some agreement, cooperation, and relationship between the two	
F.9	Doctoral education will prepare future faculty to be stewards of the	1
	field, including the academic discipline and profession	
F.12	Professional components will move themselves to wherever they	1
	can best continue their work	

F.IV The Profession Versus Discipline Dynamic in the Academic Discipline – Undesirable Futures

	Projections	Frequency
F.2	There will be a profession <i>versus</i> discipline distinction, with little	2
	cooperation between the two	
F.3	The sub-disciplines and profession(s) will separate to parent and/or	1
	cognate academic disciplines	
F.6	The professional aspects of the academic discipline will not be well-	1
	regarded	
F.10	The disciplinary components of the academic discipline will dictate	1
	to the professional components	

After the executive summary was complete, the researcher determined it was too long to be a manageable data set for a one-hour round two interview. Therefore, only the probable and preferable sections, not the possible and undesirable, were fed-back to participants and used in the round two interviews. The decision not to include the possible section was due to the fact that it was essentially a brainstorming exercise, and

all the relevant projections were repeated in the following probable and preferable sections. The decision not to include the undesirable section was in-keeping with the positive tone of the research. In sum, the probable and preferable sections seemed to be the most important and relevant sections to pursue in the round two interviews.

Thus, five participant-specific executive summaries of the probable and preferable future projections of each of the six issues were developed. Each participant-specific executive summary had an anonymized list of projections with an asterisk beside the projections that particular participant offered.

Data Collection: Round Two Interviews

Prior to the round two interview, participants were provided with their participantspecific executive summary, as well as the round two interview guide (Appendix E).

The round two interviews began by asking participants to comment on any of the projections in the executive summary, and more specifically to indicate whether they strongly agreed or strongly disagreed with any of the statements. Furthermore, participants were welcome to provide any commentary on the projections. The participants were then asked five concluding questions, including: how they believed their perspective on the future was influenced by their geographical context and experience as an administrator; what they considered to be the three most relevant issues impacting the future of higher education physical education; a final and overall projection for the future of higher education physical education; and lastly, what advice they would offer to the entire field about the future. Lastly, the experts' participation in the study was concluded by asking them for any further questions or comments, thanking them for

their participation in the research, and asking for their preferences on receiving the final report.

Data Analysis: Round Two

Following the conclusion of all round two interviews, the researcher transcribed each interview verbatim. The data was then prepared for analysis by compiling the final executive summary and organizing the Delphi projections and interview answers by question. More specifically, the final executive summary was compiled by revising wording of the round one projections as necessary, adding new round two projections, and tallying the frequency of agreement and disagreement; this can be seen in Table 20 in Chapter 6.

After the organization of the data set, analysis was conducted, and is described in detail in Chapter Six.

Quality of Research

The quality of this research can be appropriately judged against the measures of credibility, transferability, dependability, as well as critical change and constructivist criteria (Patton, 2002).

Credibility

Credibility is considered to be the qualitative research term analogous to internal validity (Patton, 2002). Therefore, credibility is concerned with whether the method of research actually measures what it intends to measure (Patton, 2002). This research was designed with credibility in mind. More specifically, as the purpose of this research was to investigate the future of higher education physical education, a futures research method

was chosen (i.e. the Delphi method), and the interview questions asked participants to explicitly project the future.

Transferability

Transferability is considered to be the qualitative research term analogous to external validity (Patton, 2002). Therefore, transferability is concerned with whether the research can offer meaning to those outside of it (Patton, 2002). This research was designed to maximize the potential for transferability in two specific ways. First, in the purposeful selection of the participants, their geographical location was considered. The recruited participants were from North America and Europe. This geographical variance in perspective increases the likelihood of having meaning to a broad audience. Second, this research was not designed to simply investigate the troubled status of higher education physical education, but rather to investigate the deep issues that contribute to this troubled status. For example, this research does not simply investigate a name conflict occurring at a particular university; instead it investigates the core issue of the academic discipline that precipitates name conflicts. Therefore, the fact that this research addressed core and academic discipline-wide issues, rather than acute local issues, allows it to have greater potential transfer of meaning to those who wish to access it.

Dependability

Dependability is considered to be the qualitative research term analogous to reliability (Patton, 2002). Therefore, dependability is concerned with whether the method used is systematic and offers consistent results. This research was designed for dependability in the following ways. First, the research method of the Delphi was selected because it has been found by scholars to be the best method of futures research

pertaining to education (Massengale, 1987). Second, the Delphi method has been the only consistently used method of empirical research on the future of physical education (Ishee, 2003).

Critical Change Criteria

Patton (2002) outlines a variety of criteria to judge the credibility of research employing a critical theoretical framework. Some of the criteria include: taking on a critical perspective by identifying injustices; representing and engaging the perspectives of the less powerful; and identifying potential change-making strategies. First, this research took on a critical perspective by explicitly identifying the issues within the academic discipline and making them the basis of the research. Second, this research engaged the less powerful by purposefully selecting a sample of physical education or pedagogy scholars, as members of this sub-discipline have been identified as marginalized in the academic discipline of physical education/kinesiology. Third, this research identified potential change-making strategies by asking participants to project the future, the very act of which is considered a change-making strategy.

Constructivist Criteria

Patton (2002) outlines a variety of criteria to judge the credibility of research employing a constructivist theoretical framework. Some of the criteria include: the acknowledgement of subjectivity, particularity, and encouragement of dialogue. This research was designed to meet these criteria. First, this research acknowledges subjectivity as it was based on expert *opinion*; participants were purposefully selected based on their demonstration of educated opinions in the past and in hopes they would offer their opinion again. Furthermore, this research explicitly called for subjectivity in

that it asked participants to assign personal meaning to futures (i.e. as preferable or undesirable). Second, this research strived for particularity (i.e. doing justice to the integrity of unique cases), as it did not require the participants to move toward consensus on futures of higher education physical education, but instead valued the participants' individual responses, including those that dramatically differed, by asking participants to offer even further information on that outlying perspective. Third, this research encouraged dialogue among perspectives by selecting a method, the Delphi method, which was designed to facilitate discussion. The Delphi method removed social limitations of the conference room setting (i.e. where the loudest voice may lead the discussion) so as to ensure all voices were heard equally.

CHAPTER SIX: RESULTS AND DISCUSSION

This chapter outlines the analysis of data and resulting findings as guided by the research question of this study.

Based in a hermeneutic theoretical framework, a layered analysis was conducted that progressed from more superficial and literal interpretations of the data, to deeper and more figurative interpretations of the data. More specifically, the analysis was framed in Schlety and Noblit's (1982) interpretive and layered approach of first "making the obvious obvious", then "making the obvious dubious", and finally "making the hidden obvious".

The intention of the first layer of interpretation, making the obvious obvious, was to "confirm what we know is supported by the data" (Patton 2002, p. 408). The intention of the second layer of interpretation, making the obvious dubious, was to "disabuse us of misconceptions" we may have about the data (Patton 2002, p. 408). Lastly, the intention of the third layer, making the hidden obvious, was to "illuminate important things we didn't know but should know" (Patton 2002, p. 408).

More specifically, in order to achieve the intention of each layer, the following analysis was conducted. In Layer 1 (make the obvious obvious), the raw Delphi projections and interview question data were compiled, and primary results were identified through quantitative descriptive statistics and qualitative within-question content analysis. In Layer 2 (make the obvious dubious), the primary results of Layer 1 were challenged through comparative within-question and cross-question content analysis. In Layer 3 (make the hidden obvious), the entire data set was analyzed holistically to identify themes.

Table 19 provides an outline of the analysis.

Table 19. Layers of Data Analysis

	Layer 1 – Making the Obvious Obvious
Purpose	Identify primary patterns in the data
Method	Quantitative descriptive statistics
	Qualitative within-question content analysis
Results	1.1 Delphi Results
	• 1.1.A Final executive summary of Delphi results
	• 1.1.B Descriptive statistics of Delphi results
	• 1.1.C Probable, preferable, and undesirable future
	type results
	1.2 Interview Question Results
	• 1.2.A Results of the most relevant issues impacting
	the future of higher education physical education
	• 1.2.B Results of the expert advice to the field for
	the future of higher education physical education
	• 1.2.C Results of expert's final and overall
	projections of the future of higher education
	physical education
	Layer 2 – Making the Obvious Dubious
Purpose	Challenge the primary patterns found in Layer 1
Method	Comparative within- and cross-question content analysis
Results	2.1 Challenging Delphi Results

- 2.1.A Comparative analysis of probable,
 preferable, and undesirable future type results
- 2.1.B Analysis of Delphi results for literaturedriven or indigenous typologies
- 2.1.C Analysis of geographical influence on Delphi Results

2.2 Challenging Delphi and Interview Question Results

• 2.2.A Cross-question pattern results

Layer 3 – Making the Hidden Obvious		
Purpose	Illuminate the unarticulated and hidden thought that may	
	drive the explicit and obvious statements	
Method	Holistic and interpretive analysis of entire verbatim data	
	set	
Results	3.1 Holistic and Interpretive Analysis Results	

Layer 1 Making the Obvious Obvious

Layer 1.1 Delphi Results

Layer 1.1.A Final Executive Summary of Delphi Results

Table 20 outlines the final results of the Delphi investigation. More specifically, this includes the final executive summary of the round one and two projections on the probable and preferable futures.

Table 20. Final Executive Summary of Delphi Results

A.II The focus of the academic discipline – Probable Futures

	Projections	Round 1 Frequency	Round 2 Strongly Agree	Round 2 Strongly Disagree
A.1	The academic discipline will have an exercise	1	1	
	science/bioscience focus			
A.4	There will be differences in focus depending on	1	1	
	geographical location, size, and type of			
	university			
A.5	The academic discipline will become	1		
	increasingly fragmented (i.e. faculty, degree			
	programs, and foci)			
A.6	Physical education, as a focus in the academic	1	1	
	discipline, will increasingly be considered			
	purely professional and will not exist within the			
	Kinesiology academic discipline/units, but			
	rather within the Education academic			
	discipline/units			
A.7	Sport management, as a focus in the academic	1	2	
	discipline, will increasingly exist within the			
	academic discipline of Business			
A.8	Faculty members in academic units of	1		
	Kinesiology will have very little in common			
A.17	The focus of the academic discipline will	1		1
	become more practical and useful, with the			
	exception of focuses on pre-health/medicine,			
	bio-physical-social, and physiology			
A.22	There will be limited consensus regarding the	1	1	
	focus of the academic discipline			

A.24	New components will enter the academic	1	1	1
	discipline			
A.25	The focus of the academic discipline will be	1		
	multidisciplinary			

$A. III\ The\ focus\ of\ the\ academic\ discipline-Preferable\ Futures$

	Projections	Round 1 Frequency	Round 2 Strongly Agree	Round 2 Strongly Disagree
A.2	There will be quality discussion about the focus	2	1	
	of the academic discipline (i.e. people will have			
	the interest, intellect, and education to do so)			
A.10	The focus of the academic discipline will be	1		
	defined in both a broad and inclusive way			
A.13	There will be three foci of the academic	1		1
	discipline: kinesiology, physical education, and			
	sport management			
A.16	The focus of the academic discipline will be on	1	1	
	physical activity, not simply human movement,			
	and its correlates; through a social-ecological			
	framework, with particular reference to			
	disenfranchised populations			

B.II Undergraduate Degree Program Curricula in the Academic Discipline – Probable Futures

	Projections	Round 1 Frequency	Round 2 Strongly Agree	Round 2 Strongly Disagree
B.1	There will be some consensus on the curricula	1		1
	of undergraduate degree programs within the			
	academic discipline			
B.2	The various undergraduate degree programs in	1		1
	the academic discipline will separate to be			

	offered in different academic units, and will			
	have little in common			
B.5	The curricula of undergraduate degree	1	1	
	programs within this academic discipline will			
	become more scientific and disciplinary			
B.11	There will continue to be five-year degree	1		
	preparation to become a physical education			
	teacher in Canada			
B.12	There will continue to be four-year degree	1	1	
	preparation to become a physical education			
	teacher in the United States			
B.16	Conflicts over undergraduate degree program	1	1	
	curricula will intensify due to the knowledge			
	explosion and increasing interdisciplinarity			
B.17	The professionally-oriented degree programs	1		2
	will hire their own instructors to deliver			
	disciplinary courses			
B.20	Course instructors will consult physical	1		1
	education teacher educators in order to deliver			
	courses in the disciplinary core meaningfully			
B.26	There will be constant changing and shifting of	1	1	
	undergraduate degree program curricula			

 $B. III\ Undergraduate\ Degree\ Program\ Curricula\ in\ the\ Academic\ Discipline-Preferable\ Futures$

	Projections	Round 1 Frequency	Round 2 Strongly Agree	Round 2 Strongly Disagree
B.1	There will be some consensus on the curricula	3	1	
	of undergraduate degree programs within the			
	academic discipline			
B.9	The undergraduate degree program curricula	1		

	will clearly communicate to external audiences			
	what degree programs in the field are			
B.13	Physical education professional preparation will	1	1	1
	occur after an undergraduate kinesiology			
	degree program			
B.14	Curricula of the undergraduate degree programs	1		
	will have a mix of personal performance, cross-			
	disciplinary performance analysis, and aiding			
	others in analyzing their performance			
B.20	Course instructors will consult physical	1		1
	education teacher educators in order to deliver			
	courses in the disciplinary core meaningfully			

 ${\it C.II \, Location \, of \, Undergraduate \, Degree \, Programs \, in \, the \, Academic \, Discipline \, - \, Probable \, Futures}$

	Projections	Round 1 Frequency	Round 2 Strongly Agree	Round 2 Strongly Disagree
C.1	Academic units of physical	3	1	
	education/kinesiology will be located variably			
	in universities			
C.2	Parts of the academic discipline of physical	2		
	education/kinesiology will be located in			
	different academic units in universities			
C.11	Physical education will exist in low-regard in	1		
	faculties of Education			
C.12	Undergraduate degree programs in sport	1	2	
	management will be located in other academic			
	units, such as Business			
C.13	Academic units of kinesiology will increasingly	1		
	divest themselves of professional components			
C.15	Large universities will drop physical education	1		1

C.17 Omnibus-model academic units (i.e. including 1 1 both profession(s) and disciplines) will only exist at private universities and small public universities

C.III Location of Undergraduate Degree Programs in the Academic Discipline – Preferable Futures

	Projections	Round 1 Frequency	Round 2 Strongly Agree	Round 2 Strongly Disagree
C.3	There will be omnibus-model academic units	1	2	
	(i.e. including profession(s) and disciplines)			
C.6	Academic units of physical	1	1	1
	education/kinesiology will be housed in a			
	consistent location			
C.7	Academic units will be consistently located in	1	1	1
	health-related academic units			
C.10	Physical education will exist in faculties of	1		2
	Education			
C.14	Physical education programs will move to	1	1	
	whichever academic unit location they can best			
	prepare professionals			
C.16	There will be no omnibus-model academic	1		
	units (i.e. will not include both profession(s)			
	and disciplines)			

D.II Conflict over the name of our academic units and discipline – Probable Futures

	Projections	Round 1 Frequency	Round 2 Strongly Agree	Round 2 Strongly Disagree
D.1	Kinesiology will be the most consistently used	3		
	name for the academic discipline and its academic units within universities			

D.2	Conflicts regarding the name of the academic	1	2	
	discipline and its units will continue			
D.3	There will be greater consensus on a single	1	1	
	name for the academic discipline and its units			
D.11	Shorter names for the academic discipline and	1		
	its units will prevail			
D.15	There will be a proliferation of the names used	1		2
	for the academic discipline and its units			

D.III Conflict over the name of our academic units and discipline – Preferable Futures

	Projections	Round 1 Frequency	Round 2 Strongly Agree	Round 2 Strongly Disagree
D.1	Kinesiology will be the most consistently used	2		
	name for the academic discipline and its			
	academic units within universities			
D.3	There will be greater consensus on a single	1		
	name for the academic discipline and its units			
D.9	There will be a common name for the academic	1		
	discipline, and its units, that embraces both the			
	disciplinary and professional aspects of the			
	field			
D.12	Physical activity and health education	1		1
D.13	Physical activity education	1	1	1

E.II The Organizational Framework of the Academic Discipline – Probable Futures

	Projections	Round 1 Frequency	Round 2 Strongly Agree	Round 2 Strongly Disagree
E.1	There will be more of the same sub-disciplinary	3	1	
	organizational framework			
E.4	The organizational framework will	1	1	
	communicate a lack of identity and confuse			

	external audiences			
E.7	The natural science sub-disciplines will be	1		
	strong components of the academic discipline			
E.12	There will be an elimination of some sub-	1	1	
	disciplines of the academic discipline			
E.13	There will be a realization that the full	1		1
	encyclopedia of sub-disciplines cannot be			
	maintained			
E.15	It will be difficult for members of the academic	1	1	
	discipline to work outside of their sub-			
	discipline			
E.16	There will be growing unease with the sub-	1		
	disciplinary organizational framework			
E.17	There will be a search for alternative	1	2	
	organizational frameworks			

E.III The Organizational Framework of the Academic Discipline-Preferable Futures

	Projections	Round 1 Frequency	Round 2 Strongly Agree	Round 2 Strongly Disagree
E.3	The organizational framework will depend on	1	3	
	the nature of the university (i.e. size, type)			
E.8	The organizational framework will become less	1		
	compartmentalized			
E.9	The organizational framework will be	1		
	reconsidered			
E.10	There will be networked communities of	1		
	practice locally, nationally, and globally			
E.14	The academic discipline will move beyond a	1	1	
	sub-disciplinary organizational framework			
	towards an interdisciplinary organizational			
	framework			

E.26 The organizational framework will be a form of 1 -- -- a sub-disiplinary model that has a "touchstone" that acknowledge what the areas have in common

F.II The Profession Versus Discipline Dynamic in the Academic Discipline – Probable Futures

	Projections	Round 1 Frequency	Round 2 Strongly Agree	Round 2 Strongly Disagree
F.2	There will be a profession <i>versus</i> discipline	1	2	
	distinction, with limited cooperation between the			
	two			
F.4	The status quo will continue	1	1	
F.6	The professional aspects of the field will not be	1	1	
	well-regarded			
F.7	The academic discipline will be increasingly	1	2	
	well-regarded			

F.III The Profession Versus Discipline Dynamic in the Academic Discipline – Preferable Futures

	Projections	Round 1 Frequency	Round 2 Strongly Agree	Round 2 Strongly Disagree
F.1	There will not a profession <i>versus</i> discipline	4		
	distinction, but rather some agreement,			
	cooperation, and relationship between the two			
F.9	Doctoral education will prepare future faculty to	1	1	1
	be stewards of the field, including the academic			
	discipline and the profession			
F.12	Professional components will move themselves	1	1	
	to wherever they can best continue their work			

Layer 1.1.B Descriptive Statistics of Delphi Results

This section summarizes the Delphi projections into more meaningful results through the application of descriptive statistics. More specifically, this analysis reveals the convergence of the discussion from round one to two, the distribution of discussion by future type, and the frequency of experts in agreement.

Convergence of Discussion

Table 21 presents the convergence of the round one discussion. More specifically, Table 21 outlines the number of projections that were discussed by more than one expert (i.e. converging), as well as the number of projections that were discussed by only one expert (i.e. individual).

Table 21. Convergence of Round One Discussion

Distribution	Number of Projections (n=78)
Converging	8 (10%)
Individual	70 (90%)

Table 22 presents the convergence of the round two discussion. More specifically, Table 22 outlines the number of projections that were agreed upon by some experts with no disagreement (i.e. exclusive agreement), the number of projections that were agreed upon by some experts yet disagreed upon by other experts (i.e. agreement and disagreement), the number of projections that were articulated by only one expert and disagreed upon by other experts (i.e. exclusive disagreement), and lastly, the number of projections that were discussed by only one expert (i.e. neutral).

Table 22. Convergence of Round Two Discussion

Distribution	Number of Projections (n=72)
Exclusive Agreement	35 (49%)
Agreement and Disagreement	6 (8%)
Exclusive Disagreement	12 (16%)
Neutral	19 (26%)

Distribution of Round Two Discussion by Future Type

To further understand the round two data in Table 22, Table 23 presents the areas of agreement, agreement and disagreement, disagreement, and neutrality by future type.

Table 23. Distribution of Round Two Discussion by Future Type

Distribution (n=72)	Probable Future (n=43)	Preferable Future (n=29)	
Exclusive Agreement (n=35)	25	10	
Agreement and Disagreement	1	5	
(n=6)			
Exclusive Disagreement (n=12)	8	4	
Neutral (n=19)	9	10	

Agreement Frequency

The experts were in exclusive agreement (i.e. no disagreement) or convergence on 38 projections regarding the probable, preferable, and undesirable future. The number of experts in agreement and/or convergence is outlined in Table 24.

Table 24. Agreement Frequency

Agreement Frequency	Number of Projections (n=38)	
Some agreement (2 of 5 experts agree)	24 (63%)	
Moderate/Majority agreement (3 of 5 experts agree)	9 (24%)	
Strong agreement (4 of 5 experts agree)	5 (13%)	
Unanimous agreement (5 of 5 experts agree)	0	

Layer 1.1B Discussion

Convergence of Discussion

There was little convergence (10%) of expert opinion in round one of the 'discussion', with nearly the entire discussion (90%) consisting of diverging independent thought. However, this changed in round two, as there was much more converging opinion, including areas of exclusive agreement (49%), agreement and disagreement (8%), and exclusive disagreement (16%); with only 26% of the 'discussion' consisting of diverging independent and/or neutral thought.

In regards to round one, it was to be expected that the discussion would be largely divergent; as it was a discussion of five experts, from five different areas of Canada, the United States, and the United Kingdom, tackling six broad issues, without being aware of each others' opinions. In regards to round two, the considerable amount of convergence may be attributed to the use of the Delphi method, and its provision of feedback. This method provided the structure to enable five experts, from three different countries, to discuss the same 53 projections on six broad issues.

Distribution of Round Two Discussion by Future Type

Overall, there was more discussion of the probable future (n=43), than the preferable future (n=29). Furthermore, more of the exclusive agreement and exclusive disagreement was pertaining to the probable future, whereas, more of the split opinion, i.e. agreement and disagreement, as well as more of the neutral opinion, was pertaining to the preferable future. Therefore, it could said that the polarizing points of discussion were around the probable future, whereas the more varied and less rousing points of discussion were around the preferable future.

There was likely more discussion of the probable future than the preferable future because the sample consists of academics, which in their profession of research are trained pragmatists, not dreamers. These experts likely have spent more time dealing with the evidence of the present and considering eventual realities, than they have philosophizing of the ideal world.

The fact that the discussion of the probable future was more polarizing than the discussion of the preferable future was perhaps due to the fact that experts felt more confident in their ability to extrapolate the trends of their field (i.e. probable futures), and differing views resulted in stronger reactions due to cognitive dissonance.

The fact that the discussion of the preferable future was more varied and less polarizing than the discussion of the probable future may be due to the fact that all the experts identify as physical educators, and felt that any future that was positive for physical education was preferable to them. It seems as though the experts were happy to leave an alternative perspective for the future alone, as long as it was a positive future for physical education, even if it wasn't the way they had personally envisioned it.

Agreement Frequency

The number of experts in agreement and/or convergence was mild for the majority of the projections, as 63% of the time only two of the five experts agreed/converged. As for the remainder of the discussion, 24% of the time three of the five experts agreed/converged, 13% of the time four of the five experts agreed/converged, with zero unanimous expert agreement/convergence of opinion.

The predominately mild agreement may be explained by the broad nature of the six issues discussed, as well as the fact that there was only two rounds of interviews conducted.

Layer 1.1.C – Probable, Preferable, and Undesirable Future Type Results

The executive summary of Delphi results was reorganized to demonstrate results specific to each future type: probable, preferable, and undesirable.

Probable Futures

Strongest Areas of Agreement on Probable Futures

The strongest areas of agreement regarding probable futures were on two projections, of which four out of the five experts agreed. These include:

- C.1 Academic units of physical education/kinesiology will be located variably in universities
- E.4 The organizational framework will communicate a lack of identity and confuse external audiences

Patterns in the Expert Discussion of Probable Futures

Among the experts' projections about the probable future of higher education physical education, there were 10 patterns that appeared to be recurring in the discussion. These patterns included:

An increasing presence of science in the academic discipline. The experts repeatedly mentioned that in the probable future the natural science sub-disciplines would be strong components of the academic discipline, and also that both the focus of the academic discipline, and the curricula of undergraduate degree programs, would become more scientific. This pattern regarding the increasing presence of science in the academic discipline was evident in three different projections about the probable future (A.1, B.5, E.7), and more specifically was mentioned a total of five times, by two different experts, with no disagreement from any experts.

A continuation and/or increase of conflicts within the academic discipline.

The experts repeatedly mentioned that in the probable future there would be a continuation and/or increase of conflicts over undergraduate degree program curricula, the name of the academic discipline and academic units, as well as the profession versus discipline dynamic. This pattern regarding a continuation and/or increase of conflicts within the academic discipline was evident in three different projections about the probable future (B.16, D.2, F.4), and more specifically was mentioned a total of seven times, by four different experts, with no disagreement from any experts.

Limited consensus on some issues within the academic discipline. The experts repeatedly mentioned that in the probable future there would be limited consensus on what the undergraduate degree program curricula, as well as the focus and organizational

framework of the academic discipline should be. This pattern regarding limited consensus on issues within the academic discipline was evident in three different projections about the probable future (A.22, B. 26, E.17), and more specifically was mentioned a total of seven times, by three different experts, with no disagreement from any experts.

An increasingly fragmented academic discipline. The experts repeatedly mentioned that in the probable future both faculty members and degree programs in the academic discipline would have little in common in terms of their focus, curricula, and academic unit location. This pattern regarding an increasingly fragmented academic discipline was evident in five different projections about the probable future (A.5, A.8, B.2, C.2, E.15), and more specifically was mentioned a total of seven times, by four different experts, and was disagreed with by one expert on one occasion.

Greater consensus on some issues within the academic discipline. The experts repeatedly mentioned that in the probable future there would be greater consensus on the curricula of undergraduate degree programs within the academic discipline, as well as on a single name for the academic discipline and its academic units in the university. This pattern regarding greater consensus on some issues within the academic discipline was evident in two different projections about the probable future (B.1, D.3), and more specifically was mentioned a total of three times, by two different experts, and was disagreed with by one expert on one occasion.

A separation of physical education from the academic discipline of kinesiology. The experts repeatedly mentioned that in the probable future there would be limited cooperation between those within the academic discipline who are concerned with physical education and those within the academic discipline who are not concerned with

physical education, and furthermore that academic units of kinesiology would increasingly divest themselves of professional components such as physical education, which would instead exist within faculties of Education. This pattern regarding a separation of physical education from the academic discipline of kinesiology was evident in five different projections about the probable future (A.6, B.17, C.11, C.13, F.2), and more specifically was mentioned a total of eight times, by three different experts, and was disagreed with by two experts on one occasion.

Elimination of some sub-disciplines from academic units and/or the academic discipline. The experts repeatedly mentioned that in the probable future some sub-disciplines would be eliminated from the academic discipline and academic units of physical education/kinesiology. Some experts more specifically indicated that the sub-disciplines of sport management and physical education would migrate to the academic discipline and academic units of Business, and Education, respectively. This pattern regarding the elimination of some sub-disciplines from academic units and/or the academic discipline was evident in five different projections about the probable future (A.7, C.12, C.15, E.12, E.13), and more specifically was mentioned a total of ten times, by five different experts, and was disagreed with by two different experts on two different occasions.

Differences in academic units of physical education/kinesiology as a function of their geographical location, size, and type of university. The experts repeatedly
mentioned that in the probable future the focus, location, and model of academic units
within the academic discipline would vary depending on the geographical location, size,
and type of the university. This pattern regarding the differences in academic units as a

function of geographical location, size and type of university was evident in three different projections about the probable future (A.4, C.1, C.17), and more specifically was mentioned a total of eight times, by four different experts, and without disagreement from any experts.

The academic discipline regarded above the profession(s). The experts repeatedly mentioned that in the probable future the academic discipline would be increasingly well-regarded, while the profession(s) would not be well-regarded. This pattern regarding the privileging of the academic discipline above the profession was evident in two different projections about the probable future (F. 6, F.7), and more specifically was mentioned a total of five times, by three different experts, without disagreement from any experts.

A status quo continuation of some issues within the academic discipline. The experts repeatedly mentioned that the existing state of affairs surrounding the degree program format for physical education teachers, the sub-disciplinary organizational framework, and the profession versus discipline dynamic would continue in the probable future. This pattern regarding the status quo continuation of some issues within the academic discipline was evident in four different projections about the probable future (B.11, B.12, E.1, F.4), and more specifically was mentioned a total of seven times, by five different experts, and without disagreement from any experts.

Preferable Futures

Strongest Areas of Agreement on Preferable Futures

The strongest areas of agreement regarding preferable futures were on three projections, of which four out of the five experts agreed. These include:

- B.1 There will be some consensus on the curricula of undergraduate degree programs within the academic discipline
- E.3 The organizational framework will depend on the nature of the university (i.e. size, type)
- F.1 There will not be a profession versus discipline distinction, but rather some agreement, cooperation, and relationship between the two

Patterns in the Expert Discussion of Preferable Futures

Among the experts' projections about the preferable future of higher education physical education, there were four patterns that appeared to be recurring in the discussion. These patterns included:

Increasing consensus on some issues within the academic discipline. The experts repeatedly mentioned that in the preferable future there would be increasing consensus on the undergraduate degree program curricula, as well as name of the academic discipline. The pattern regarding increasing consensus on some issues within the academic discipline was evident in two different projections about the preferable future (B.1, D.3), and more specifically was mentioned a total of five times, by four different experts, without disagreement from any experts.

Consistency on some issues within the academic discipline. The experts repeatedly mentioned that in the preferable future there would be consistency on the name of the academic discipline and its academic units, with some experts specifically indicating the name to be kinesiology; as well as consistency on the academic unit location, with some experts specifically indicating locations in health-related units. The pattern regarding consistency on some issues within the academic discipline was evident

in four different projections on the preferable future (C.6, C.7, D.1, D.9), and more specifically was mentioned a total of seven times, by two different experts, and was disagreed with by two different experts on two different occasions.

Physical education will migrate wherever necessary to survive and thrive.

The experts repeatedly mentioned that in the preferable future physical education would migrate to whichever academic unit location necessary in order to best prepare future physical education professionals. The pattern regarding the migration of physical education to wherever necessary to survive and thrive was evident in two different projections about the preferable future (C.14, F.12), and more specifically was mentioned a total of four times, by three different experts, without disagreement from any experts.

Functional relationships and organization within the field. The experts repeatedly mentioned that in the preferable future there would be a functional relationship between the profession(s) and the academic discipline, reflected in the curricula of undergraduate degree programs as well as academic unit models and locations; as well as a functional organizational framework which moves beyond a sub-disciplinary framework to a more interdisciplinary framework with a common touchstone networked locally, nationally, and globally. The pattern regarding functional relationships and organization within the field was evident in seven different projections (B.20, C.3, E.3, E.10, E.14, E.26, F.1), and more specifically was mentioned a total of 16 times, by five different experts, and was disagreement with by one expert on one occasion.

Undesirable Futures

Strongest Areas of Convergence on Undesirable Futures

The strongest areas of convergence regarding undesirable futures were on three projections, of which two out of the five experts agreed. These include:

- A.5 The academic discipline will become increasingly fragmented (i.e. faculty, degree programs, and foci).
- D.1 Kinesiology will be the most consistently used name for the academic discipline and its academic units within universities
- F.2 There will be a profession versus discipline distinction, with limited cooperation between the two

Patterns in the Expert Projections of Undesirable Futures

Among the experts' projections about the undesirable future of higher education physical education, there were seven patterns that appeared to be recurring in the round one discussion. These patterns included:

A fragmented and separated academic discipline. The experts repeatedly mentioned that in the undesirable future, the academic discipline would have an extreme sub-disciplinary framework focused on the differences, not similarities, of its components. This extreme sub-disciplinary framework is projected to result in such things as: a separation of undergraduate degree programs within the academic discipline to be offered in different academic units; as well as a separation of sub-disciplinary faculty members to parent/cognate academic disciplines. The pattern regarding fragmentation and separation of the academic discipline was evident in five different

projections about the undesirable future (A.5, B.2, E.11, E.23, F.3), and more specifically, was mentioned a total of six times, by four different experts.

Confusion regarding the name and organizational framework of the academic discipline. One expert repeatedly mentioned that in the undesirable future there would be confusion regarding the variety of names used to refer to the academic discipline, what the name kinesiology means, as well as the identity of the academic discipline as communicated by the organizational framework. The pattern of confusion regarding the name and organizational framework of the academic discipline was evident in three different projections about the undesirable future (D.6, D.8, E.4), and more specifically, was mentioned a total of three times, each time by the same expert.

A lack of identity within and towards the academic discipline. One expert repeatedly mentioned that in the undesirable future there would be a lack of identity within the academic discipline and its academic units, and furthermore that the organizational framework will communicate a lack of identity which will confuse external audiences. This pattern of a lack of identity was evident in two different projections about the undesirable future (D.7, E.4), and more specifically, was mentioned a total of two times, each time by the same expert.

Conflicts within the academic discipline. The experts repeatedly mentioned that in the undesirable future there would be conflicts regarding the name of the academic discipline and its academic units in the university, as well as conflict between the sub-disciplinary areas of the academic discipline. This pattern of conflict was evident in three different projections about the undesirable future (A.23, D.2, E.24), and more specifically, was mentioned a total of four times, by two different experts.

A lack of cooperation between the academic discipline and the profession(s).

The experts repeatedly mentioned that in the undesirable future there would be a lack of cooperation between the academic discipline and the profession(s) within the field, particularly in the area of curricular content, where faculty members in sub-disciplines will teach whatever content they like, regardless of what is relevant to the profession(s) within the field. This pattern regarding a lack of cooperation between the academic discipline and profession(s) was evident in six different projections about the undesirable future (A.18, A.20, B.21, E.19, F.2, F.10), and more specifically, was mentioned a total of seven times, by two different experts.

Inconsistency and lack of consensus on some issues within the academic discipline. The experts repeatedly mentioned that in the undesirable future there would be inconsistency and lack of consensus regarding undergraduate degree program curricula, location of academic units within the university, names of academic units and the academic discipline, and on what the "touchstone" is that all the sub-disciplines of academic discipline have in common. This pattern of inconsistency and lack of consensus was evident in five projections on the undesirable future (B.22, B.26, C.1, D.15, E.25), and more specifically, was mentioned a total of five times, by three different experts.

Professional aspects of the field, particularly physical education, will be held in low-regard. The experts repeatedly mentioned that in the undesirable future the professional aspects of the field, particularly that of physical education, would be held in low-regard, and more specifically would be located in academic units of lesser academic prestige, such as Education, or academic units where it is considered exotic and unwelcome. This pattern of low-regard for physical education and other profession(s)

within the field is evident in three projections about the undesirable future (C.11, C.18, F.6), and more specifically, was mentioned a total of three times, by two different experts.

Layer 1.1C Discussion

The results specific to each future type can be summarized as follows.

In the probable future the experts projected that the six conflicts investigated in this research would continue, however, they foresaw that these conflicts would be manifested differently in universities of different sizes and types.

In the preferable future the experts wished to see compromises made among members of the academic discipline in order to minimize the impact of conflicts.

Furthermore, the experts wished that these compromises would focus on improving functionality within the academic discipline and that local adjustments would be made for the particular needs of universities of different sizes and types.

In the undesirable future the experts projected that the six conflicts investigated in this research would continue and would result in inconsistency, confusion, lack of identity, lack of cooperation, and ultimately fragmentation of the academic discipline.

Layer 1.2 Interview Question Results

In this layer the results of the interview questions will be presented, including: what the experts believed to be the most relevant issues influencing the future of higher education physical education; what advice they would offer to the entire field regarding the future; and lastly, a final and overall statement about the future of higher education physical education.

Please note that the results of the interview questions which asked experts how they believed their geographical context had influenced their future perspective, as well as how their administrative experience had influenced their future perspective, are not presented here but instead were used to inform the researcher's interpretation.

Layer 1.2.A Most Relevant Issues Influencing the Future of Higher Education Physical Education

Each of the experts was asked to indicate what they believe to be the top three issues influencing the future of higher education physical education.

Patterns within the Experts' Responses

After conducting qualitative content analysis there appeared to be three patterns recurring within the experts' responses. These include:

Leadership. Two of the experts spoke about leadership as one of the most influential issues regarding the future of higher education physical education. These experts indicated that it is not just leadership within higher education that is important, but leadership throughout the field. One expert specified the importance of leadership within large international scholarly societies, such as NAK or AAHPERD, and simultaneously questioned the ability of, but indicated the need for, these organizations to "take on leadership roles and be persuasive, and be listened to, and bring together the consensus and expert opinion". He further indicated that he hoped for leaders in these organizations to be "informed" and act like "visionaries", and make this field a place where "non-conformism... becomes the norm, rather than the usual thing". Another expert explained that it is "absolutely pivotal" that leaders throughout the field be "able to move beyond pet interests and preferences, that in part are derived from their own

biographies, in short, become less ideologically committed... to programs and practices that may have little empirical or theoretical grounding". He further explained that this type of leadership "merely safeguards a future where what you see today, is what you get tomorrow", and that "this religiosity with regard to a particular kind of physical education program, a particular kind of teacher education program, is inescapable, and is very very dangerous. In this time and context, it has become really quite counterproductive".

Recruitment and preparation of future physical education professionals and disciplinarians. Four of the experts spoke about the recruitment and preparation of future physical education professionals and disciplinarians as one of the most influential issues regarding the future of higher education physical education. The experts explained that it is important for the field to recognize that a next generation of physical education teachers and disciplinarians needs to be recruited, and then prepared in a desirable manner. More specifically, two experts address coaching; one expert indicated the field needs to recruit people who "see the field as even more than a profession, as a mission, not people who simply want to get in it as a coach", while another added that "physical education... is never going to be effective until we get rid of coaches who are teachers of physical education, because they don't care about teaching PE" and that doing so would be "the single most important thing we could do for PE". One expert indicated how this recruitment and preparation needs to be addressed, first he explained that the field needs to

Recognize that schools are... among the primary networks of recruitment of the next generation... so if you want to see a new generation of physical education

teachers and professors... this fundamentally depends on new institutional and programmatic designs in today's schools, and that will require in turn, a new partnership configuration where universities and schools, renew and improve interactively, simultaneously, and synergistically.

Two other experts also spoke about the need for revised physical education teacher education and "good pedagogues" as influential to the future of higher education physical education.

The appreciation of physical education as relevant and valuable. Three of the experts spoke about physical education being appreciated as relevant and valuable to be one of the most influential issues regarding the future of higher education physical education. One expert explained that, "our field is finding it difficult to make itself culturally relevant". Another expert supported this statement by illustrating the example that when the general public and media ask questions about childhood obesity "they ask physicians, they ask other medical personnel, they ask professional athletes, they seem to ask everybody but physical educators. It's almost as if, we're not relevant". Two experts offer reasons as to why physical education is not appreciated as relevant and valuable, one expert suggested that the field has an inability to "articulate why it is that we are important", and another expert linked the issue to the "lack of definition we've struggled with". In sum, it appears that "there's something about social, cultural, economic relevance that will be important in terms of the survival of the field".

Other Responses

Other issues that were identified as some of the most relevant issues impacting the future of higher education physical education, but were not patterns, included:

- A single name with which to communicate in a consistent way, and for the general public to identify with
- The specialization, fragmentation and separation of the sub-disciplines in the academic discipline
- Obesity
- A decision regarding the location of our field in the university
- A focus on public policy by physical education leaders throughout the field
- A clarification of the core body of knowledge and subsequent preparation of students as experts in that body of knowledge
- To narrow the focus of objectives and outcomes of physical education
- To hold physical education teachers accountable for a narrow set of objectives and outcomes

Layer 1.2.B Expert Advice to the Field for the Future of Higher Education Physical Education

Each of the experts was asked to offer a piece of advice to the entire field about the future of higher education physical education.

Patterns within the Experts' Responses

After conducting qualitative content analysis there appeared to be one pattern recurring within the experts' responses, this was:

Proactively analyze the present and adapt as necessary. As advice to the field for the future of higher education physical education, two experts spoke about proactively analyzing the present and adapting as necessary to the results of that analysis. More specifically, one expert explained the field should not "rely on a rear-view mirror as you

begin to think about the future". Instead, both experts suggested the need to analyze the present. More specifically, one expert explained that the field should "rely on data, data that indicates the strengths, weaknesses, threats, and opportunities, in the internal environment for higher education, and the external environment for schools and universities", while the other explained the need to "be continually looking for better ways of doing things, new ways of doing things, more culturally relevant ways of doing things". After such proactive analysis of the present, both experts indicated the need to then "use that data to actively create the future that you desire, rather than finding yourself coming to terms with the future when it has already arrived". In sum, "it's a particular way of looking at the world so that you see change as the norm, not as the exception, you're looking for ways to adapt to better suit your environment".

Other Responses

While not recurring patterns, other expert advice to the field for the future of higher education physical education included:

- In order to have the strength in numbers to make a difference, it is important to reach out and make all the alliances possible, particularly with health-related areas
- Have a broad, rather than narrow focus, and work for the betterment of all types
 and abilities of people. Be sure to keep specialism in perspective, and ensure the
 total population is addressed
- Eliminate coaches as teachers of physical education in schools
- Narrow the focus of objectives and outcomes of physical education and hold physical education teachers accountable for these objectives and outcomes

 See beyond the obvious; see depth, nuance, and complexity, without complicating or overcomplicating the situation

Layer 1.2.C A Final and Overall Statement about the Future of Higher Education Physical Education

Each of the experts was asked to offer a final and overall statement about the future of higher education physical education.

Patterns within the Experts' Responses

Through qualitative content analysis of all the final statements, three particular tones were evident:

Optimistic and positive statements about the future. In his own words, one expert offered a very "optimistic" outlook on the future. More specifically, he projected that there will be "drastic changes that will be very positive for physical education"; including physical education being truly "valued for what it can do to promote a healthy society"; with schools systems committed to having "physical activity every day for every child". He explained that these drastic changes would be the result of "a major health crisis with young people" in North America, "when the rate of obesity, diabetes, cancer, and all the aspects of adult life creeps down into middle and elementary school".

Pessimistic and critical statements about the future. Two experts offered more pessimistic outlooks on the future, which one expert described as a "continuous struggle", and another expert described as "volatile" and "risky". One expert explained this "struggle" would be due to the "wild" and "crazy over-emphasis" and spending on sport by governments, and the concurrent reality that "90% of children and youth are not

getting quality programs". The other expert explained the reason for this "volatile" and "risky" projection is

That with the large social, cultural, relevance of sport, exercise, and leisure, comes raised expectations for what physical education teachers and sport coaches, can actually deliver... and people start to be very cynical about the claims that we make when they are considered against the evidence [such as survey data that states physical education has not made people lifelong exercisers].

This expert offered the solution of running "research programs that show the evidence of the hard and soft skills that we [actually] develop throughout our various programs".

Uncertain: Hopeful, yet skeptical. Two experts offered an uncertain outlook on the future. One expert explained that he would "like to see [physical education] become the renaissance field of the 21st century", and believes there is "overwhelming evidence that we could become that kind of profession... but only if [physical educators] decide to ... really become experts in the field and no longer have coaches as teachers of physical education". Unfortunately, he was "skeptical" this would happen. The second expert felt the future is "dependent upon a whole series of things, only some of which the field's members can influence and control", including such things as: "a very different and more rigorous kind of research that goes outside what has become the dominant mode... of physical education pedagogy" and "begins to look at the divides" between subdisciplinary areas and how they "can be bridged", as well as alternatives to

Physical education teacher education and school programs... that can and will emerge as a function of public policy and inter-professional competition, including from other kinesiology sectors, who... are basically going to take over

the market... because they have a much better set of empirically guided and theoretically sound program models... and are prepared to let the data drive them rather than ideology.

This expert indicated that this will "play out differently in different places", and that "in other parts of the world there are encouraging new signs...[of] integration", yet he still feels the future is "uncertain".

Layer 2 Making the Obvious Dubious

Layer 2.1 Challenging Delphi Results

Layer 2.1.A Comparative analysis of probable, preferable, and undesirable future type results

In order to challenge the probable, preferable, and undesirable futures projected in the Delphi investigation (and reported in Layer 1), a comparative analysis was conducted which compared two futures types at a time, to reveal what the interaction of those futures types meant. More specifically, the analysis sought to identify those projections that were assigned more than one meaning (i.e. probable, preferable, and/or undesirable).

Comparison of Probable and Preferable Futures

Probable and preferable futures projections were compared to reveal what experts thought were likely (probable) *and* positive (preferable) future developments. These include:

- B.1 There will be some consensus on the curricula of undergraduate degree programs within the academic discipline
- B.20 Course instructors will consult physical education teacher educators in order to deliver courses in the disciplinary core meaningfully

Comparison of Probable and Undesirable Futures

Probable and undesirable futures projections were compared to reveal what experts thought were likely (probable) and negative (undesirable) future developments.

These include:

- B.2 The various undergraduate degree programs in the academic discipline will separate to be offered in different academic units, and will have little in common
- B.26 There will be constant changing and shifting of undergraduate degree program curricula
- C.1 Academic units of physical education/kinesiology will be located variably in universities
- C.11 Physical education will exist in low-regard in Faculties of Education
- D.2 Conflicts regarding the name of the academic discipline and its units will continue
- D.15 There will be a proliferation of the names used for the academic discipline and its units
- E.1 There will be more of the same sub-disciplinary organizational framework
- E.4 The organizational framework will communicate a lack of identity and confuse external audiences

Comparison of Preferable and Undesirable Futures

Preferable and undesirable futures projections were compared to reveal projections that were contradictorily projected as both preferable and undesirable by different experts. This includes:

 C.3 There will be omnibus-model academic units (i.e. including profession(s) and disciplines)

Layer 2.1.A Discussion

Only two of the preferable projections for the future were also considered probable, while eight of the undesirable projections for the future were also considered probable. Therefore, it can be said that the experts foresee the probable future as considerably more undesirable than desirable.

Fortunately, there was only one contradictory projection that was indicated by some experts as preferable and others as undesirable. It appears that some experts believe it would be desirable to have omnibus-model academic units, while others believe it would be undesirable. This contradiction is likely explained by the differences in university size and type that the experts are coming from.

Layer 2.1.B Analysis of Delphi results for literature-driven or indigenous typologies

In order to challenge the probable, preferable, and undesirable futures projected in the Delphi investigation (and reported in Layer 1), the projections were compared to projections in the existing literature. This analysis reveals whether this research study reiterated the findings of existing literature (i.e. literature-driven typologies), or instead offered novel findings (i.e. indigenous typologies).

Two typological analyses were done. The first analysis compared the Delphi projections to existing empirical literature that includes explicit projections for the future; more specifically, the Delphi projections were compared with Ishee (2003) (see Tables 13, 14, 15), which is the only existing faculty-level empirical research study on this topic

(Ishee, 2003). The second analysis compared the Delphi projections with existing conceptual and empirical literature that includes both implicit and explicit projections for the future (see Table 17).

The first typological analysis, which compared Ishee (2003) (Tables 13, 14, 15) with the Delphi projections, found eight of the Delphi projections to be literature-driven, or in other words, reflective of Ishee's (2003) results.

- In regards to the probable future, the Delphi result A.25 and Ishee (2003), both project increasing interdisciplinary scholarship.
- In regards to the preferable future, the Delphi results E.14 and B.20, F.1 and Ishee (2003), project increasing interdisciplinary scholarship as well as collegiality among faculty members, respectively.
- In regards to the undesirable future, the Delphi results C.11 and A.5, B.2, F.3 and Ishee (2003), project a merging of higher education physical education with other academic disciplines, as well as a separation of the academic discipline to parent/cognate academic disciplines, respectively.

The second typological analysis, which compared Table 17 with the probable Delphi projections, found 11 Delphi projections to be literature-driven, or in other words, reflective of 11 existing implicit and or explicit projections of the future from both empirical and conceptual literature.

- In regards to the probable future, the Delphi result(s):
 - F.4 was reflective of the Table 17 literature-driven typology that there will be a negative perception of the academic discipline by outsiders (Lawson, 2007; Rikli, 2006).

- o C.13, F.2, F.4, F.6, and F.7 were reflective of the Table 17 literaturedriven typology that there will be a knowledge hierarchy placing physical education and professional aspects of the field at the 'bottom', where they will be marginalized and undervalued (Lawson, 2007; Melnychuk et al., 2011; Newell, 2007).
- C.15 was reflective of the Table 17 literature-driven typology that the academic discipline will be in danger of elimination from the academy (Ishee, 2003; Kirk, 2010; Lawson, 2007; Melnychuk, et al, 2011).
- A.5 and E.12 were reflective of the Table 17 literature-driven typology
 that the academic discipline will become further fragmented (Kirk, 2010;
 Kretchmar, 2008; Lawson, 2007; Melnychuk, et al, 2011).
- B.2 and C.2 were reflective of the Table 17 literature-driven typology that some of the research sub-disciplines will separate and move to parent/cognate sub-disciplines (Kirk, 2010; Kirk & Macdonald, 2001; Kretchmar, 2008; Lawson, 2007; Melnychuk, et al., 2011).

Layer 2.1.B Discussion

Through two typological analyses, 17 (23%) of 72 Delphi projections were found to be literature-driven typologies. This would suggest that the vast majority (77%) of the Delphi projections resulting from this research are indigenous typologies reflecting novel findings, rather than supporting previous literature. A caveat to this result is the researcher's observation that some of the Delphi projections that appear to be indigenous typologies through analyses, are actually reflective of literature-driven typologies of a

different future type, i.e. indicated in the literature as an undesirable future projection, but indicated as a preferable future projection in this research.

The finding that 23% of the Delphi projections were reflective of literature-driven typologies can be explained, and even expected, due to the fact that the expert participants in this research have either read, written, and/or been cited in much of the literature on the topic. At the same time, the finding that 77% of the Delphi projections were reflective of indigenous typologies can be explained, and even expected, due to the irregular publication of literature on this topic, particularly in recent history.

Layer 2.1.C Analysis of geographical influence on Delphi Results

In order to challenge the futures projected in the Delphi investigation (and reported in Layer 1), an analysis was conducted to determine whether the resulting projections might be a function of the experts' geographical background, or whether these results may be true irrespective of the experts' geographical background.

More specifically, each of the resulting 72 probable and preferable Delphi projections were coded with the nationality of the expert(s) who projected or agreed with it, and then tallied as being a projection that was either a: single-country projection (i.e. projected or agreed to by an expert(s) from one country), two-country projection (i.e. projected or agreed to by experts from two different countries), or three-country projection (i.e. projected or agreed to by experts from three different countries). The results of this analysis can be seen in Table 25.

Please note that undesirable projections were not included as these were projected only in round one, with no feedback sought in round two. Also, please note that the experts' geographical background is as follows: one expert with a Canadian background,

three experts with American backgrounds, and one expert with a British-Australian background.

Table 25. Projections from a Single Country, Two Countries, or Three Countries

Number of Countries Contributing to Projection	Number of Projections (n=72)
One Country	36 (50%)
Two Countries	29 (40%)
Three Countries	7 (10%)

The seven projections that were articulated by experts from all three countries include:

Probable Future Projections:

- A.7 The focus of sport management will be within the academic discipline of Business
- D.2 Conflicts regarding the name of our academic units and discipline will continue
- F.2 There will be a profession versus discipline distinction, with little cooperation between the two

• Preferable Future Projections:

- B.1 Some consensus and decisions about what undergraduate degree programs in this field should consist of
- C.3 There will be omnibus-model academic units (i.e. including profession(s) and disciplines)

- E.3 The organizational framework will depend on the nature of the university (i.e. size, type)
- F.1 There will not a profession versus discipline distinction, but rather some agreement, cooperation, and relationship between the two

Layer 2.1.C Discussion

This analysis reveals that 50% of the projections were made by a participant, or participants, from a single country, while the remaining projections were made by participants from two (40%) or three (10%) different countries. In sum, it could be concluded that approximately half of the Delphi projections may only be true to a particular national context, while the other half of the projections may be true of two or three national contexts. Therefore, this analysis offers inconclusive results as to whether the Delphi projections are a function of the experts' geographical context.

There are explanations to support the finding of geography as influential to the Delphi projections, and also explanations to support the finding that geography was not influential. One reason that geography could be considered influential, is that some experts explicitly stated it to be. For example, one expert clearly stated that "geography matters", while another expert asserts that "perspectives in Europe, England, and Canada are different from the United States". There were also subtle implications of geographical influence by participants, such as one expert who wondered "maybe that's a Canadian thing", a second expert who began an explanation with "Here in the US…", as well as a third expert who explained that in regards to one issue "it's difficult to comment on that, because the situation here is different".

However, at the same time there are explanations to support the notion that geography was not influential in the resulting Delphi projections. First, this research study was framed broadly, for instance, participants were asked about broad issues that are not geographically specific, and also asked to respond broadly. Second, when the participants were specifically asked about their geographical context, and also how they perceive geography to have influenced their responses, four out of five said they felt they had "broad" perspectives, and cited their extensive international work experience as evidence. Third, it is important to consider that the sample is comprised of three

American experts, and only one expert from the United Kingdom and Canada. Therefore, the fact that there are three participants from one country may explain the large number of single-country projections. Lastly, the small sample size may mean projections are more likely a function of individuality than nationality.

Furthermore, when considering the data in its entirety, there appears to be evidence that factors *other* than geography were important influences on the resulting Delphi projections. First, experience as an administrator appeared to be a strong influence on the experts' perspectives and their Delphi projections. For instance, while one participant said he didn't know how geography might have influenced his perspective, when asked immediately after as to how his administrative experience may have influenced his perspective, he was quick to respond. He replied, "Where this question is concerned the answer is very clear... I have no doubt that so much of the work that I've done... is profoundly influenced by [my] administrative experiences". Also, many of experts' anecdotal comments referenced their administrative experience, whether they

were explaining a projection in round one, or justifying their agreement or disagreement with a projection in round two.

Second, the difference between universities of varying types (i.e. public or private; tiered or open system) and size (i.e. small, mid-size, or large) appeared to be strong influence on the experts' perspectives and their Delphi projections. For instance, not only did the experts indicate the size and type of university as a profound factor for the future, but also that their experiences at universities of particular types and sizes as having a profound influence on their perspective, even though this question was never asked of them during the interview. For instance, one expert explained, "Most of my experience... is at research-intensive universities... the perspective of those schools compared to the next level down, all the way down to small liberal arts colleges...are quite different".

Layer 2.2 Challenging Delphi and Interview Question Results Layer 2.2.A Cross-question Pattern Results

In order to challenge the entire data set (reported in layer 1), qualitative crossquestion content analysis was conducted to reveal patterns that were recurring in the data set, but were not specific to a particular question, and therefore not reported previously.

Twenty-nine patterns were found in the cross-question analysis, and can be metaorganized into four categories based on the context they apply to. More specifically, these categories include patterns pertaining to: the profession of physical education teaching in schools (two patterns), the academic discipline in higher education (14 patterns), the field including both the academic discipline and the profession(s) (eight patterns), and other general comments not specific to a particular component of the field (five patterns).

Cross-Question Patterns Pertaining to The Profession of K-12 Physical Education Teaching

The type and preparation of physical education teachers. Three of the experts spoke repeatedly about the current type of physical education teachers, and the type we need for the future. More specifically they indicated the need for passionate, wellprepared, expert, and teaching-focused (not coaching-focused) individuals. First, in regards to passion, one expert spoke about the need to have people teaching physical education who "see the field as even more than a profession, as a mission... a vocation", and "who are truly concerned about the welfare of the individual from womb to tomb". Another expert added that in order to be a strong field, and be considered as such, the profession of physical education needs "people that have the same kind of dedication to physical education as coaches have to coaching". Second, in regards to the preparation of physical education teachers, the three experts all voiced concern that future physical educators are not, and likely will not, get a "solid experience", or an "adequate grounding...in the subject matter knowledge they need to teach in schools" through their undergraduate and/or professional degree programs (due to such factors as the academization of curricula, cuts to length of degree programs presenting challenges to instruct the requirements of a broad liberal education, the disciplinary core, and the demands of the profession). Third, in regards to the need for expert physical education teachers, three experts in this research explained that our physical education teachers are not prepared through their university education to be experts, and therefore are not perceived as experts by their students, other members of the field, or external audiences. One expert explained that physical education teachers of today are largely considered

"jacks of all trades, masters of none", and likely do not, or maybe even cannot, serve as a school authority on physical activity, nutrition, and the like. Lastly, in regards to teaching-focused physical education teachers, two of the experts spoke passionately that "the single most important thing" for the future of the physical education profession, would be to "get rid of coaches as teachers of physical education" as by and large, although not exclusively, they "spend all of their time coaching and very little time preparing to teach physical education... don't attend in-service meeting or conferences for physical education, they only go to coaches' meetings".

Claims of physical education objectives and the evidence of results. Two of the experts spoke repeatedly about the claims made by the stated objectives of physical education and the evidence that these objectives are not achieved. One expert summarized the problem by explaining that "we claim so many objectives of physical education... sportsmanship, social objectives, attitude change, knowledge, fitness development, skill development... and in the time that we have, we can't do all of those". Another expert provided an example, explaining that "we make claims... that a broad program of school physical education will produce a population of lifelong exercisers" while the "survey data from the last ten to twenty years...shows us... that most people don't play any of the sports and games they learned at school, in fact most people aren't active physically on a regular, habitual basis". The experts explained the gravity of this problem, with one expert suggesting that this is extremely "risky" as with the "massive social, cultural, and economic relevance of sport, leisure and exercise... has come raised expectations for what physical education teachers...can deliver... [and] people start to be very cynical about the claims that we make when they are considered against the

evidence", with the other expert seconding that "the worst possible outcome is that we keep claiming that we're doing it and then we don't, because then programs are going to fall to the side, as they have". In terms of a solution to this problem, one expert suggested the need to "limit the focus of our objectives" and distinguish between "principle versus concomitant objectives" adding "we can't continue to try to be everything to everybody, we have to decide what's important and agree upon it". Furthermore, this expert suggested that teacher's need to be held accountable for the achievement of a more focused set of objectives. Finally, the second expert suggested that it "is a logical priority" for the profession to conduct research to outline the evidence of results actually achieved in physical education.

Cross-Question Patterns Pertaining to the Academic Discipline in Higher Education

Popularity of degree programs in the academic discipline. Two experts repeatedly indicated that the academic discipline would be quite popular in the future in terms of the number of students interested in pursuing undergraduate degrees in the area. However, the experts indicated that the caveat to this is that by and large these students would be using degrees in this discipline as a preparatory place to continue on to allied-health professional preparation programs. One expert indicated that this would be beneficial to the academic discipline, as administrators view high enrollment positively. However, this same expert indicated his concern that popularity often means that programs can "withstand a lot of questions", meaning "you may have a good curriculum, or you may have a bad curriculum, or you may have issues with your curriculum, but if you've got lots of students, people like that".

Elimination of some aspects of the academic discipline. Three experts repeatedly mentioned the notion of some aspects of the academic discipline being eliminated. More specifically, two experts suggested that academic units would have to eliminate some sub-disciplinary areas from their unit, due to such things as resource constraints. Furthermore, two experts projected that physical education undergraduate degrees will, if they haven't already, be eliminated from some universities, particularly large research-intensive universities, to the point that only a limited number of these degrees will remain.

Degree programs and sub-disciplinary researchers of physical education housed in faculties of education. Three experts repeatedly mentioned the concept of physical education degree programs and sub-disciplinary researchers being housed in Faculties of Education. More specifically, two of those experts spoke repeatedly about this as being a probable development. However, this concept was often referred to negatively, some experts spoke about this development as a "weak option" and "dangerous place" for physical education; a place in which it would "fight a hard uphill battle" due to such factors as being "looked down on" among the ranks of educational researchers.

Scientization. Three experts spoke repeatedly about the increasing presence of science in regards to the undergraduate curricula as well as the focus of the academic discipline. More specifically, scientization was referred to rather negatively as one of the experts referred to "the bioscience people" as "in control", and that he felt the "social sciences and humanities" to be "pushed off to the side" and to experience "prejudice"

from, what another expert calls, some of "the scientists in kinesiology who don't consider" these areas to be part of kinesiology.

Financial resources. Four of the experts repeatedly mentioned financial resources, specifically in regards to undergraduate enrollment income, external research grants, and university budget concerns and decisions. First, in regards to undergraduate degree program income, one expert explained that the fact that this academic discipline has been serving as a preparatory place for students to later pursue allied-health professions has been a "gold mine", and will likely "not go away anytime soon". Second, in regards to external research grants, one expert mentioned that "virtually all of the funding is to do work in schools and communities, and so people who saw themselves as bench scientists in the basic research tradition, are quickly finding there's no funding for them". Third, in regards to university budget concerns and decisions, one expert explained that "resources are in major decline" and that "universities can't continue to be encyclopedic; they are going to have to make hard decisions" about what to continue to do or not do. Another expert explained that fewer students are enrolling in physical education degree programs, and therefore the cost of running the program against declining enrolment is becoming a financial concern, causing him to think about relinquishing the program to Education. Lastly, one expert repeatedly mentioned that decisions made in the academic unit (i.e. name, location) would be influenced, and in the end reflect, the areas of the academic discipline with greatest enrollment.

Differences and dependencies. Each of the five experts spoke repeatedly about differences and dependencies in the academic discipline, and more specifically about how differences depend on the nature (i.e. type and size) of universities and their geographical

location. First, in terms of the nature of the university, the experts indicated that the issues within the academic discipline manifest themselves differently depending on whether the university is: public or private; in a tiered-system (i.e. research-intensive, comprehensive, or teaching universities) or open system; or a small, medium or large university. One expert provided a single example of these differences by stating "the troubles that [large research universities] have with the profession and disciplinary people are quite different than those at smaller institutions". He explained further that in "small schools, were going to see disciplinar [ians] and professionals working together, and the smaller the school it may be the exact same people, whereas in mid-size schools we may have some sub-disciplinarians as well as [some] professionals working together", while the large research-intensive universities "that have the resources to have experts have often gotten out of the business" of physical education and/or kinesiology all-together. Second, in terms of the geographical location of universities, the experts indicated that there are significant local, regional, national, and international differences, due to such things as different language communities (and therefore different academic bodies of literature), and different cultural contexts. One expert provided an example by stating "the big debate that took place in the pages of Quest ... [over] the proliferation of titles to describe the field... You won't find this debate in pages of any scholarly journals in Australia or in the UK, and... the francophone community for example, I don't think people have been nearly so preoccupied with that, and that's an interesting really cultural issue in itself". In sum, the experts emphasized the fact that they foresee "very different things in very different places", and that "context matters" as well as "geography matters".

Academization. Three experts repeatedly mentioned the concept of academization, referring to it as "the big problem", or "the main issue that has been the most difficult issue" for higher education physical education. One expert explained this phenomenon saying that

We have actually shoved out to the margins, in some cases shoved out completely, the subject matter knowledge that teachers need to teach in schools. So knowledge of how to actually play games and sports, not just to teach them but to play them, has actually begun to disappear.

Another expert provided an analogy, saying that the difficulty is getting

Mainstream academic disciplinarians to not just understand, but also accept the fact that having knowledge about the internal combustion engine from physics, does not prepare you to replace spark plugs, or tune an engine... that action-oriented knowledge, rigorous and theoretical, is absolutely needed for people who want to work with people.

'The Information Explosion'. Two of the experts frequently referred to "the information explosion" or the "the knowledge explosion". This phenomenon was commonly discussed as an important influence on many of the issues in the academic discipline. For example, one expert cited the knowledge explosion as a financial challenge for academic appointments within academic units, as "all but the most well-to-do units are going to find that they simply can't afford to be encyclopedic in the way that they once were". The knowledge explosion was also cited as a challenge for curricula in this academic discipline, as one expert was concerned about the time frame, stating that "it's going to be impossible to teach everything in whatever sort of period", and another

expert was concerned about the quality of physical education in small universities, stating that "I really don't understand how two or three people can teach all of the courses, it defies logic, in the era of the information explosion".

A focus on differences rather than similarities. Two experts repeatedly mentioned that members of the academic discipline oriented themselves around their differences. One expert indicated that there is "no focus on what we have in common. It's more a focus on how are we so different", echoed by a second expert who indicated "we spend our whole time talking about why we're different. Why we're better than everybody else". Both experts disagreed with this orientation, and instead recommended just the opposite, that members of the field "talk about what it is that makes us the same or similar". One expert referred to this alternative orientation as identifying "the touchstone" or "what it is that brings us together, what's the glue, touchstone… what do we share rather than what do we not share".

Interdisciplinary scholarship. All five of the experts repeatedly mentioned the notion of interdisciplinary scholarship. One expert explained the present reality of interdisciplinary scholarship, stating that

Most of the needs, or problems, or goals that we want to address, the aspirations we want to help people achieve, the opportunities on which we wish to capitalize, are no longer the province, in most cases, of any one field... interdisciplinarity is the new wave of the future.

The experts also spoke about the effect of interdisciplinary scholarship on the academic discipline of physical education/kinesiology, stating

What we see happening is more research now being done by medical doctors [in] what was considered to be our domain, physical activity, [and] more and more people emerging as scholars in what we consider our academic discipline who are not primarily kinesiologists.

A second expert explained that "what [interdisciplinary scholarship is] doing is taking exercise physiology out of the realm of what we do and put it in the biology department", which he concluded will mean "we are going to lose degrees, they are going to be put somewhere else". A third expert indicated that "new components will enter the academic discipline", which an additional expert explained means that "we probably will have a different shape than we have at the moment".

Inappropriate frames of reference. All five of the experts expressed that some of the frames of referenced used in the academic discipline are inappropriate for a variety of reasons. The frames of reference in question include: the profession *versus* discipline concept, a single disciplinary core for multiple professions, and the sub-disciplinary organizational framework. First, in regards to the profession versus discipline frame of reference, three experts expressed displeasure with this frame of reference. One expert explained his view, stating:

In the early days of the academic field establishing itself in universities, people... used the wrong analogy. They wanted to see themselves as a science, like physiology, or botany, or chemistry... I think it was the wrong way to go. They should have been talking about medicine, engineering, law, as the models for their field... I've never heard anybody say medicine is not a tough subject academically, or law isn't a tough subject academically, or becoming a dentist is

an easy thing to do. So why on earth would we say that about the professional applications of kinesiology? ... We're no different from engineering [and] architecture; these are all recognizable professions, and well-paid professions for that matter. Why wouldn't you want to model yourself on some of these? ... We've gone down the wrong track in terms of analogies, we tended to think of ourselves as a science-based, or biological sciences-based, or even a health-based field; when in fact, I think the analogies that are more appropriate are things like medicine, law, engineering. Nobody fusses about the academic status of any of those fields, you know, they are all jobs, they are all practical applications, and I think that's a much better way of thinking about it, rather than discipline versus profession. Clearly engineering is both, clearly medicine is both, clearly law is both.

A second expert offered an alternative frame of reference for the profession versus discipline dynamic; he advocated "common goals but different roles". He explained further that

Everybody in our programs don't have to do the same thing, and that's one of the problems in higher education, is we expect everybody to do the same thing, and then we get the 'grandest tiger in the jungle' phenomenon, where people say my sub-discipline is better than yours, or what I do is more important than yours, and it's counter-productive.

A third expert offered his alternative frame of reference which was based upon "different kinds of knowledge workers"; he explained "you can use the profession-discipline relationship", or you can simply say,

Look, we're all in the same field but do different kinds of knowledge work, yet we're really related fundamentally in the sense that knowledge needs to flow from the bench to the trench, and also from the trench back to the bench... we need to figure out who will do what in that system of knowledge.

Second, in regards to a single disciplinary core for multiple professions, two experts expressed the inappropriateness of this frame of reference. One expert explained that, "as long as we're talking about one discipline and one profession, I wouldn't change a thing". However, he explained that "in the last twenty to thirty years, these other professions have emerged" and he argued that "there is a problem with identifying one common core for all of the different professions". He explained

What was once trying to find a common core for physical education, and then gradually became you take a core and then you choose a specialized profession, that model doesn't work anymore because there's so many different professions, each with their own goals, each with their own specific professional requirements, that one core doesn't work, or one disciplinary area of study doesn't work for all of them, thus some of the tension.

He offered the conclusion that "professions have different duties and different goals, what's good for one is not necessarily best for the other". A second expert reinforced this view and explains that this frame of reference, with "everyone all mixed up in the same" program, "is like mixing oil and water".

Third, in regards to the sub-disciplinary organizational framework, two experts indicated this frame of reference to be inappropriate. While one expert expressed that

"There is growing unease with the sub-disciplinary structure", a second expert more specifically explained that

The idea of a sub-discipline is an industrial-age, 20th century idea... it so splinters knowledge, and so splinters a department. My gosh it splinters faculty relations... Some might argue that the sub-disciplinary frameworks are... like the human appendix, that they're residual, they came out of the previous century and we can wonder how well they're going to serve us, especially given the growing number of colleagues that do both basic and applied work.

This expert explained further that "a sub-disciplinary structure is in part a reflection of place-bound identities and place-bound structures", yet "in this day in age, with Skype and the internet, and all the other technologies, there is no reason for our work to be place-bound in the way that it currently has been". One expert described the reaction of some members of the academic discipline to this frame of reference, explaining, "There seems to be a search for some alternative organizational framework". Another expert made a recommendation that "we are going to need flexible arrangements, whereby the nature of the problem we're trying to research and solve is going to be a much better determiner of how faculty organize themselves and how the discipline is configured". He argued the members of the academic discipline should "break out of the mold and begin to look at the divides, particularly between the [sub-disciplines]... and [how the divides] can be bridged".

Change. The notion of change was a recurring pattern discussed by three experts.

More specifically, these experts discussed the notion of constant change within higher education, as well as the impact of change within the academic discipline of physical

education/kinesiology. First, one expert explained that the higher education "environment is fast changing", and that there are constantly "new expectations that are brought to bear on higher education". Two experts made a point to explain that this constant change is a desirable thing, and that in fact "there *should* be constant changing and shifting in higher education". However, one expert noted that if this change is not managed well, it can have a negative impact on the academic discipline. He explained that "you can have this ongoing moving sort of thing happening in the field more generally, but the undergraduate program doesn't need to be changing that rapidly". He illustrated that

The degree program I did in the 70s, there's no real relation to the title degree programs now, there will be no relation to the title degree programs in fifteen years. That's not a good situation to be in I don't think. It does suggest a level of instability that is not very reassuring for university administrators... having been at administrative posts myself... you're not looking for things to be ossified, but nonetheless, you want there to be some level of consensus, or incremental change happening to programs.

Endemic conflict. Two experts repeatedly discussed that some issues in the academic discipline were endemic and normative, rather than unusual. One expert explained, "I don't know of any complex field... that doesn't have some endemic conflict". The experts identified conflicts such as curricula, names, focus, and fragmentation, as examples of endemic conflicts. One expert added that "the assumption that kinesiology, or physical education by whatever name, is abnormal with regard to those concerns and conflicts, is a flawed assumption, because it seems that those conflicts are endemic in every field".

Doctoral preparation. Three experts repeatedly discussed doctoral preparation. More specifically, the experts all favoured the doctoral preparation of the past, and were critical of current doctoral preparation as being too specialized, disconnected from the field at large, and lacking important education on relevant issues within higher education. First, in regards to specialization, one expert was critical of the fact that current doctoral education expects students to become experts that "specialize to the point that you know more and more about the same thing". Second, in regards to doctoral program graduates being disconnected from the field at large, one expert explained that

Earlier, people who got doctoral degrees in physical education were concerned about what's going on in the field... now what's happening is that the people who are getting these kinesiology degrees, all they want to do is get jobs in universities, and get research grants, and get promotion, and get money, and go to conferences, they're not worried about what's happening out in the schools and in the profession.

Third, one expert argued that today's doctoral students are not being educated to deal effectively with the issues inherent in higher education, and particularly within the academic discipline of physical education / kinesiology, and suggests that

The desirable [scenario] is that people are prepared the way they once were, with the American Carnegie foundation studies of the doctorate. That we prepare people to be stewards of the field, stewards of the discipline... that the [issues of the field]... are dealt with routinely at every level of preparation, but especially during doctoral programs, so that faculty get preparation for them, and then move into a workplace where these issues are vibrant questions, but that's not

happening... faculty should be prepared to help students to come to grips with, even as they come to grips with them themselves.

Ideology. Three experts repeatedly mentioned the notion of ideology. More specifically, these experts were critical of ideologically committed members of the academic discipline and referred to this as problematic. One expert described that "this religiosity with regard to a particular kind of physical education program, a particular kind of teacher education program, is inescapable, and it is very, very dangerous. In this time and context it's become really quite counterproductive". This is reinforced by a second expert who explains, "there's too many turf issues, too many people who have their own ideology, and I don't think that they necessarily always keep the best interest of the students in mind". And lastly, a third expert stated that

At the end of the day... people have got to be able to step outside their own sectional interest and see the bigger picture, and that's the biggest problem we've got with the field I think, we have too many people who can't.

Cross-Question Patterns Pertaining to The Entire Field

Popular physical culture. Two experts repeatedly referred to popular physical culture, and suggest that it has been a complicating factor for physical education. One expert suggested that the "massive... social, cultural, economic relevance" of "sport, exercise and leisure", or "popular physical culture", has "raised expectations for what physical education teachers, sport coaches, youth leaders can actually deliver". Another expert suggested that "crazy over-emphasized commercialized sport", and government spending on sport, causes a "struggle" for physical education, as in the meanwhile "90% of children and youth are not getting quality programs".

Concern for public opinion. Three experts repeatedly referenced the public, and more specifically concern about public opinion. One expert indicated that the "one of the biggest relevant issues is an appreciation and value of what physical education is to the general public". The same expert voiced concern as to how the curriculum "communicates to the external audience who we are". A second expert indicated that "public recognition of terminology is really important", while a third expert pleaded, "if we can just get the public into the picture".

Leadership. Three experts repeatedly spoke about leadership. The experts explained they were looking for leadership in this field, and that they were not seeing it. The experts indicated "that it all comes down to leadership" and they were looking for leadership in terms of high quality university administrators, scholarly organization executives (i.e. NAK), as well as leading authors in the literature. More specifically, the experts indicated the need for leadership in order to better deal with issues regarding the focus of the academic discipline and the curricula of undergraduate degree programs. One expert offered a specific critique of the leadership in the field at present, explaining leaders in the field need to

Become less ideologically committed, in almost religious-like ways, to pet programs and practice that may have little empirical or theoretical grounding. And that merely safeguard a future in which what you see today is what you're going to get tomorrow.

He added, "We don't do leadership development in ways that other disciplines do, and that the field so desperately needs".

Terminology. The experts repeatedly discussed terminology, specifically the terms kinesiology, physical education, and physical activity education. In regards to the term kinesiology, two experts took issue with the term itself. One expert indicated that kinesiology appears

Manufactured... unless you were a Latin scholar and you understood the roots...

That's the danger of kinesiology, unless you can really get a big PR campaign to get into the general public sort of understanding, it doesn't connect with anything people know about.

Another expert held a similar view, "if you start with the idea of kinesiology being the study of human movement, that can be so expansive, it can include virtually everything under the sun". Furthermore, two experts took issue, not with the term itself, but with the implications of the term. More specifically, the idea that kinesiology was a term intended to "fool" people was repeated. One expert suggested the term was intended to "fool" research-granting bodies in order to emphasize science, and to "fool" the public since they do not understand the term. Another expert echoed this idea by indicating that the term kinesiology could be considered a "wolf in sheep's clothing". He argued that those who advocate kinesiology suggest the term could embrace the profession of physical education, however, the fear is that once the name is changed the promise of inclusion will not honored, and that physical education will be met with the response of: "where does it say physical education in here?"

In regards to the term physical education, two experts repeatedly mentioned the need to "get rid" of the term physical education. They argue that there is "no such thing" as physical education. For example, one expert gave an analogous example of

mathematics education, which refers to the teaching of mathematics but could stand on its own as mathematics; however, physical education, he argued, "what's the physical without education?" The word physical on its own does not indicate the subject matter. Another expert indicated that "there is no physical education, there is education through the medium of the physical". These two experts suggested the term physical activity education as a replacement for physical education, as it is physical activity that they considered to be "the most important objective" of the profession, and which can stand alone, as mathematics does.

Lack of understanding, misunderstandings, and confusion. Three experts repeatedly spoke about lack of understanding, misunderstandings, and confusion. First, in regards to lack of understanding, one expert indicated, "People don't know what the hell kinesiology is! It's that simple! It confuses everybody else on the campus... and sort of confounds everybody a little bit". This was echoed by a second expert who is "continually amazed" by prospective kinesiology students who say to him "Yeah, I wanna do this [Kinesiology], but what is it?"

Second, in regards to misunderstandings, one expert expressed his frustration with those who mistake physical activity and physical education, as well as those who mistake current undergraduate degrees in this academic discipline as professional study rather than disciplinary study. Another expert similarly stated that "there is great misunderstanding as to what kinesiology or physical education is today".

Third, in regards to confusion, one expert referred to external audiences' "confusion about what we do" or "what we're all about", and attributes some of this

confusion to such things as variety and conflict over academic unit location, names, and organizational framework.

Separation and disconnect. All five of the experts repeatedly mentioned a separation of the components of the academic discipline. More specifically, experts mentioned a disconnect between: members of the academic discipline and members of the profession of physical education in the field; the natural sciences and social sciences/humanities sub-disciplines; as well as a physical separation of some sub-disciplines and degree programs to parent and/or cognate academic disciplines, particularly that of physical education and sport management to Education and Business, respectively. The experts offered some potential reasons for the disconnect and separation, including such things as: lack of agreement, lack of focus, and also purposeful distancing of one group from another, either implicit and explicit.

Respect. All five of the experts repeatedly referenced the notion of respect. More specifically, the experts discussed the lack of respect for both school physical education and higher education physical education, barriers to respect, as well as hopes for respect in the future.

First, the notion that school physical education, and its higher education counterpart, are not well respected was discussed repeatedly. In regards to school physical education, one expert explained that "we've got all this science that tells us about the health benefits of physical activity, and the best way for delivering it is physical education, but we've got people who, umm, kind of discount the importance of physical education". A second expert added that there is a "lack of appreciation and value for what physical educators do", while a third expert simply stated, "physical education means, or

is, something lower in the education system... which is why physical education is not required in our public schools".

A similar situation exists in higher education. One expert explained "physical education has been marginalized a lot by kinesiologists who want to distance themselves from it". A second expert added that "physical education is hanging in there in schools of education, and the sad fact about that is that the schools of education are low-man-on-thetotem pole... they are the least highly regarded academic unit on campus". One expert provided the example of NAK, and states, "the focus of the academy (NAK) is much different now than it was then, it's much more about kinesiology, and physical education is often an after-thought".

Interestingly, two experts suggested that the problem with respect for physical education is that it is the people *within*, not outside, the field of physical education/kinesiology who do not value physical education. One expert explained that issues regarding respect are "an inside/outside thing. When you ask who it is that is not well-regarding the professional aspects, you find it is people inside the field rather than people outside the field". A second expert explained in further detail

Many of [the people outside the field] will be more favorable to physical education than people who came from our field. The reason is that our people have an inferiority complex, and they want to separate themselves from physical education, whereas the people from medicine and so forth, are just trying to figure out ways that we can help improve public health through physical activity and see schools as a medium where that can be done.

Second, in regards to barriers to respect, the experts identified a variety of barriers to respect for both school and higher education physical education. In regards to school physical education, one expert argued the field itself is at fault; he explained,

Our field is finding it difficult to make itself culturally relevant. I mean it suggests to me complete ineptness. I mean how can we possibly shoot ourselves in the foot to the extent that we can't articulate why it is that we are important?

Another expert argued that the preparation of physical educators is to blame, and that we need to "really teach them how to analyze movement, then maybe the physical education people would get more respect because they know what they're talking about". In regards to higher education physical education, one expert argued that because people in "universities are worried about tenure" they want to distance themselves from physical education. Another expert pegged the name conflict as a barrier, arguing that when "you've got 200 names describing what your field is out there, you're not going to get much respect".

Third, in regards to hopes for respect in the future, two experts spoke positively about the likelihood of more respect for physical education in the future. One expert explained, "I think the worm is turning a little bit, we're getting back to where people value physical education". A second expert added, "I'm optimistic... I think, down the road, physical education is truly going to be valued for what it can do to promote a healthy society".

Health. The topic of health was a recurring pattern discussed by all five of the experts. More specifically, health was discussed in regards to the focus of the physical education profession, as a justification or defense used by the field, in regards to nutrition

and obesity, and as an influence to the field. First, in regards to the focus of the physical education profession, one expert argued that physical education should operate within a "public health model; using physical education to promote public health". Second, in regards to health being used as a justification or defense by the field, one expert explained that when articulating the importance of the field, members seem to "go down one track, and one track only", that being "the health side of things". Third, nutrition and obesity were two health subtopics frequently used as examples by the experts, including such things as the impact of obesity in society on the field, as well as the importance of, and increasing partnership between, nutrition and physical education/kinesiology. Fourth, health was discussed as influential to the physical education/kinesiology field in a variety of ways. In regards to the profession of physical education teaching, one expert explained that the declining health of youth would bring "drastic changes that will be very positive for physical education". In regards to the academic discipline, one expert explained that this discipline is "becoming a place where [students] can get a major so they can apply to allied heath related programs", which has meant considerable "growth" in enrolment to the undergraduate programs, and which another expert added, has been a "goldmine" that is "here to stay".

Cross-Question Patterns: General

History. Three experts repeatedly mentioned history, specifically referencing historical events and patterns, as well as emphasizing the importance of acknowledging history when considering the future. First, in regards to the referencing of historical events, two experts repeatedly made mention of the 'Space Race', and in particular the 1957 Russian launch of Sputnik, and the following emphasis on science in the education

system. In regards to the reference of historical patterns, one expert indicated that change has been crisis-related in this field, stating "historically... when drastic change took place...there was some things that got really bad... that's when people institute policies. Once something gets so bad, people will do something about it... I think it just has to get bad enough". Another expert indicated that universities follow in the footsteps of their beginnings, stating, "Different universities... are greatly influenced by the history of their program. [Whether] they came out of a teacher education history, or whether they came out of a more scientific research history". Lastly, another expert pointed to the general historical pattern of constant change, stating, "if you look at history, things have always been in motion, nothing stays the same for very long".

Second, in regards to acknowledging the importance of history when considering the future, one expert explained that "history is important... if you don't know where you've been, how do you know where you're going?" Thus, this expert indicated that history should be fundamental part of the disciplinary core. Another expert seconded this view and explained that it is important to do historical work because "inevitably in historical work... you find yourself speculating about, or in some ways considering issues that deal with future", and furthermore through historical work one is able to "see the relationships forming between past, present and future".

Hope and skepticism. All five of the experts repeatedly offered statements of hope for the future of higher education physical education, although four experts quickly indicated that they were "skeptical" that these hopeful futures would be realized. For example, one expert indicated he was "hopeful" that doctoral preparation would instill graduates with "some concern about stewardship of the field" but indicated, "I don't see

any indication that will be the case". A second expert indicated he would "like to see us become the renaissance field of the 21st century", but indicated he was "skeptical that we will". A third expert explained he was hopeful that the field would "get beyond all of the fine-grained distinctions and all of the crazy debates that have occurred", but rescinded that this was likely a "starry-eyed view". Lastly, a fourth expert hoped that we would have consensus over terminology, but again, is "skeptical" that it will happen.

Irresolvable tensions. Two experts repeatedly mentioned the notion of some tensions within the field being irresolvable. More specifically, the two experts identified the name conflict as an irresolvable tension. One expert stated, "Unless you invent a term like kinesiology, you're going to be stuck with these long lists of things... we're not going to solve the problem... some people will always be unhappy with whatever comes up". An expert also identified the location conflict as an irresolvable tension, explaining that because physical education/kinesiology

Is a multidisciplinary field, it doesn't matter where you're going to be [located] as an organizational unit... [if you're located in] social sciences, the biophysical people feel alienated, [if you're located in] biophysical sciences, the social sciences people feel alienated.

Experience as an administrator. All five experts repeatedly referenced their experience in administrative roles (i.e. in the form of examples, narratives, etc.). The experts often referred to their administrative roles in the universities (i.e. Dean of a Faculty) as well as their leadership roles in scholarly organizations (i.e. President of NAK) when discussing projections for the future of the location conflict, the name conflict, and the profession versus discipline dynamic. The experts referred to these

administrative experiences positively, and as being beneficial experiences. For example, one expert indicated that as a department head "once you have responsibilities for the whole [you] recognize the whole that is a department... is greater than the sum of its parts, it profoundly influences how you look at each part and also their relationships".

More of the same. All five of the experts repeatedly conveyed a "more of the same" expectation for the future of higher education physical education in general, as well as in regards to: the focus of the academic discipline, the location of the academic units, the name of the academic discipline, the organizational framework of the academic discipline, as well as the profession versus discipline dynamic. For example, one expert stated, "I think the future holds a lot of the same", this is echoed by a second expert who added, "You'd have to say more of the same. Unless universities themselves have radical sort of revolutionary change, it's hard to see anything else".

Layer 3 Making the Hidden Obvious

Layer 3.1 Holistic and Interpretive Analysis Results

In order to 'make the hidden obvious' the following analysis set out to illuminate the unarticulated and hidden thought that may have driven the experts' explicit and obvious statements described in layer 1 and 2. This analysis involved repetitive examinations of the entire verbatim transcripts, as well as of relevant literature, to inform the researcher's interpretation (Patton, 2002).

A review of the transcripts revealed that much of the experts' comments about the future centered on the notion of change; specifically regarding era's gone by, and new times having arrived. Moreover, when the experts were discussing change, they focused their comments on critiquing the members of the academic discipline that they deemed to

be unaware or inflexible to these changes, and who instead, continue to use and advocate for outdated frameworks. Subsequently, a review of Chapter 4's Review of Literature revealed that many of the comments made by the experts' in this research were reflective of the literature on the modern-to-postmodern era transition, and particularly the challenges faced by this academic discipline to align itself with those new times (Fernandez-Balboa, 1997; Massengale, 2000; Tinning, 2004). A Block and Estes (2011) quote in particular was strikingly similar to the comments of the experts in this research. Block and Estes (2011) state, "Those scholars who are able to ... keep abreast of the changing phenomena of super-complexity will be successful... Those scholars who are insistent on a modernist mindset and who are inflexible will not" (p. 189). It appeared that the comments made by the experts' in this research were aligned with the views that many postmodernist scholars in this academic discipline hold on the conflicts and future of the academic discipline. This analysis led the researcher to the inference that many of the experts' explicit statements might be reflective of unarticulated postmodern thought.

As previously mentioned, it is considered that the modern era has ended and a new postmodern era has begun. This postmodern era is characterized by the widespread questioning, critique, and rejection of modern assumptions, including, but not limited to: objective truth, grand narratives, efforts to control nature, rational logic, and linearity (Fernandez-Balboa, 1997).

Although it is difficult to convey unarticulated and hidden thought in this document, the following examples attempt to provide evidence of what the researcher considers implicit postmodern thought weaved throughout the experts' comments.

First, the postmodern tendency to reject grand narratives was implicitly evidenced in one expert's dismissal of a common name and ideal academic unit location for the discipline. In regards to a common name, this expert makes the postmodern argument that he rejects the notion of a universal name for the academic discipline being possible, and furthermore argued that a common name "may not even be desirable". In regards to an ideal academic unit location for the discipline, this expert described that even "the assumption that there is an ideal home... is one that [he] would take issue with". Further evidence of the rejection of modern grand narratives can be seen when all five experts continuously referred to the importance of particularity, and more specifically the fact that the academic discipline does, and should, differ depending upon a university's size and type.

Second, the postmodern tendency to question and critique the notion of control was implicitly evidenced by three of the experts in this research. For example, one expert exhibits postmodern thought as he described that the focus of the academic discipline is a result of "unseen forces and factors... that are well beyond our influence and control". While another expert expressed his surprise and disbelief that many members of the academic discipline believe that they "might exert some degree of control over" the focus. Further contrast to the modern notion of control can be seen in two experts' description of their acceptance of the common occurrence of irresolvable tensions, and another two experts' reference to conflicts in academic fields as endemic and normative.

Third, the postmodern tendency to critique the reliance on rational logic was implicitly evidenced by three experts in this research. For example, one expert demonstrates postmodern thought through his disdain for those who are "ideologically-

wedded" and operate in "almost religious-like-ways" within the academic discipline. He offered a poignant example by referencing the sub-disciplinary structure, which he described to be an example of a "residual" structure that "came out of the previous century". He continued, "we can wonder how well this [sub-disciplinary structure] will serve us" when dealing with the non-linear and "wicked" postmodern problems of today, which instead require "flexible arrangements and interdisciplinarity, whereby the nature of the problem we are trying to solve is going to be a much better determiner of how faculty organize themselves, than ideology". Another expert similarly critiqued the members of the academic discipline who rely on a "this-is-how-we-do-things-around-here" logic, he argued that whatever 'this' is, "it may not always be the best... and these are the colleagues that do not see big changes coming". Further contrast to the modern reliance on rational logic can be seen in these two experts' recommendation that members of the academic discipline should analyze present conditions and then be willing to adapt as necessary.

In sum, it may be inferred that some of the experts' projections for the future are reflective of postmodern thought, as evidenced through their understanding of the current postmodern climate, their critique of modern thinkers and competing modern structures within the academic discipline, as well as their recommendations for a postmodern transformation.

Concluding Statements

Conclusions of Findings

Layer 1. Quantitative descriptive statistics of the experts' projections revealed some of the primary findings of the Delphi projections. First, the experts' discussion of

future projections increased in convergence from round one to two considerably, implicating the utility of the Delphi method. Second, the experts discussed the probable future much more than the preferable future, typifying a sample of pragmatic academics. Third, the probable future was a more polarizing topic among experts, while the preferable future was a less rousing topic, exemplifying the homogenous quality of the sample as all physical educators. Lastly, the number of experts in agreement on future projections was often only two of five experts, which was likely a result of the broad research design and conducting only two rounds of the Delphi.

Qualitative within-question content analysis revealed some of the primary findings of the Delphi projections and the interview questions. First, in the probable future the experts projected a continuation of the conflicts in the academic discipline, with differences at universities of varying sizes and types. Second, in the preferable future the experts hope to see compromises made between members of the academic discipline that improve functionality and adjust for a university's particular size and type, so as to minimize the impact of the conflicts. Third, in the undesirable future the experts projected that the conflicts within the academic discipline would continue and result in inconsistency, confusion, lack of identity, lack of cooperation and ultimately fragmentation of the academic discipline. Fourth, the most relevant issues influencing the future of higher education physical education include leadership, the recruitment and desirable preparation of future physical education teachers and disciplinarians, as well as the appreciation of physical education as relevant and valuable by those by those internal and external to the field. Fifth, that the experts' advise the members of the entire field to be more be proactive in regards to the future, by analyzing the present, and then making

adjustments as necessary. Last, the experts' final and overall projection about the future of higher education physical education was considerably more skeptical than optimistic.

Layer 2. Qualitative cross-question content analysis challenged the primary findings found in layer 1 to reveal the following. First, the experts projected the probable future to be considerably more undesirable than desirable. Second, the majority of the experts' projections appear to be novel and not reflective or previous literature, although it can be argued that this is likely a function of the irregular publication of literature on this topic. Third, it is unclear if the experts' projections were a function of their geographical context; however, the experts' experience as administrators, as well as their experience at universities of different sizes and types, appeared to be influential to their projections of the future.

Layer 3. A holistic and interpretive content analysis revealed that many of the experts' responses were implicitly grounded in postmodern thought. This was reflected in the experts' critique of the maintenance modern frameworks within the academic discipline despite the incompatibility of those frameworks within the current postmodern context.

Limitations of this Research

It is important to acknowledge the limitations of this research in order to better understand the results, and their significance.

First, a closer examination of Polak's (1973) concepts of influence-optimism and influence-pessimism, can illuminate one of the limitations of this research. More specifically, Polak (1973) indicates that there are different modes of imagining the future; influence-optimism, which involves the consideration of how people can influence the

future to achieve desirable futures; and influence-pessimism that does not consider this, and is perhaps resigned to the notion that people cannot influence the outcome of the future. While this research was carefully designed within an optimistic constructivist framework, upon reflection, it may unintentionally have more undertones of influence-pessimism than influence-optimism. For example, while the experts were asked to project preferable futures, the design was still framed by the conflicts of the academic discipline. Furthermore, there were no influence-optimism questions specifically asking experts what individuals could actually *do* to influence the achievement of a preferable future; save perhaps, for the interview question which asked experts to provide advice to field for the future.

Second, the protocol of this research study was somewhat repetitive and resultantly produced more data than necessary; thus, this may be considered a limitation of this study. Upon closer examination, the protocol could likely have been streamlined to achieve the same results. More specifically, asking the experts to project possible futures could be considered a limitation that caused repetition. The intention of asking experts to project possible futures (before indicating probable, preferable, and undesirable futures) was done as a brainstorming exercise to promote the experts' consideration of the entire spectrum of possibilities, and to avoid getting a response reflective of whatever was first at mind at the time. However, upon completion of the study it is clear that experts are considered to be experts for good reason, they are very intelligent academics and do not need to engage in such a brainstorming exercise to be able to acknowledge the range of possibilities. Therefore, the time spent asking for possible futures could have been used more wisely. Moreover, because of this large and repetitious data set, the executive

summary was simplified to include only probable and preferable futures in the round two interviews. Upon completion of the study, the removal of the undesirable projections appeared to produce a somewhat inconsistent product in terms of results, which could have been avoided through its inclusion.

Third, the age of the experts in this sample may be considered a limitation of the research. As previously mentioned, the experts in this sample are either in the senior years of their academic career or are retired. Chronologically, this means that these experts were born, educated, and employed before, or during, the profession-to-discipline transition and the modern-to-postmodern transition, and moreover, are among of the last of their generation to still be active in the field. As previously stated, these two transitions have proven to be very significant within the academic discipline of physical education/kinesiology and thus impacted the perspective of its members. This impact has likely manifested itself very differently among those who experienced the transitions first-hand (read: the more senior experts in this sample) and those who may have never heard of it (read: some younger faculty members). Therefore, the fact that this sample consists entirely of those who have lived through these profoundly transformative experiences, of which the majority of the field's members have not, introduces a bias that may not resonate with younger members. This can be considered a limitation as it is the younger members of the field who are the decision-makers, administrators and leaders of the future (read: the target audience of this research).

Finally, the exclusively male sample of experts may be considered a limitation of this research. The selection of experts for this research indirectly and inadvertently precluded females. This was because in order to be an accomplished expert in this area,

you are likely to be advanced in age, and the present cohort of elder academics is predominately male due to the societal gender roles that were in place at the time this cohort was selecting their career paths. However, the times have changed, and many females are now highly successful in academia. Therefore, this all-male sample may not be representative of, or resonate with, the female members of the field.

Future Research Directions

The following research directions could extend the findings of this research and offer valuable insights.

First, a valuable future research direction would be to extend the present study and conduct a third round of Delphi interviews. More specifically, in this third round, experts could have the opportunity to comment on the final executive summary which resulted from the round two interviews, as well as be asked to indicate practical steps needed to achieve the desirable futures projected. As is indicated in Delphi literature, conducting additional Delphi rounds often leads to greater consensus (Linstone & Turoff, 1975). While consensus was not the purpose of this research, it is a valuable pursuit, as the results can then be used to lobby for a particular cause with expert consensus, giving the advocates cause more clout. Also, by asking the experts to explicitly suggest practical steps that could be taken to achieve desirable futures, the results may be more easily accessible and transferrable to the reader's situation.

Second, another valuable future research direction would be to acknowledge the differences of university size, type, and geography within the academic community, and perhaps even limit the scope of the research and/or the participant sample to reflect a specific subset of the academic discipline. More specifically, one of the results of this

research indicated that in the 'new times' of higher education, universities and their physical education/kinesiology academic units, are no longer comprehensive and homogeneous, and instead are heterogeneous, and differ both purposefully, and out of necessity, based on their size, type, and location. The present research chose to focus on the academic discipline as a whole and therefore recruited a broad geographical sample without considering the experts' experience in universities of a particular size and type. This broad design was intended to produce findings that could be consumed generally by many in the English-speaking academic community, regardless of the nature and location of the university; however, a more focused study would likely be consumed by smaller group, but may have more impact to that group as the results may be more easily transferable.

Third, another valuable future research direction would be to conduct a study on the future of higher education physical education framed in appreciative inquiry.

Appreciative inquiry is "an alternative approach to examining the current contextual setting with the primary emphasis away from 'What problems are you having?' and toward 'What is working around here?'" (Fiorentino, 2012, p. 209). As previously mentioned, this study's focus on the problems (i.e. *conflicts*) of the academic discipline proved to be a limitation as it translated to undertones of influence-pessimism; whereas a study framed in appreciative inquiry would likely reflect influence-optimism.

Furthermore, as Fiorentino (2012) explains, there has been a plethora of literature focusing on the problems of the academic discipline, yet very little focusing on its strengths. Thus, this future research direction would be innovative and fill a gap in the literature. Lastly, taking an appreciative inquiry approach appears to be a more practical

exercise than the present research as "the reorientation towards 'finding the positive' suggests that we not look for *interventions* to 'solve a problem' but look to *innovations* to create a better future design" (Fiorentino, 2012, p. 222).

A final valuable future research direction would be to conduct a similar study with a more heterogeneous sample. As discussed previously, the homogeneous sample in the present research included experts who were each advanced in age and are male. However, this may not resonate with the future leaders of the academic discipline who are *young* males *and* females. Therefore, conducting a Delphi investigation facilitating a discussion between more elder experts *as well as* early-career faculty members and doctoral students, of both the male and female sex, would offer more comprehensive and pragmatic insights about the future of the discipline.

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APPENDIX A

Letter of Invitation

May 7 th , 2012	
Dear Dr	

I, Jenna Lorusso (Principal Student Investigator) from the Faculty of Applied Health Sciences, Brock University, Ontario, Canada, would like to invite you to be an expert participant in my graduate degree research study entitled "The Future of Physical Education in Higher Education".

The purpose of this study is to investigate what five selected experts within higher education physical education, including yourself, consider the future of this academic discipline to be. More specifically, this research aims to investigate what the possible, probable, preferable, and undesirable futures of this academic discipline's core issue (lack of unified focus) and secondary issues in both the physical education degree program (curriculum conflict and location conflict) and the research sub-disciplines (name conflict, organizational framework conflict, and profession versus discipline conflict) to be.

I consider my knowledge of higher education physical education's issues and futures to be significantly furthered from reading your insightful publications on these topics, and feel that this research study would benefit greatly from your expert involvement.

This research utilizes a two-round interview-Delphi method. Should you choose to participate, you will be asked to participate in a first round in-depth one-on-one telephone interview during the week of May 21-25. In this interview, I will ask you to project 15 years into the future the possible, probable, preferable, and undesirable futures of the core and secondary issues within the academic discipline. After the first round of interviews, the data will be analyzed and you will be provided with feedback of the group's anonymous future projection results. You will be asked to participate once again for a second round interview during the week of June 4-8. In this interview I will ask you to provide commentary on the resulting future projections of the group.

Please note that if these dates are not amenable to your schedule, yet you would still like to participate, I will make every effort to accommodate your schedule, as I believe your participation is extremely valuable.

Attached to this email is a copy of the informed consent form, a brief summary of the topics to be discussed in the interview, the round one interview guide, as well as a notes page. These materials are provided for your optional review and were designed with the intention to ease your participation in the interview process.

The expected duration of your participation is estimated to be two hours in total, as each of the two interviews is expected to last a maximum of one hour.

As I am well aware of your busy schedule and responsibilities, this research has been designed with the intention to take up as little of your time as possible.

In terms of the potential benefits resulting from your participation in this research, this study is constructed on the belief that engaging physical education experts, such as yourself, in the process of studying alternative futures, ensures that the future of physical education will not be predestined, but instead could be desirably created. Furthermore, as you well know, the study of the future is seldom done in physical education, leaving a gap in the literature. This research will contribute to filling this gap through the much-needed perspective of a systematically derived and expert-consulted approach.

If you have any pertinent questions about your rights as a research participant, please contact the Brock University Research Ethics Officer (905 688-5550 ext 3035, reb@brocku.ca)

If you would like to participate, or have any questions, comments, or concerns, please feel free to contact me (see below for contact information).

Thank you,

Jenna Lorusso B.PhEd-B.Ed., M.A. Candidate Faculty of Applied Health Sciences, Brock University Principal Student Investigator jenna.lorusso@brocku.ca 905-688-5550 ext. 4481

Dr. Nancy Francis Ed.D
Department of Kinesiology, Brock University
Professor
Faculty Supervisor
nancy.francis@brocku.ca
905-688-5550 ext. 4366

This study has been reviewed and received ethics clearance through Brock University's Research Ethics Board [File# 11-246].

This research is funded by the Social Sciences and Humanities Research Council of Canada.

APPENDIX B

Informed Consent

Date: May 7th, 2012

Project Title: The Future of Physical Education in Higher Education

Principal Student Investigator: Jenna Lorusso Faculty of Applied Health Sciences, Brock University jenna.lorusso@brocku.ca 905-688-5550 ext. 4481

Faculty Supervisor: Dr. Nancy Francis Ed.D Department of Kinesiology, Brock University nancy.francis@brocku.ca
905-688-5550 ext. 4366

Invitation

Dear Dr. _____, I would like to invite you to participate in my graduate research study. The purpose of this study is to investigate what experts within higher education physical education consider the future of this academic discipline to be.

What's Involved

As a participant, you will be asked to participate in two one-on-one telephone interviews, which will be audio-recorded. Participation in these interviews will take approximately one hour each, and will be held approximately two weeks apart.

Potential Benefits and Risks

There are a variety of potential benefits that may result from your participation in this research, including for yourself, higher education physical education, and the academic community. For instance, this research is based in the belief that engaging physical education experts in the process of studying alternative futures ensures that the future of physical education will not be predestined, but instead could be desirably created. Furthermore, the study of the future is seldom done in physical education, leaving a gap in the literature. This research will contribute to filling this gap through the much-needed perspective of a systematically derived and expert-consulted approach. There are no known or anticipated risks associated with participation in this study.

Confidentiality

All information you provide is considered confidential; your name will not be included or, in any other way, associated with the data collected in the study. Please note that with your permission, your anonymous quotations will be reviewed by fellow participants in this research study in the same manner in which you will review their anonymous quotations. Please note that no information will be provided that will render your quotations personally identifiable.

Data collected during this study will be stored in password-protected files on password-protected computers in locked offices on Brock University's campus. Data will be kept only until the completion of the final report, which is expected to be finalized in September 2012, after this time any hardcopy documents will be confidentially shredded and electronic files will be permanently erased.

Access to this data will be restricted to the principal student investigator and her faculty supervisor.

Voluntary Participation

Participation in this study is voluntary. If you wish, you may decline to answer any questions or participate in any component of the study. Furthermore, you may decide to withdraw from this study at any time and may do so without any penalty.

Publication of Results

Results of this study may be published in professional journals and presented at conferences. If you wish to receive a final report of this research, the principal student investigator will send you an electronic copy in September 2012.

Contact Information and Ethics Clearance

If you have any questions about this study or require further information, please contact the principal student investigator, Jenna Lorusso, or her faculty supervisor Dr. Nancy Francis, using the contact information provided above. This study has been reviewed and received ethics clearance through the Research Ethics Board at Brock University [File# 11-246]. If you have any comments or concerns about your rights as a research participant, please contact the Research Ethics Office at (905) 688-5550 Ext. 3035, reb@brocku.ca.

Thank you for your assistance in this project. Please keep a copy of this form for your records.

Consent

I agree to participate in this study described above. I have made this decision based on the information I have read in the Information-Consent Letter. I have had the opportunity to receive any additional details I wanted about the study and understand that I may ask questions in the future. I understand that I may withdraw this consent at any time.

Verbal Consent Name:	
Date:	
Time:	

APPENDIX C

Brief Summary of Content to be Discussed

This research study investigates the future of higher education physical education using the Delphi method, and more specifically involves two rounds of one-on-one interviews with five selected experts of higher education physical education. In the first round of interviews, the expert participants will be asked to project 15 years into the future the possible, probable, preferable, and undesirable futures of the core and secondary issues within the academic discipline of physical education/kinesiology. After the first round of interviews, the data will be analyzed and participants will be provided with feedback of the resulting future projections. During round two of interviews participants will be asked to provide commentary on the resulting future projections of the group.

Definitions

- Field: A field is a particular sphere of interest made up of an academic discipline and profession(s). This research refers to the field of physical education/kinesiology as including both an academic discipline and professions.
- Academic Discipline: An academic discipline is the portion of a field that exists within higher education, where its content is studied. An academic discipline is made up of degree programs and research sub-disciplines. The academic discipline of physical education/kinesiology is made up of the undergraduate degree programs of the bachelor of physical education and bachelor of kinesiology, as well as the various research sub-disciplines (i.e. human anatomy, biomechanics, pedagogy, psychology of physical activity, etc.).
- Profession: In this research the field of physical education/kinesiology is considered
 as having a variety of professions, including its original profession of K-12 school
 physical education teaching, as well as the newer kinesiologist profession (with
 specializations in rehabilitation, ergonomics, fitness, biomedical applications,
 research, etc.).

Core Issue

The core issue of the academic discipline of higher education physical education/kinesiology has been identified as: *a lack of unified focus within the academic discipline* (Gill, 2007; Penney & Chandler, 2000; Wade, 2007).

This diagnosis of a lack of unified focus infers that the academic discipline of physical education/kinesiology is not unified in its scholarly foci within its teaching, research, and service programs. More specifically, the unified focus this academic discipline had in the past, that of physical education and the preparation of physical education teachers, is no longer the only focus (Gill, 2007; Kirk, 2010; Penney & Chandler, 2000; Wade, 2007). Instead there are numerous focuses, including the variety of focuses of each of the diverse research sub-disciplines. When these various focuses are considered comprehensively, it is clear there that they are not unified, and that there is little coherence between them (Gill, 2007; Kirk, 2010; Penney, 2000; Wade, 2007).

Secondary Issues

It is considered that the core issue, of a lack of unified focus within the academic discipline, precipitates and maintains a variety of secondary issues within physical education undergraduate degree programs and the research sub-disciplines (Greendorfer, 1987).

The curriculum conflict within the physical education degree program. The curriculum conflict of physical education degree programs is the debate about what should, and should not be included in the curriculum students will learn (Lawson, 2007). Of relevance to this conflict are disagreements over: What content is of relevance? What content is academically rigorous enough? And most importantly, what knowledge is of most worth? (Henry, 1964; Rink, 2007; Siedentop, 2002).

This conflict can largely be categorized into two perspectives that argue for a type of curriculum contrary to the other. In brief, one perspective advocates for a more broad and liberal arts curriculum based upon pure and basic research, in which the scientific and objective discourses of performance are prevalent. The alternative perspective advocates for a more professional curriculum based upon applied research, in which the more subjective discourses of participation are prevalent (Rink, 2007; Tinning, 2004).

The location conflict within the physical education degree program. The location conflict can be understood as the great variation of, and conflict over, where the academic unit of physical education/kinesiology and its physical education degree program, is located within the university (Newell, 2007). The academic unit of physical education/kinesiology exists in some universities as its own faculty, while in other universities it exists only as a department within a larger parent/cognate, interdisciplinary, or professional faculty, with or without physical education degree programs (Elliot, 2007; Kirk & MacDonald, 2001; Mason, 2010; Meylnchuk, 2011; Newell 2007; Vertinsky, 2009). Differing academic unit locations result in differing local demands, and therefore the diversity of physical education/kinesiology academic unit locations results in very different faculty members, courses, degree programs, administrators, and focuses.

The name conflict within the research sub-disciplines. The name conflict can be understood as the debate over which name should represent the academic discipline of physical education/kinesiology and its academic units within universities (Lawson, 2007). Contests over the name exist between those who wish to change the name and those who do not, and also between two or more groups who wish to change the name but disagree over which name to use.

In North America the name conflict has largely centered around the names of "physical education" and "kinesiology". More specifically, the North American name conflict often involves debates over changing the name from physical education (historically the original and universally accepted name), to variations of the name physical education, or to other names entirely, the most prominent of which being kinesiology (Custonja et al., 2009; Lawson, 2007; Mason, 2010; Newell, 1990; Rikli, 2006).

The organizational framework conflict within the research sub-disciplines. The organizational framework conflict can be understood as "disagreement over the structure of the [academic] discipline" of physical education/kinesiology (Lawson & Morford, 1979, p. 222). The conflict of which organizational framework should underpin this academic discipline involves criticism of the current interdisciplinary organizational

framework, and suggestions for improvement and alternative frameworks (Gill, 2007; Lawson & Morford, 1979; Lawson, 2007; Rikli, 2006; Vertinsky, 2009).

More specifically, conflict over the interdisciplinary organizational framework centers around its sub-disciplinary structure, which includes specialized areas of study bearing the names of parent arts and science disciplines. It is argued that this sub-disciplinary structure results in the generation of prolific knowledge in a vertical, rather than a horizontal/collaborative, structure, which impedes the rich potential of thematic scholarship and results in fragmentation (Greendorfer, 1987; Newell, 2007).

The profession versus discipline conflict within the research sub-disciplines. The profession versus discipline conflict can be understood as the conflict between those within higher education physical education that identify with the K-12 school physical education profession and those who do not (i.e. disciplinarians). The coexistence of these two groups within higher education has been described as "at best an uneasy relationship. At worst, they are becoming more disconnected and out of sync" (Lawson, 1998, p. 230)

The profession versus discipline conflict appears to be of a bi-lateral nature. On one side of the conflict, some who identify with the profession (i.e. the pedagogy research sub-discipline) see the discipline to be of little relevance. While at the same time, some who identify with the discipline (i.e. the research sub-disciplines other than pedagogy) wish to distance themselves from, what they consider, the 'un-academic' profession (Corbin, 1993, Lawson, 2007; Rink, 2007).

APPENDIX D

Round One Interview Guide

• Introduction.

- Thank you for your interest to participate in my master's thesis research project on the future of physical education in higher education.
- o In this round one interview I would like to begin by receiving your informed consent, confirm your demographic information, review and clarify the definitions we will be using, ask your expert opinion on the present status of the issues within this academic discipline, and lastly ask your expert opinion on the future of these issues.
- O I am using the Delphi method in this research, and therefore in round one I am looking for fairly explicit and direct answers about the future; in fact your answers will be reduced through analysis so as to feedback a manageable data set in the executive summary. Contrastingly, in round two I will be asking for more in-depth responses, including your explanations and commentary on the resulting future projections.

Informed consent.

o Oral review of informed consent and verbal consent.

Demographics.

- What is your current academic capacity (i.e. Assistant Professor, Tenured, Retired, other)?
- What is the approximate length of your academic career in higher education?
- o Please indicate your degrees, including year, university, and subject area.
- Do you have experience as a teacher in the elementary and / or secondary school system?
- o Do you have experience as an administrator in higher education?
- Please describe the geographical context of your academic career (i.e. conferences, journals, academic appointments, collaboration)
- Which sub-discipline of the academic field do you identify with? (i.e. pedagogy, motor control, biomechanics, etc.)
- What is your academic relation to the topic of the future of higher education physical education (i.e. research interest, publications, general interest, other)?

Review of important information and context.

- Terminology and Definitions
 - Due to the myriad of definitional issues pertaining to this topic, I'd like to discuss the terminology and ensure that we share similar definitions.
 - Field
 - Academic discipline
 - Profession
 - Higher education physical education
 - Kinesiology
 - Inter-disciplinary organizational framework

• The present.

What is your expert understanding and opinion on the present status of the following issues within the academic discipline:

- o Lack of focus within the academic discipline
- Physical education degree program curricula
- Physical education degree program location
- o Name of the academic discipline and academic units within universities
- Organizational framework of the academic discipline
- o Profession versus discipline conflict within the academic discipline

The future.

What is your expert opinion on the possible, probable, preferable and undesirable futures of each of the issues within the academic discipline in 15 years time:

- o Lack of focus within the academic discipline
 - What are the possible futures of the lack of focus conflict within the academic discipline?
 - What is the most probable future of the lack of focus conflict within the academic discipline?
 - What is the most preferable future of the lack of focus conflict within the academic discipline?
 - What is the most undesirable future of the lack of focus conflict within the academic discipline?

o Physical education undergraduate degree program curricula

- What are the possible futures of the conflict over physical education degree program curricula?
- What is the most probable future of the conflict over physical education degree program curricula?
- What is the most preferable future of the conflict over physical education degree program curricula?
- What is the most undesirable future of the conflict over physical education degree program curricula?

Physical education undergraduate degree program academic unit location

- What are the possible futures of the conflict over the academic unit location of physical education undergraduate degree programs?
- What is the most probable future of the conflict over the academic unit location of physical education degree programs?
- What is the most preferable future of the conflict over the academic unit location of physical education degree programs?
- What is the most undesirable future of the conflict over the academic unit location of physical education degree programs?

Name of the academic discipline and academic units within higher education

• What are the possible futures of the conflict over the name of the academic discipline and academic units within higher education?

- What is the most probable future of the conflict over the name of the academic discipline and academic units within higher education?
- What is the most preferable future of the conflict over the name of the academic discipline and academic units within higher education?
- What is the most undesirable future of the conflict over the name of the academic discipline and academic units within higher education?

o Organizational framework of the academic discipline

- What are the possible futures of the organizational framework conflict of the academic discipline?
- What is the most probable future of the organizational framework conflict of the academic discipline?
- What is the most preferable future of the organizational framework conflict of the academic discipline?
- What is the most undesirable future of the organizational framework conflict of the academic discipline?

o Profession versus discipline conflict within the academic discipline

- What are the possible futures of the profession versus discipline conflict within the academic discipline?
- What is the most probable future of the profession versus discipline conflict within the academic discipline?
- What is the most preferable future of the profession versus discipline conflict within the academic discipline?
- What is the most undesirable future of the profession versus discipline conflict within the academic discipline?

• Comments and questions.

o Do you have any comments or questions?

Closing remarks.

- o Thank you for your participation.
- Our round two interview is scheduled for . .

APPENDIX E

Round Two Interview Guide

- 1. Are there any projections (see Executive Summary) that you would like to comment upon because you strongly agree or disagree with the statement?
- **2.** How might your geographical background have influenced your perspective on the future of higher education physical education?
- **3.** How might your academic background, especially your administrative and leadership experiences, have influenced your perspective on the future of higher education physical education?
- **4.** What do you consider to be the three most relevant issues impacting the future of higher education physical education?
- **5.** Can you offer a final and overall projection, sentiment, or statement about the future of higher education physical education?
- **6.** If you could offer one piece of advice about the future of our field to all our members, what might it be?
- Comments and questions.
- Closing remarks.
 - o Thank you
 - o Preferences on receiving the final report