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The purpose of this dissertation study was to investigate how students enrolled in two different undergraduate core kinesiology courses conceived knowledge of the body through visual storytelling, a mode of writing that uses visual elements, like photographs, to tell a story. For the purposes of the study, body knowledge (Evans and Davies, 2004) was constrained to sport, physical education and fitness. This dissertation study had three research questions and one practical purpose. One, how did students chose to tell their stories, what images and storylines were included and which were left out? In other words, what repetitive or reoccurring themes about the body in the contexts of exercise, physical education and sport emerged from these visual narratives? Two, how did these repetitions (Kumashiro, 2003) construct knowledge of active body and what were the obstacles to addressing them? In other words, did the students select images or themes that overemphasized particular gender, racial, or economic groups, or body sizes, and if so what are potential road blocks to remedying them? Three, why are these repetitions of body knowledge needed? After addressing these three questions, this study aimed to provide kinesiology and HPE educators with practical pedagogical strategies for addressing (visual) repetitions of body knowledge within the curriculum. Following Norman Fairclough's (2009) critical discourse analysis (CDA) methodology, this study analyzed 22 visual narratives and found that *gender and physical ability* was an overarching theme in the narratives.

BODY KNOWLEDGE AND REPETITION: RE-CONCEIVING ABILITY THROUGH STUDENTS' VISUAL NARRATIVES OF SPORT, PHYSICAL EDUCATION AND FITNESS

by

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Approved by

_____
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To the outside observer a doctoral dissertation may appear to be the work of one individual. However, this project could not have been completed without the support of others. I am grateful to my parents, Mary Owens and James Thorpe, who have always installed the value of education in me. I am appreciative of John Foreman, who has been a mentor and dear friend. And most of all I am beholden to my partner, Roger LeBlanc, for instilling in me a sense of adventure and giving me a new beginning.

APPROVAL PAGE

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CHAPTER I

INTRODUCTION

How do students in undergraduate kinesiology programs in North America come to understand or know the body? Although, at face-value, this question appears to have a straightforward answer, how knowledge of the body is conceived by this population is varied and requires an examination of the educational curricula that embodies the core knowledge of the discipline. For example, an introductory college textbook on kinesiology such as Dr. Shirl Hoffman's (2009) *Introduction to Kinesiology* or Dr. Peter Klavora's (2009) *Foundations of Kinesiology* are obvious examples of how an undergraduate kinesiology student might to be introduced to the academic discipline. The formal or official curriculum, what educators intentionally teach, within core or foundational courses, includes resources like textbooks, syllabi. However, the hidden curriculum what educators teach but do not intend to teach or prior knowledge that students bring with them into the classroom is just as important. As Kumashiro (2009) eloquently states, the hidden curriculum "echoes the messages that students hear from outside of school…rarely goes challenged…arguably has more educational significance than the formal curriculum" (p. 718). Thus, both the hidden and formal curricula have significant implications in how students come to understand the body within the contexts of physical activity.

Purpose

The purpose of this dissertation study was to investigate how students enrolled in two undergraduate core kinesiology courses at two different universities in North America conceive knowledge of the body through visual storytelling, a mode of writing that uses visual elements, like photographs, to tell a story. For the purposes of the present study, this knowledge of the body is constrained to sport, exercise, physical education and fitness. This study had two objectives. First, it was concerned with how students tell stories using images. This study examined the topics, themes, and 'plots' that emerged within the narratives by analyzing the images the students chose to re-count their stories and how these images were sequenced. In doing so, this study paid close attention to how knowledge of the body was produced through the formal or hidden curriculum. Second, this study, using the insights gained from the aforementioned analysis, sought to help educators with using visual storytelling as a viable teaching method for the field of kinesiology. It should be noted that similar approaches such as Photovoice and the Photo Novella (Wang & Burris, 1997) have been used in other health-related disciplines.

Rationale

Knowledge of the body, or *body knowledge*, should not be taken for granted. Body knowledge, simply defined, is the processes by which individuals acquire knowledge of their bodies. In the academic discipline of kinesiology this definition is unnecessarily limiting. As a whole, body knowledge is an under-theorized concept in the kinesiology, sport studies and the health and physical education (HPE) literature. At one

end of the spectrum body knowledge is transdisciplinary and includes all that one could know explicitly or tacitly about the body in sport, fitness, and health, or physical activity, in general. At the other end of the spectrum, body knowledge is a finite set of empirically-grounded heuristics or social class dispositions about the body that become indoctrinated as apparent or hidden truths. This is due to the fact that body knowledge research has framed explicit and implicit knowledge of the body from two overarching perspectives: scientific knowledge and physical capital. The *scientific knowledge perspective* suggests that individuals come to understand the body through knowledge generated by the natural sciences and the formal curricula that rely on them, like kinesiology, health, or medical education (see Pronger, 2002). The *physical capital perspective* establishes that knowledge is best understood through productive and consumptive practices of a capitalist society, namely consumerism. An example would be purchasing over-the-counter pharmaceutical products, like glucosamine, or subscribing to health-related magazines such as *Men's Health* and *Women's Health* (for other examples see Turner, 1996; Shilling, 2005). Cultural artifacts, like the aforementioned publications, create *de facto* Western standards of the body. The physical capital perspective is seldom part of the official curriculum, but it does manifest itself within the hidden curriculum where the values of a society's dominant culture are reproduced within the curriculum of educational institutions and the pedagogical practices of its educators (Bourdieu & Passeron, 1990).

More recently HPE scholars have framed body knowledge within the contexts of health, physical education and sport, paying particular attention to how physical ability

and identity are related to health. Evans and Davies (2004) published an edited volume on body knowledge and social control in 2004. Evans and Davies (2004) express *body knowledge* as "understanding the social processes and practices of schooling" (p. 4) that operate within the domains of sport, health and physical education. Although the authors' primary emphasis is on primary, middle, and secondary schooling, the present study interrogates body knowledge within institutions of higher learning "to provide both an innovative and critical way of looking at the relationships between education, physical culture, identity, and health" (p. 12). Since the publication of *Body Knowledge and Social Control* there have been few studies have addressed body knowledge in any systematic way (see Martino & Beckett, 2004; Rich, 2010; Shilling, 2010; Wellard, 2006a; Wellard, 2006b for exceptions). This study seeks to add to that literature.

Body knowledge is transmitted to the curriculum by way of discourse. The term *discourse* has been defined in various ways by scholars in communication and media studies, linguistics, and social theory and from sport studies scholars borrowing from these disciplines. For the purposes of this study, a discourse is a way of talking that leverages certain types of (body) knowledge while hiding others. Applying discourse to body knowledge, this study presumes that higher education, through the formal or hidden curriculum, produce discourses, or ways of talking, about the body that are deemed worth knowing and to be taken for granted. Historically, scientific knowledge within kinesiology focuses on the movement of elite athletes (Hoberman, 1992), articulates the masculine body as the 'natural' athletic body (Bordo, 2000), and embraces

anthropometric indicators like body mass index (BMI) as a sign of the body-at-risk in need of an intervention (Hessenbruch, 2000).

What is left unnamed in these discourses is oppression. Scientific knowledge of the body is oppressive as it does not allow for alterity, or alternative ways of thinking about active bodies. According to Kevin Kumashiro (2003) the power of oppression lies in its ability to be repeated. He argues that oppression is the *repetition* of regulatory knowledges, identities and practice that privilege "only certain ways of identifying, thinking, or relating to others" (p. 68). Therefore, oppression brings certain bodies into being and closes off others through repetitions (in language). In kinesiology such repetitions might include privileging the scientific knowledge of the body over other ways of knowing about bodies. This type of knowledge is highly evident in three of its subdisciplines: exercise physiology, biomechanics, and motor behavior. Sport studies scholars such as David Andrews (2008) have called attention to this knowledge hierarchy within kinesiology and have questioned its merits. Not only do these subdisciplines privilege their own versions of body knowledge, but they also suppress the body knowledge of other subdisciplines within kinesiology, namely the psychology, sociology, philosophy, and history of physical activity.

It should be noted that repetition occurs within psychology, sociology, philosophy and the history of physical activity. The difference is that these subdisciplines do not have hegemony over the active body. Consider the psychological research on self-perception and the body, and two of its interrelated concepts: *body image* and *social*

physique anxiety. A perception of one's body (or *body image*) is particularly useful knowledge for sport and exercise psychologists who work with clients with eating disorders (Gill, 2000). Body image as a construct in body knowledge is prone to repetition within the *hidden curriculum* because of its malleable nature outside of academia. Body image, and knowledge of it, is profoundly influenced by imagery within the mainstream media (Grogan, 2008). This makes body image susceptible to preconceived notions in the classroom. Body image has been studied by various disciplines within the social sciences and the humanities and has an entire journal entitled *Body Image: An International Journal of Research* dedicated to its study. Therefore, it might be less prone to harmful repetitions in the formal curriculum. Its multidisciplinary nature allows for various interpretations. In comparison, social physique anxiety a concept derived from the psychological research on self-representation which measures the degree to which a person becomes anxious when another person evaluates his or her physique (Hart, Leary, & Rejeski, 1989) is arguably more prone to harmful repetitions in the *formal curriculum* because it very specific to sport and exercise psychology.

To break the cycle of repetition, Kumashiro (2003) speaks of "teaching against", "learning against", "supervising against" and "researching against" repetition. This study was primarily concerned with the first two approaches and the ways in which educators might 'teach and learn against' repetition to break the cycle of repetition that comes from either the formal and/or hidden curriculum. While Kumashiro concedes that not all repetitions are harmful (some repetitions can actually be useful such as leveraging multiculturalism or cultural competency to counter or compliment scientific body

knowledge of the body), he also asserts that educators must realize their own biases towards particular kinds of knowledge and how those biases might affect their teaching. He also suggests that students are not blank slates when they enter the classroom. They bring their own biases or pre-dispositions for particular viewpoints of the body while resisting others. When "learning against" dominant views of body knowledge that privilege certain representations of the fit, or healthy body, students must be afforded different perspectives that move them to what Kumashiro calls "crisis", a place where what they have previously learned is shattered, thrown out, and becomes irreconcilable with newer or other forms of knowledge and its representation.

Having students use non-traditional ways of writing about the body is a potential way of teaching against repetition. Laurel Richardson (2000) names these processes of discovery "creative analytic practices". Using literary approaches such as evocative writing, visual storytelling or poetic representation, students can convey their knowledge of the body that works against what they already know and allows them to see their bodies and the bodies of others, in new and innovative ways. Most representations of body knowledge within kinesiology are bi-modal, meaning that they are communicated through words and images. With the global flow of new media communication channels, like YouTube ™, these representations of the body take on new meaning and focus. First and foremost, the unidirectional nature of the visual image has ceased to exist. Second, educators cannot stop their students from joining grassroots initiatives that social media offer. On YouTube ™ social media channel, these visual narratives are often referred to as 'photo stories', 3 -5 minute stories composed of images, sound, and text based on the

name of free product from the Microsoft Corporation called *Microsoft Photostory 3 for Windows*, which is often used to create these narratives. A December 3, 2010 search on the keyword 'photo story' on YouTube ™ website yielded over 130,000 results.

Visually storytelling has the potential to allow students to explore their own questions about the physical activity and body knowledge (e.g. ability and identity) and produce stories in the classroom from the 'ground up'. Through visual storytelling students can chronicle and document the lives of women, racial, ethnic and sexual minorities (in sport, physical education, and health). For example, an injured student-athlete enrolled in a major university in the southeastern part of the United States created a digital collage of *male* athletes from photos in the major sports magazines to *visually write* about her challenges to find visual images of *female* athletes coping with injury. Additionally, students at the University of Moncton students in New Brunswick, Canada crafted visual blogs of their *Right To Play* ™ expedition to Haiti where they delivered 60 hockey bags of relief aid and sports equipment (University of Moncton, 2010). *Right To Play* ™ is a non-profit organization founded by professional athletes that promotes humanitarian projects and *sport for development and peace* in third-world countries (*Right To Play* ™ International, 2010). These are but a few examples of how educators can draw on new writing practices that potential counter or compliment the repetitive knowledge generated by the scientific subdisciplines of kinesiology.

As is the case with more traditional forms of academic writing, just because students know how to use the technological tools that produces writing, it does not mean they know how to write within that particular genre. For instance, an educator at the

University of Gloucestershire had 60 of his students in a second-year ‘Football and Community’ course use digital storytelling to reflect on the role that football played in their lives. He found that the quality of students work vastly improved (Gravestock & Jenkins, 2009). However, he also discovered that his students had problems telling stories and not with using the technology. He further realized that the key to teaching his students how to effectively create these digital stories depended on scaffolding (Sadik, 2008), a pedagogical process where the instructor models the behavior for students to imitate. To address this matter, the instructor produced a digital story about his own ‘football’ identity that modeled the process of writing a story about one’s own identity in sport.

The aforementioned finding coincides with the literature on visual narrative and graphic storytelling. Will Eisner (1996) argues that humans have an innate tendency for wanting to tell stories but the actual act of storytelling requires skill. He asserts that all stories have a structure, a framework that holds the story together, despite its medium (e.g., oral, written, or visual). The function of a story is to convey information, take abstract ideas like scientific knowledge, and make them concrete, palatable and absorbable. He proposes that stories can be told with words, images, or a combination thereof, and emphasizes that stories told using visual narratives, like graphics or other images, must deal with the problem of transmission. How the story is told through images will influence how the story is understood within one’s cultural context. When images are used as narrative tools they sometimes produce conventions that lead to stereotyping of certain groups of people through visual portrayals of how they behave, identify, and

interact within the broader society or geo-spatial locale. In kinesiology, the question becomes how do educators use visual narratives as an effective teaching strategy within a discipline that relies heavily on scientific body knowledge that resists these conventions?

Research Purpose and Questions

The purpose of the following research questions is to address how body knowledge was represented in students' visual narratives. This study had three research questions and one practical purpose. One, how did students chose to tell their stories, what images and storylines were included and which were left out? In other words, what repetitive or reoccurring themes about the body in the contexts of exercise, physical education and sport emerged from these visual narratives? Two, how did these repetitions construct knowledge of active body and what were the obstacles to addressing them? In other words, did the students select images or themes that overemphasized particular gender, racial, or economic groups, or body sizes, and if so what are potential road blocks to remedying them? Three, why are these repetitions of body knowledge needed? After addressing these three questions, this study aimed to provide kinesiology educators with practical pedagogical strategies for addressing (visual) repetitions of body knowledge in the curriculum.

This study relies on critical discourse analysis (CDA) as a framework for its analysis. CDA investigates the ideologies or hidden meanings generated in language that create 'commonsense' knowledge and govern appropriate ways of being, acting, and interacting in society. These hidden meanings might stem from social relations, material

practices, power, institutions and their rituals, and individual thoughts, beliefs, values and desires (Harvey, 1996). Although there are several approaches to critically analyzing discourse including sociocognitive approaches, discourse-historical approaches, and Foucauldian analyses (see Wodak & Meyer, 2009), this study relied on Norman Fairclough's (2003) dialectical-relational approach, which presumes that social practices exist in many forms including discourse, individual beliefs, and intergroup social relations. Fairclough argues that these social elements are interrelated but are not *reducible* to one other. By this Fairclough suggests that a social element such as discourse cannot fully explain another social element like individual thoughts, beliefs, and desires. To give an example, the discourse that promotes healthy ways of eating as a counter to the obesity epidemic is related to, but cannot be fully explained by, how individuals think of food consumption and their body weight. There are other matters that can be considered including peer group and family eating habits, having the income to purchase healthier food choices, or having the leisure time to engage in physical activity (Taylor, Poston, Jones & Kraft, 2006).

Although understanding the impact of multimodality and new media is part of CDA's research agenda (Fairclough, 2009, Wodak & Meyer, 2009), most of the research in this area has not engaged Fairclough's CDA framework. Part of the reason may be that Fairclough has not attended to the role of multimodality in discourse in a systematic way. Fairclough's framework considers the semiotic nature of the object under investigation. In the case of visual imagery, the semiotic nature of the image can be found in its paradigms and syntagms. Stephen Spencer (2011) defines the paradigm as "the choices

from a lexicon or cultural repertoire of words, images, or other sign vehicles" and the syntagm as "sequences which are put together from these elements" (p. 146). In this study, the paradigms are the choices students made in selecting images for their narratives and the syntagms are how these choices relate to one another.

As a methodological approach, Fairclough's CDA framework utilizes a variant of Roy Bhaskar's (2009) *explanatory critique*, which takes an object of analysis, like body knowledge, and moves it through four stages. In the first stage, the researcher considers the semiotic nature of the object under analysis. By semiotics, Fairclough is referring to how the object is represented in society (and is less concerned about the true nature or reality of the object). Applied to the present study, I asked, "What choices did students make to tell their stories, what images and storylines were included and which were left out? In other words, what repetitive or reoccurring themes about the body in the contexts of sport, physical education and fitness emerged from these visual narratives?" In the second stage, the researcher focuses on the any obstacles to addressing potential problems. In this stage, I asked, "how did these repetitions construct knowledge of active body and what were the obstacles to addressing them? In other words, did the students select images or themes that overemphasized particular gender, racial, or economic groups, or body sizes and if so what are potential road blocks to remedying them?" In the third stage, the researcher considers why the problem is needed to maintain the *status quo*, and for the purposes of this study, I asked, "Why are these repetitions of body knowledge needed?" In the fourth stage, the researcher provides potential solutions for moving beyond the problems or barriers. At this stage, I attempted to provide kinesiology

educators with practical pedagogical strategies for addressing (visual) repetitions of body knowledge within the curriculum.

Significance of this Study

This study is significant for three reasons. First, the research on body knowledge within the context of physical education, health, and sport is a recent phenomenon. Although there is a wealth of research on the body in social theory and physical activity, little attention has been paid to how the processes of schooling affect how students construct knowledge of the body. Secondly, much of the physical education research, while attentive to critical teaching practices, have privileged critical pedagogy as its main focus and have not incorporated anti-oppressive education in its research strand (for examples see Fernández-Balboa, 1995; Domanque & Lee, 2008). Third, very few studies consider the role of visual storytelling in replicating or resisting harmful repetitions of body knowledge. The only study that this researcher could find focused on self-concept and identity (see Gravestock & Jenkins, 2009).

Scope and Limitations of this Study

This study questioned the dominance of scientific knowledge in the academic discipline and its limits in explaining physical activity and *body knowledge*. The intention of this study was not to privilege other ways of understanding the body such as its social or historical aspects. Instead this study argued that any discipline-specific knowledge of the human body is always partial, incomplete, and limited (Haraway, 1998). This partiality of knowledge has implications for the academic discipline including the

pedagogical practices of its educators. This study was limited in that in only considers two groups of students enrolled in two universities located in North America. Furthermore, this study only investigated the discursive aspects of body knowledge. It did not consider the physical or material aspects of body knowledge or students' personal thoughts and beliefs about the body.

CHAPTER II

REVIEW OF THE LITERATURE

The study describes how particular themes in health, sport, and physical education become repetitive forms of knowledge for students in undergraduate kinesiology programs. The context of this study is higher education; the subject matters are sport, fitness and physical education. This study was conducted at two North American universities, one located in the southern part of the United States, and the other located in the New Brunswick province of Canada. This chapter reviews the literature on how body knowledge in transmitted and received in educational curricula. It is structured in four sections and a conclusion. The first section reviews how partial knowledge of the body is (re)produced through the processes of schooling and socialization. The second section describes how social differences (e.g. race, class, gender, sexuality, and ability) play a key role in determining how the body is thought of within the context of physical education and sport. The third section explains how partial knowledge of the body is oftentimes replicated in ways that make certain bodies appear to be normal and other bodies deviant. The fourth section describes anti-oppressive education and its potential for dismantling oppressive body knowledge within the curriculum.

Theorizing Body Knowledge in Sport, Fitness, and Health

Springgay (2008) states what we have come to know about the body "is exhaustive and comprehensive, covering a multitude of possibilities and directions" (p. 3). Grosz (1994), Schilling (2005), Turner (1996) and others would concur with this multifaceted nature of the body that makes definitions of body knowledge ever-changing and volatile. Body knowledge is an illusory concept because it can only be understood within the historical context. Throughout the course of history, Western culture has valued bodies of varying shapes and sizes at different times. Therefore, a definition of body knowledge cannot exist outside of history. Additionally, how we come to know the body in Western culture cannot be fully understood or realized outside of the intersections of gender, race, class, sexuality, science, technology and politics. This is principally relevant in the contexts of sport, physical education, fitness and health. Cheryl Cole (1993), for one, has shown that in an age where technologies like steroids can transform the muscularity of women's bodies, the real question becomes what is the feminine body and is there a new feminine aesthetic that resists culturally-inscribed boundaries of femininity? Said differently, body knowledge has a plurality where dominant views of the body are always fragmented and contestable.

Judith Butler (1997) refers to this volatile nature of the body as its *historicity*, how the body has been constituted at a particular time and over the course of time. During the period of the industrial revolution knowledge of the body took on two forms. First, the body was constituted through narratives of progress that makes the human body a project for the middle and upper classes. Second, any legitimate understanding of the body was

framed through medical discourse. In physical education, for example, when physical educator Dudley Allen Sargent introduced his health machines to Bowdoin College in 1869, and later a Harvard College in 1879, his students were men from the middle and upper classes (de la Peña, 2003). Sargent was fascinated with the body of strongman Eugen Sandow and believed that exercise machines could make men's bodies symmetrical and aesthetically pleasing like Sandow's. These machines relied on pulleys and had a direct connection to the industrialization of American society that looked towards the path of least resistance and ultimate efficiency in the manufacturing of goods. Sargent also developed anthropometric measures to assess young men's bodies before they began his physical education program and after to ascertain their progress. During that time period, anthropometric measures were often used to prove the racial superiority and inferiority (Haller, 1996). Sargent, like many of the physical educators of his time, was a medical doctor and consequently his approach to physical training relied on objective observation and standardized measures (Massengale and Swanson, 1997). Thus narratives of progress in the physical development of the human body were often based in scientific achievement and innovation.

Shilling (2003) suggests four recent historical events that swayed what we know about bodies in modern times. He cites the 1960s second-wave feminist movement, the aging population (e.g. "baby boomers") and the anticipated health-related concerns of this population, the shift from a production to a consumer-based society, and advances in technology that alter the human body, making it visibly less human and noticeably more machine-like. The influence of these historical markers led to a major expansion of

physical activity and health research. For example in relation to aging, periodicals like the *Journal of Aging and Physical Activity*, first published by the International Society for Aging and Physical Activity in 1993, and the *Journal on Aging and Health: An Interdisciplinary Research Forum* which began in 1989 illustrate current research trends.

For these reasons, Shilling (2007) calls for the study of 'body pedagogics', an interdisciplinary approach to the study of the body which examines how culture transmits "its corporeal techniques, skills, and dispositions, the embodied experiences associated with acquiring or failing to acquire these attributes, and the actual embodied changes resulting from this process" (p. 13). To understand how body knowledge is transmitted to students in Western culture requires the examination of at least two pedagogical practices. The first is an investigation of how formal knowledge of the body is taught through the processes of schooling. The second is how this knowledge is learned informally through the processes of socialization, such as inter-class or inter-gender relations. While neither approach can fully explain body knowledge because both types of knowledge are partial and incomplete, taken together, kinesiology educators can begin to understand how they "play an important role in shaping bodies and attitudes towards them" (Pronger, 1995, p. 429).

Scientific Knowledge and the Body

Donna Haraway (1988) argues that all knowledge is partial. The field of kinesiology is an example of a discipline that takes partial knowledge of the body to form a 'holistic' body of knowledge that seeks to explain how the body is activated within the context of physical activity. The academic discipline of kinesiology is composed of the

following subdisciplines: the history and philosophy of sport and physical education, the sociology of sport, motor behavior, biomechanics, exercise physiology, and sport and exercise psychology (Hoffman, 2009). The American Academy of Kinesiology and Physical Education (AAKPE) describes kinesiology as an "interdisciplinary", "multifaceted field of study" that examines physical activity "from different perspectives" that "can lead to a variety of careers involving teaching, research, coaching, and delivery of services related to physical activity and fitness, health promotion and sports medicine" (Gill, 2007, pp. 276 – 277). Scholars within the subdisciplines like Gill (2007) and Andrews (2008) have questioned whether the field is indeed integrative and counter that the scientific disciplines, specifically biomechanics, physiology, and motor behavior, often dictate how students of kinesiology come to know and think about physical activity. This dominance of scientific knowledge produced by these three subdisciplines creates partial knowledge of the body within physical culture and sport. As Andrews (2008) states:

> …kinesiology is both a *comprehensive and integrated* approach to the study of human movement, the field cannot develop through a blind, antagonistic, or exclusive adherence to either scientific, social scientific, or, for that matter, humanities, approaches. A true kinesiology program, in name and intent, requires a complimentary synthesis of epistemologies if it is to realize its diverse and multifaceted empirical project (pp. 50 – 51)

Said differently, the ways of knowing of experiencing the body is lacking in the academic discipline kinesiology primarily due to the dominance of its scientific subdisciplines.

Scientific texts

The academic discipline of kinesiology is an accumulation of scientific 'texts' making it difficult for the average person to discern the origins of knowledge of the body in physical activity, health, and fitness. 'Text' is a term used in social theory that refers to literary quality of knowledge representation and production. The importance of this concept is that physical education and kinesiology scholars can take seemingly ordinary and taken-for-granted things like photographs, video recordings, sporting events, or celebrities and 'read' them as if they were stories. A scientific text in kinesiology could be a photograph that depicts a wheelchair athlete, the physical activity pyramid, an acronym like F.I.T.T. principle, or a physiological measure such as VO_2 max. Scientific texts create discourses or ways of speaking within the discipline, that solidify knowledge of the body, as if this knowledge comes solely from natural phenomenon, always there waiting to be discovered. These texts work individually and in tandem to hide or diminish the importance of the social, historical, philosophical and cultural aspects of the body.

Brian Pronger (2002) in his theory of body fascism explores how scientific knowledge, acting as a form of technology, resources the human body through discourses on health and fitness. He cites five 'texts' that characterize scientific knowledge of the body. Some of these texts are written, but others are visual. The first type of text includes government fitness initiatives, policies, and position statements on health like *HealthyPeople 2020*. The second type is scientific articles, textbooks and educational resource materials available to educators on websites like Human Kinetics. Or the curriculum guidelines disseminated through kinesiology organizations like the National

Association for Sport and Physical Education (NASPE). The third is popular magazines, books, and videos on fitness and health. The fourth is exercise prescriptions, health appraisals, sport and fitness equipment, the tools used to monitor, control, and increase fitness levels; and the fifth is popular media representations of the 'fit' body. According to Pronger (2002), these texts create an "intertextual ensemble" (p. 145), an assemblage of scientific knowledge that provides multiple, yet fragmented, ways of knowing the body.

Gross Anatomy

Pronger (1995) notes that gross anatomy course is one site where scientific knowledge of the body is privileged within the university curriculum. Born of the anatomical studies in the 18th century, he stresses that the biological sciences have determined how we come to know and value the body in Western society. Drawing from Michel Foucault (1979), he argues that the purpose of human dissections was to gain new insights into how the body functions as a *useful* machine. Making the body useful to the needs of a modern society means enhancing it physiologically and anatomically to do things like breaking previous world records in athletic performance (Guttman, 2004). If scientific knowledge equates the living body to the anatomical body, then knowledge of the body in modern society is grounded in manipulation, regulation, and social control. Pronger believes that manipulation, regulation, and social control of the body are the implicit lessons of undergraduate gross anatomy courses.

Health and fitness curricula

Undergraduate courses in gross anatomy (e.g. anatomy and physiology) are pre-requisite knowledge for the academic discipline of kinesiology (NASPE, 2010a). Kinesiology, as a discipline, is mainly concerned with two different (but related) types of fitness: health-related fitness and skill-related fitness. The purpose of skill-related fitness is to improve athletic performance in a sport or in jobs that have demanding physical requirements such as firefighting. In contrast, the intended goal of health-related fitness is to help the heart endure the physical activities needed for daily living, improve how the body stores and uses energy, and ward off diseases like colon cancer, hypertension, heart attack, stroke and diabetes (Fahey, Insel, & Walton, 2010). Its components include cardiorespiratory endurance, muscular strength, muscular endurance, flexibility and body composition. The problem with this configuration is it is based in information derived from the exercise physiology, biomechanics, and motor behavior, leaving one to question what type of 'health' is health-related fitness improving.

Academic courses in anatomy, exercise physiology, biomechanics, and motor behavior implicitly teach students to technologically resource the body to make it more "useful for other projects" (Pronger, 1995, p. 431). This resourcing occurs within the broader economic sphere of capitalism and capitalist worker productivity. Productivity becomes the key to optimal athletic performances in elite sports organizations like the National Football League (NFL) where fans are the consumer base. For example, according to STATS LLC, the global sports data and information service, the overall

attendance at football games at 17 million in 2008 with a modest decline to 16.6 million in 2009 (Associated Press, 2010).

Technology

Pronger (1995, 2002) asserts that at the core of a body's productivity is technology. He borrows his definition of technology from the work of Martin Heidegger. According to Heidegger (1962), humans live an era where technology surrounds us, dominating our lives, turning everything, including the human body, into a resource. Pronger (1996) alleges that the human body is a technological body, existing for solely for the purposes of production. In the academic discipline of kinesiology, educators become the technological resources disseminating scientific knowledge of the body to undergraduate students, the future professionals of the field. Further, MacIntosh and Whitson (1990) argue that there has been little resistance to the technological body in kinesiology, instead "there has been a significant move to make faculties of physical education ever more technological" (Pronger, 1996, p. 434). Technology pervades not only the theoretical aspects of physical education but also its practical or real world, implementations. John Hoberman (1992) in his investigation into the history of scientific interest in athletic performance cites the number of unhealthy regimens that collegiate and professional athletes experience including overtraining, illicit drug use such as doping, and gratuitous violence on the playing field – that in any other context would be considered inhumane or criminal. That scientific knowledge can be held solely accountable for the practices in professional sport is not the argument here. What is at

hand is the tendency for science to dehumanize the human, making it appear to be more machine-like and therefore disposable and reusable.

Power

Power makes the technological body possible. Global capitalism, for instance, drives the technological body in elite and professional sport to become 'faster, higher, stronger' or as the International Olympic motto states 'citius, altius, 24orties'. Also in consumer fitness culture the 'fit' or 'health looking' body becomes a resource for economic consumption through the marketing, selling and production of fitness products like TRX suspension equipment, kettlebells, or the X-Box Kinect gaming system. Yet, as Michel Foucault (1980) argues, power is never absolute. Instead it is a "multiplicity of force relations…the process which, through ceaseless struggles and confrontations, transforms, strengthens, or reverses them" (p.92). These force relations are in a perpetual state of contest. Said in another way, the dominance of scientific knowledge of the body is neither absolute nor unconditional (Pronger, 2002). It can change.

Physical Capital and the Body

Scientific orthodoxy cannot fully explain how knowledge of the body is constructed in Western society and culture. Another way in which this knowledge is constructed in and outside of schools is through the one's social net worth. Students do not come to school as blank slates. They have a wealth of the informal knowledge gained from their prior experiences and family backgrounds. This informal knowledge dictates what types of body knowledge these students value. Consequently, Pierre Bourdieu's (1986) notion of physical capital is applicable in how students come to know their bodies

and the bodies of others. Chris Shilling (2005), drawing on Bourdieu, describes physical capital as the ways in which the body is commodified in society as less a form of physical labor power and more the "possessor of power, status, and distinctive symbolic forms which is integral to the accumulation of various resources" (p. 111). Physical capital does two things. First, it produces bodies that are culturally recognizable and valuable. Second, it converts these bodies into *cultural*, *social*, or *economic capital* in a way that determines a body's worth and exchange value.

Cultural capital

Bourdieu (1986) defines cultural capital in three ways. One, it is *embodied* as an enduring dispositions of the body or mind; two, it is *objectified* in the form of cultural good like a book or baseball helmet; or three, it is *institutionalized* as something that differentiate individuals like educational credentials or the formal titles. Moreover, through school curriculum, social class affiliations students develop perceptions that become their foundational attitudes and dispositions for the body, what Bourdieu names as *habitus* (Bourdieu & Passeron, 1990). Habitus is a "socially constituted system of 'durable, transposable' dispositions which provide individuals with class-dependent, predisposed ways of categorizing and relating to be familiar and novel situations" (Shilling, 2003, p. 62). Habitus creates lifestyles which extend to an individual's recreational, leisure, and fitness pursuits (Bourdieu, 1990). Students not only develop the habitus of future educators (and come to view the body as a resource for health and physical education) but bring with them their own propensities or dispositions for particular types of physical activity. Students are rewarded for demonstrating this habitus

in their academic and physical achievements. The better the student performs the more cultural capital the student attains.

Social capital

While similar to cultural capital, social capital differs in that it is the "aggregate of the actual or potential resources which are linked to a possession of a durable network of more or less institutionalized relationships" (Bourdieu, 1986, p. 51). The slim muscular body, for example, has a cultural exchange value in physical education, in that it complies with the components of health-related fitness, but it is also part of larger social network of bodies that is associated with athleticism, health, and class mobility (Shilling, 2005). Social capital is entrenched in physical activity classes like weightlifting or aerobics which as designed to modify an individual's body composition. Research has shown that students who major in physical education and kinesiology have greater weight and fat biases (Chambliss, Finley, & Blair, 2004; O'Brien, Hunter, & Banks, 2007) in comparison to other students. Social capital is maintained through in-group solidarity among these students.

Economic capital

Bourdieu (1986) asserts that it is economic capital which is at the root of cultural and social capital. It takes economic capital, or money, to attain social and cultural capital. Economic capital transforms into social and cultural capital and this ensures that capitalism in Western society is maintained. Fundamentally, it is the upper class that determines what bodies matter in Western thought as this social class produces the ideologies and discourses that become enacted as health and physical activity guidelines

and policies. The *President's Council on Physical Fitness and Sports* (PCPFS) and the *Center for Disease Control and Prevention* (CDC) are but two examples of the government programs and agencies designed to disseminate health-related information.

In summary, students come to understand their bodies in Western culture through the two interrelated processes of schooling and socialization. First, a kinesiology curriculum creates body knowledge through courses in anatomy, physiology, and biomechanics. These courses not only disseminate partial knowledge of the body, they also dehumanize the body by treating it as a resource. Second, educators and the general society train students that some bodies are more valuable than others. This partial perspective privileges achievement over other ways of knowing or experiencing the body. To broaden students' perspectives body knowledge, educators, the faculties who teach in kinesiology departments, need to understand how difference and oppression discursively frame knowledge of the body.

Theorizing Body Knowledge

Pronger's (1995, 2002) analysis, although useful in that it describes how power structures bodies and privileges scientific knowledge within the academic discipline of kinesiology, is limited because it does not deeply attend to the social and cultural differences among students who are being 'schooled' in the body. Nor does it attend to the rights that these students have in co-creating the pedagogical spaces and the curriculum. Likewise, a Bourdieusian approach to physical capital and the body, from which Pronger appears to readily draw, is useful for explaining class embodiment in

schools, but it does not explicitly address the institutional processes and practices that attend to differences based on size, gender, race, sexuality, or ability.

Expanding Pronger's (2002) theory of body, John Evans and Brian Davies (2004) propose a *body knowledge* framework that frames knowledge of the body from the institutional practices and policies of schooling within physical education and health curricula. In *Body Knowledge and Control: Studies in Physical Education and Health* (2004), these authors address the ways in which knowledge of the body is received by and transmitted to students within the socio-educational contexts of sport pedagogy, physical education, and health/fitness. Although Evans and Davies (2004) situate their framework in primary and secondary school curriculum, it is applicable to a higher education curriculum because future educators are trained in physical education and kinesiology departments located in post-secondary institutions. Furthermore, understanding body knowledge within a higher education environment is relevant to educators who are preparing students for work in kinesiology professions such as fitness leadership, coaching, sports medicine or physical therapy as these students will transfer knowledge of the body to peers and clients within these settings. Drawing from Basil Bernstein's (2000) work in the sociology of education, Evans and Davies (2004) argue:

> Bernsteinian insight on pedagogy, symbolic control and identity along with other recent social theory, can sharpen and guide our attention to ways of looking at how knowledge of 'the body' is implicated in the construction of identity and 'health' and the achievement of social hierarchies, order and control in society and schools (p. 4).

Evans and Davies (2004) suggest that knowledge of the body has implications in the construction of class and cultural hierarchies which are largely applicable to formal knowledge produced within kinesiology, physical education, and sport pedagogy curricula. Citing Pronger (2002), they assert that the authoritative knowledge in U.S., Canadian, and British school curricula come from the biological, behavioral, and health sciences, and are reflective of Western economic interests in globalization, capitalism and knowledge stabilization. This widely accepted view of the body in Western culture is expressed through a system of codes represented as 'universal truths' that stress individual autonomy, the acceptance of one's behavior for the self-surveillance of one's body. Finally, these codes are realized through, what they term, 'good' performances in sport, physical education, and health. Thus, human *ability*, the level to which an individual can and does perform 'well' in sport, physical education, fitness and health is central to understanding how students construct knowledge of their own bodies through the processes of schooling. These processes, they argue, create systems of body hierarchies and physical capitals where bodies are socially stratified based on economic class or cultural group membership, where they are deemed to matter more or less than other bodies.

Evans and Davies (2004) assert that body knowledge is oftentimes oppressive and disempowering for those students who are members of the working-class or non-mainstream (or marginalized) cultural groups, such as the disabled. Coupled with neoliberal values which endorse individual responsibility for one's own behavior and emphasize health-promoting physical activity, body knowledge in physical education and

health curricula presumes that all students have access to equitable resources and, thus, should have the ability to attain and embody a 'healthy' physical form through intentional physical activity. This assumption is erroneous in at least one way: It presumes that all healthy bodies have universal physical traits or characteristics. Working-class bodies have less access to certain resources like gym memberships or to high-cost recreational sports in comparison to the middle and upper classes. And as Susan Bordo (1993) argues Western culture is obsessed with slimness and simultaneously avows and disavows bodies that engage in unhealthy behaviors such as binging in order to attain a visually 'healthy' status.

Citing Bernstein (2000), Evans and Davies (2004) point out that "an unequal distribution of images, knowledge, possibilities, and resources will also affect the rights of participation, inclusion, and individual enhancements of groups of students" (p. 9). These inequalities are reinforced through what they term 'horizontal solidarities' and 'vertical cleavages'. Educational institutions create horizontal solidarities, or allegiances based on social group membership, by hiding or not acknowledging power relations outsides of schools, such as social privilege based on race, class, gender, or sexuality. By not acknowledging these differences, schools keep the vertical cleavages (or hierarchies) amongst pre-established social and economic groups intact and unchallenged.

To Evans and Davies (2004) these horizontal solidarities and vertical cleavages run counter to social democracy in schools. Although the authors acknowledge educational institutions "no matter how innovative or progressive" (p. 10) cannot be solely held responsible for the social and economic health of a society, citing Bernstein

(2000), they also remind us that education, as a public institution in a knowledge-based economy, is an epicenter for distributive justice. Schooling plays a crucial role in the distribution of social justice where physical education and health teachers become 'experts' and 'managers' who reinforce the "achievement, assessment, and accountability" (p. 10) of bodies and transfer this expert knowledge to their students. This makes both groups accountable to the rules and regulations of local, state, and federal agencies.

Following Bernstein's (2000) insights on students' pedagogic rights, Evans and Davies (2004) assert that in order for social democracy to occur in schools three interrelated rights must be realized in physical education and health curriculums. The first right is the right of *enhancement*, an individual, or micro-level, condition that allows students to experience personal, intellectual, and social boundaries in a way that opens up new possibilities and new levels of confidence. The second right is the right of *inclusion* which operates at the level of the social. This right includes the social, the cultural, the intellectual and the personal, and is a condition of *communitas*. The third right is the right of *participation*, "the right to participate in the construction, maintenance, and transformation of order" (Bernstein, 2000, p. xxi). The condition for participation is an engagement in civic discourse that yields outcomes at the political level.

To explain their theoretical framework on body knowledge, Evans and Davies (2004) call attention to the policies and practices that generate knowledge of the body in educational curricula and challenge the scientific orthodoxy that informs it. By "making the familiar strange" (p. 11) these authors challenge dominant perceptions of the body by

making these sensitivities to the body unfamiliar, unrecognizable or undesirable. Through this framework, kinesiology educators can obtain new insights into how the body is socially constructed in Western societies across boundaries of gender, race, class, age, sexual identity, etc. and dismantle any *a priori* cultural logics and the subsequent, *posteri* disciplinary regimes of the body. Body knowledge must be informed by empirically-based theory; otherwise educational policies and practices are likely to "beget ideology, inequality, poetry, or fascism rather than 'better education' and social democratic ideals" (Evans & Davies, 2004, p. 11). The authors conclude that research and teaching in physical education and health must become more, not less, complex where theory, ideas, and innovation are championed in the curriculum.

Post-structural Methodologies

For kinesiology educators and scholars to understand how body knowledge has been examined in the curriculum, the history and definition of post-structuralism and its predecessor structuralism is needed.

Structuralism

Structuralism argues that "there are deep structures that underlie and generate observable phenomenon and events" (Allan, 2006, p. 315). Smith and Riley (2009) explain structuralism through its five theoretical claims. One, social life, though seemingly disordered and chaotic, can be explained by deep structures or what they call *depth*. Two, this depth is created by institutions like education, the media, and the State. Three, social life can be observed objectively. Four, language orders social life through a

process of signs (the study of which is known as semiotics). Five, human subjectivity (identity) has little to do with production of social life and culture. To clarify, structuralism uses objective methods to explain a social phenomenon which by its own definition makes it anti-humanist and ahistorical. It is anti-humanist in that it repels philosopher Jean Paul Sartre idea of *humanism*, that human thought and experience supersedes scientific knowledge and rationalism. It is ahistorical in that it advocates a synchronic approach to language where a meaning generated through language has universal time. Although structuralism as a term was coined by the French anthropologist Claude Levi-Strauss in the 1950s, it is mostly attributed to the works of Swiss linguist Ferdinand de Saussure. In 1916 his students' posthumously published a series of his lectures under the title of the *Course in General Linguistics.* Considered to be the first book that re-considered linguistics through a semiotic lens, *Course* became the seminal work for the field of structural semiotics (Silverman, 1983).

Structuralism is concerned with the linguistic significance of signs. The study of which is known as *semiotics*, the science of signs. Semiotics originated in ancient Greek philosophies of Plato, Aristotle, and the Stoics and gained prominence in the twentieth century through the writings of Saussure and his American pragmatist counterpart, Charles Sanders Peirce. Saussure's model stressed the two component parts of the sign: the *signifier*, the sound image of the sign, and the *signified*, the concept to which the signifier refers (Chandler, 2002). Saussure argued that the relationship between the signifier and its signified (what he termed *signification*) is arbitrary. For example, there is

no relationship between the word “ball” and the thought it invokes. Saussure believed that language (*langue*) was abstract and pre-existed individual speech (*parole*).

More importantly, for structuralism it was this abstract nature of language that gave primacy to the relationship between the signifier and the signified and determined the horizontal and vertical associations among sign systems and a sign’s value. Signs have *syntagmatic* (horizontal) and *paradigmatic* (vertical) relationships. Syntagmatic relationships are the choices made to signify meaning. Paradigmatic relationships are how these choices are sequenced. To signify ‘race and ability’ in sport, one could chose an image of Kobe Bryant, or one could sequence a series of images of black men leaping through the air and dunking a basketball.

Drawing from the work of linguist Kenneth Pike (1967), structuralists have described two vantage points to meaning-making in language. The outsider or *etic* view describes how meaning is made by an individual who is extrinsic to the culture being observed. The insider or *emic* view refers to how meaning is made by an individual who is intrinsically part of the culture being observed. For example, an outside observer of the sport of rugby football might find the backward pass not meaningful. However, the inside observer gives the backward pass meaning as this pass is one of the most common of several types of passes (e.g., pop, dive, scrum-half, long, pass, spin, lob pass) that advances the ball down the field.

Structuralism was popular in the 1950s and 1960s but it suffered a major setback when Jacques Derrida articulated structuralism’s key weaknesses at the first international

conference on structuralism in 1966 (Lemert, 1990). Derrida cites the four interrelated flaws of structuralism. First, it ignores human *intention* in speech (*parole*). Second, it presumes a pre-destined, one-way communicative relationship between the society and the individual where society is determined and the social individual (the *subject*) is free – overlooking what Michel Bakhtin calls the "dialogic" nature of language. Third, it "strips language of its sociality…at the point of linguistic production, the actual speaking, writing, listening, and reading of concrete social individuals" (Eagleton, 1996, p. 101). Fourth, structuralism views language objectively as "a chain of signs without a subject" – thereby focusing on language and not *discourse* "which involves writing and speaking subjects" (Eagleton, 1996, p. 100). Discourse, which will be explained in greater detail later this is chapter, involves the ways in which the social world is constructed which limits individual thought and action. Its importance for structuralism is that it allowed for lived experiences to be read as 'texts'.

Post-structuralism

To note, post-structuralism is similar to structuralism for it views language as central to how humans make meaning of their social worlds. Today, post-structuralism is most often associated with the work of French philosophers like Michel Foucault, Jacques Derrida, Gilles Deleuze, and Felix Guattari who challenged modern views of knowledge construction, identity, and reality (Seale, 2004). Post-structuralism asserts that individual subjectivity (identity) is constituted through discourses produced by social structures (Mills, 2004). For Saussure, everyday speech practices (or *utterance)* were inconsequential to signification, but to post-structuralists like Foucault these utterances

were significant in that functioned by “internal rules” that were “specific to the discourse itself” (Mills, 2004, p. 43). An example from the field of kinesiology is the discourse surrounding “fatness”. Schwartz, et al. (2003) in a study of weight bias in the fitness and health professionals found that kinesiology professionals were more likely to associate words like “stupid”, “lazy”, and “worthless” to overweight and obese people. Similar studies have shown that kinesiologists often hold this bias towards other professionals in the field (Puhl & Warton, 2007).

A simple examination of kinesiology’s textbooks, academic journals, popular magazines, and organizations readily explains why this bias occurs. Case in point, kinesiology students are taught that there are four components to health-related fitness: muscular strength, muscular endurance, cardiorespiratory endurance, and body composition. That an overweight fitness professional may have healthy, even superior, levels of the muscular strength and endurance, is irrelevant because he or she becomes a product of ‘body composition’ discourses where narratives of ‘thinness’ are privileged over ‘fatness’. Post-structuralism, in contrast to structuralism, exposes the allegedly neutral nature of language. It does this by interrogating what it calls ‘texts’.

Texts

Texts refer to any entity that can be ‘read’. Texts are not limited to words that are written down on a piece of paper. Texts are also aspects of lived experience: the people, the places, the events, and those entities which capture lived experience, such as video and photographs. One example of a text that has been scrutinized in the sociology of

sport literature is the Nancy Kerrigan/Tonya Harding incident. In 1994, Kerrigan, an Olympic figure skater was clubbed in the knee by Harding's ex-husband. Harding planned the attack against her rival. Texts are also intertextual, in that they consistently refer to and substantiate other texts. The aforementioned scientific and popular texts of kinesiology are a few examples. Regulatory knowledge of the body is supported, substantiated, and sustained by undergraduate kinesiology textbooks, organizations like the National Strength and Conditioning Association (NSCA), and popular fitness products like P90x. Texts are infused with discourses. For instance, the Kerrigan/Harding incident generated discourses on the ethics of competition, social class, and media-induced spectacle (Stoloff, 2000).

Discourse

The term discourse is complex and has a number of definitions. A simplistic but common definition of discourse is "written and spoken conversation and the thinking that underlies it" (Johnson, 1995, p. 82). A better, but vaguer, definition is "systems of knowledge and their associated practices" (Seale, 2004, p. 507). A suitable definition of discourse comes from the renowned geographer David Harvey (1996) who proposes that discourse is "the moment of resort to the vast panoply of coded ways available to us for talking about, writing about, and representing the world" (p. 78). Harvey suggests that discourse, as a social practice, is dialectical in nature and is related to but not reducible to what he calls 'moments' in the social process. These moments include power, social relations, material practices, beliefs/values/desires, and institution/ritual.

Michel Foucault (1972), in the *Archaeology of Knowledge*, refers to the social element of discourse as discursive practices. Discursive practices are constructed linguistically and act within spoken and written language to "systematically form the objects of which they speak" (p. 49). For example, the medical discourse on obesity includes measures derived from scientific knowledge like body mass index (BMI) and hip-to-waist ratio measurements. These measures are texts that govern the ways in which medical professionals can speak about obesity. Another discursive practice might be the television program *The Biggest Loser*, where morbidly obese contestants compete to see who loses the most weight. In this case, meaning is created about what is or what is not a normal body. These discursive practices not only 'speak' of the obese body, but in so speaking, create this body. That stated, not all discursive practices are oppressive. One might distinguish a discursive practice from a repetition in that a discursive practice is an enactment of the social 'rules' for thinking or speaking about an entity; whereas a repetition is more often than not an *oppressive* way of thinking, speaking, or behaving about an entity situated in and perpetuated through discourse.

Discourse Analysis and Body Knowledge

Discourse analysis has been the primary mode for interrogating body knowledge in the school curriculum. As Jan Wright (2004) indicates that the purpose of post-structural methodology, like discourse analysis, is to uncover how language creates regularities in meaning that constitute discourses that in turn constitute social realities. Theoretically, discourse analysis is grounded in social constructionism, the idea that social reality is constructed by individuals, groups, and societies. She describes the

merits of discourse analysis for contemplating body knowledge in schools.

> Health and physical education provides a rich site for examining specific relations between schooling, the body and identity (or in post-structuralist terms, subjectivity). It provides a context in which to ask questions such as: How are bodies inscribed with meanings? What part does schooling and physical education play in this process and with what effects? What institutional and cultural discourses are brought into play to construct particular identities and social practices associated with health, sport, physical activity in the context of schools? What kinds of selves/bodies are regarded as normal and what not? Who has the power to determine this and on what authority (discursive or structural) do they draw? (p. 23)

Kinesiology and HPE scholars use discourse analysis to look for the patterns in meaning-making and to examine how these patterns are entrenched in the educational curriculum where students become consumers of its knowledge.

While discourse analysis is a powerful tool for mining the dominant discourses of which bodies are normal and which are not in the curriculum, it also has its limits. First, the power of discourse analysis is its attention towards how meaning is created, replicated and disseminated in society. But this may also be its greatest weakness. Discourse analysis often reduces discourse and discursive practices to ideology and power relations. Second, discourse analysis has been criticized for being anti-individualist and putting too much emphasis on social structures (that pattern human behavior), and too little emphasis on human agency, the capacity for individuals to know what these social structures are doing and act within their best interests (Lopez & Potter, 2005). Third, discourse analysis has been accused of completely rejecting *essentialism*, the doctrine that objects have a natural essence (Sayer, 2000; Cruickshank, 2003; Joseph & Roberts, 2004).

Critical realism scholars like Andrew Sayers (2000) have suggested that while essentialism has its limits, it cannot be rejected wholesale; objects do have an essence as well as accidental properties. He gives the example of game of chess, noting that its essence is its rules. Chess also has accidental properties. The pieces might be made of wood or plastic, or its players could be left-handed or right-handed, but these accidental properties do not change the rules of the game.

Discourse analysis is grounded in social construction, the belief that reality is socially constructed and asserts that any understanding of natural phenomena is not possible without human interpretation. Critics, like López (2003), argue that any methodology that privileges ways of knowing, over ways of being, is limiting in its analysis of social phenomena. In terms of how repetition functions in body knowledge, discourse analysis is limited to translating discursive practices to power relations in schools and the educational curriculum.

Body Knowledge in the Kinesiology Curriculum: Thinking through the Four Faces of Oppression

When designing curricula, kinesiology educators working at colleges and universities must consider the role that oppression plays in determining what bodies are included and which are excluded in the curriculum. Kevin Kumashiro (2003) argues that challenging oppression in schools is full of contradictions because educators, advocating for social justice, cling to some forms of social change while ignoring others. In his theory of anti-oppressive education, Kumashiro (2000) describes the educational research on oppression as four themes or faces: ‘education for the Other’, ‘education about the

Other', 'education that is critical of privileging and othering' and 'education that changes students and society'. He advocates for fourth face contending that the first three, though sometimes useful, can also be harmful in the curriculum. When referring to 'Other', Kumashiro is referring to groups that are considered outside of the mainstream, or "other than the norm" (p. 26), such as lesbians, gays, and transsexuals or those populations have been historically disenfranchised in North American societies like African-Americans in the United States or the First Nations of Canada. How do these 'faces of oppression' intersect with body knowledge? Each 'face' will be considered below in light of current research.

Face 1: Education for the Other

Kumashiro (2000) deems that anti-oppressive educational research, when focusing on the school environment, has conceptualized oppression as either the overt, harmful actions committed by peers, administrators, and teachers against marginalized groups in schools, or that what manifests covertly as "educators' assumptions about/expectations for these marginalized groups" (p. 27). Following, anti-oppressive education's goal is to improve the learning and social environments of students who are thought to be outside of the mainstream. Health-related behaviors including eating disorders, such as anorexia nervosa, occur within the context of schooling (Rich, Holroyd & Evans, 2004). Physical education in places like the US, Canada, and UK place a great amount of emphasis on physical activity, healthy eating, individual control and responsibility for managing one's weight, and equating the healthy body as a slim, 'fit' body (Bordo, 1993; Gard and Wright, 2001).

In their investigation of how educational environments construct body knowledge, Donna Leahy and Lyn Harrison (2004) gathered data from a physical education course in Victoria, Australia. In their findings, they note that physical and health education curricula create discourses of risk in an effort to "shape and produce particular kinds of people" (p. 130). Risk assumes human autonomy and individual responsibility for one's own health and safety (Evans and Davies, 2004). The theorists that are most often associated with risk in modern society are Anthony Giddens and Ulrich Beck. Giddens (1999) argues that risk has become a central tenet of modern society where humans have become preoccupied with safety, while Beck (1992) classifies late modernity as 'risk society' where risk is actually manufactured and mediated by human action. In the context of schooling, educators become health experts and teach students how to self-monitor their behavior including levels and types of physical activity and eating habits (Evans and Davies, 2004). And, as Leahy and Harrison (2004) suggest, this governance of the body requires both educator and student to accept their bodies as being at risk.

According to Kumashiro (2000), educators who believe that educational environments are harmful to non-normative bodies often propose that schools create safe spaces for these bodies, by providing separate therapeutic spaces for them. This might include separate physical education classes based on gender and race, or special intervention programs for those bodies classified as anorexic or obese. This approach to oppression is limited in at least one way. By focusing on negative experiences of marginalized groups, there is unanticipated consequence of representing the bodies of marginalized groups as deviant.

Face 2: Education about the Other

Kumashiro (2000) explains the two ways of thinking that have harmed marginalized groups. The first type of knowledge is the "normal" knowledge of a society, "the way things generally are" and the "normative" knowledge of a society, "the way things ought to be" (p. 31). For example, Michael Gard (2004) offering a critical perspective of the obesity epidemic and body knowledge claims that the much of the scientific research on obesity is flawed but is taught as fact to students. So the assertion that obesity is a global epidemic because "we all are getting fatter, regardless of age, sex, class, ethnicity or nationality" (p. 69) is the type of knowledge that could be considered harmful in a kinesiology curriculum because it produces a normative knowledge of the body that hides difference based on race, class, gender, sexuality, ability and size.

The second type of body knowledge encourages myths and stereotypes of marginalized groups (or marginalized bodies) by not challenging popular misconceptions of these groups (or bodies). Students in undergraduate kinesiology programs are exposed to popular misrepresentations and stereotypes of marginalized groups like gay men, who are depicted via news media, television, and the web as middle-class, white "boys who act 'like girls'" (Kumashiro, 2000, p. 26). Students bring this knowledge with them into the classrooms, where, as Whatley (1992) comments, they will see very few depictions of gay men in health textbooks unless the topic is related to sexually transmitted diseases. Kumashiro (2000) argues that making the experiences of marginalized groups visible in the curriculum can help students come to grips with different ways of being. However, the weakness in this approach to oppression is that students will form partial, incomplete

knowledge of disenfranchised groups and non-normative bodies, in a way that normalizes difference and produces bias.

Face 3: Education that is critical of privileging and 'othering'

Kumashiro (2000) finds that in educational research, oppression is not always theorized from the perspective of marginalization or disenfranchisement. Indeed, some definitions of oppression require a gaze that shifts from the oppressed to the oppressor to determine how some cultural groups are privileged, exalted or normalized over others. Furthermore, how privilege is legitimized and maintained through social structures and competing ideologies is vital to understanding the complexities of oppression. Kimberly Oliver and Rosary Lalik (2004), in their interrogation of whiteness as a normative factor for beauty within a school's hidden curriculum, discovered that "cultural messages of beauty centered on characteristics of the white body as a standard for physical beauty" (p. 116). The researchers studied an annual event named, 'The Beauty Walk', at a pre-dominantly Black school in the southern part of the United States where parents, friends, and family bought tickets to watch 8th grade girls parade around in expensive dresses. As one girl noted, "If the judges are White, a White girl *will* win. If the judges are Black, a Black girl *might* win" (p. 116). Body knowledge, in this case, locates the white female body as the standard for Western notions of beauty. Drawing from Louis Althusser's (1970) concept of *ideological state apparatus* and Antonio Gramsci's (1971) notion of *hegemony*, the idea that the lower classes are complicit with their own oppression through their acceptance of the status quo, Kumashiro (2000) brings to light the role of education

in the dynamics of oppression. As an arbiter for the State, schools transmit 'ruling ideologies' that make the privileges of the few appear to be necessary and normal.

Theorizing oppression from the perspective of privilege lies in shifting one's gaze from the oppressed to the oppressor. Educators often teach body knowledge that is partial and biased, without explicitly stating so, through the formal and hidden curriculum. Kumashiro (2000) claims that despite its strengths, anti-oppressive education that critiques the processes of privilege and 'othering' is complicated. If oppression is structural, then it affects all members of a marginalized group the same; this inculcates the assumption that power comes from the top-down and is pressed upon the oppressed, instead of emphasizing that power is dialectical and requires constant negotiation between the privileged and the oppressed. A second concern is the belief or supposition that knowledge of oppression or privilege incites an individual to action, which, Kumashiro stresses, is not necessarily true. Oliver and Lalik (2004) in discussing their experiences with helping young Black women to recognize the institutionalized racism in the 'Beauty Walk' found this to be the case:

> Though the girls were able to conduct an inquiry project designed to critique this school event, the research fell short of helping them to learn to change the taken-for-granted school practice. We believe that girls need to have opportunities to develop alternative discourses about take-for-granted practices that form the hidden (as well as the official) curriculum. Nevertheless, we wonder if it is helpful for them to develop these discourses without concomitantly developing strategies for political action and structural transformation (pp. 126 – 127).

Face 4: Education that changes students and society

Kumashiro (2000) infers that the three aforementioned approaches to theorizing oppression have dominated the scholarship in anti-oppressive education. In his observation, post-structuralism and its emphasis on how discourse plays a role in constructing dominant ways of thinking about the body may offer a more compelling view of how oppression pervades educational institutions and practices. Most importantly, post-structuralism insists on looking not only for what is said, but what is not said, what is hidden, what is left out. Additionally, post-structuralism goes beyond an awareness of oppressive ideologies, allowing educators to supplement the harmful histories that are generated by stereotypes. Kumashiro (1999) specifically speaks to this through the post-structural designs of *citation* and *supplementation*. Citation refers to the way oppression is created through the "citing of particular discourses, which frame how people think, feel, act, and interact" (p. 40). Supplementation refers to ways of altering harmful histories which are brought into the classroom.

Kumashiro (1999) offers the example of his Asian-American*ness* and the stereotype of the 'model minority'. When invoked this stereotype refers to past iterations of the model minority stereotype, a perpetual reiteration of a linguistic and social practice that creates a harmful history about a group of people that becomes 'commonsense' knowledge. This type of knowledge does harm if the receiver values the speaker's beliefs or judgment. It also disguises the fact that Asian-Americans are minorities and, like other minorities, should have access to affirmative action policies and practices.

Discourses alleviate the social burden of questioning knowledge, especially knowledge of the body in the contexts of sport, physical and health education. Penney and Harris (2004) note that health-related policies stabilize schools by affirming particular discourses of health and closing off others. Specifically, they draw attention to how the HPE curriculum in New Zealand caters to the Päkehä, the descendants of British settlers, through their sanitation of the *hauora*, a concept of the Maori (the indigenous peoples of New Zealand) that honors a holistic approach to health and wellness. While specifying that the *hauora* should be taught in New Zealand schools but leaving it up to educators to discern how it should be taught, this policy allows the Päkehä to re-contextualize Maori body knowledge in a way that suits them and does not alter their own (pre)conceived notions of the Maori body.

Ability and identity within the context of health, physical education and sport are the central tenets of body knowledge. By not destabilizing difference university kinesiology departments leave social hierarchies amongst their students in place. These hierarchies are reinforced through the formal and hidden curriculum which stresses individual autonomy and the self-surveillance of one's body. To counter the oppressiveness of this type of body knowledge, educators who teach with a lens towards social justice must account for their own partial perspectives and question what discourses they bring with them into the classroom and those they leave out.

Re-conceptualizing Body Knowledge in the Kinesiology Curriculum: The Dialectics of Ability, Identity, and Discourse

Since the publication of *Body Knowledge and Control: Studies in Physical Education and Health* (Evans and Davies, 2004), kinesiology scholars within HPE have converged on its principal constructs: *ability* and *identity*. In a special edition of *Sport, Education and Society*, Lori Beckett (2004) describes the state of identity construction and management in health and physical education curricula within western countries such as the United States, New Zealand, Scotland, England and Australia. Much of the work continues and on-going engagement with Bourdieu's engagement with class relations and physical capital perspective, and Michel Foucault's post-structural articulations of discourse and power.

Kinesiology scholars have also sought to demystify ability and its relation to the body from Bourdieusian or Foucauldian frameworks – with some notable exceptions. Ian Wellard (2006a, 2007), while relying on Bourdieu for his analysis of ability, makes the observation that physical ability is often linked to sports that are usually played by boys and ignores the more 'aesthetic sports' like dance. Wright and Burrows (2006) argue persuasively that ability in the HPE curriculum is largely defined through measurable attributes or as a level of access to physical capital. But the authors also extend these claims by interrogating a more recent meaning of ability as *physical literacy*. In their critique of Margaret Whitehead (2001)'s characterization of physical literacy as a person who "moves with poise, economy, and confidence in a wide variety of physically challenging situations" (p. 129), the authors denounce physical literacy's idealism and

lack of social or cultural context:

> On the one hand, Whitehead's definition seems to provide an ideal to work towards…What it doesn't have is any reference to the social and cultural contexts in which we learn and use movement; it does not acknowledge how particular repertoires of being, including movement are socially constructed in relation to gender, class, race, and how particular forms of movement have relevance for particular social and cultural contexts (p. 279).

Recently, Whitehead (2010) has revised her definition of physical literacy to make it more inclusive and culturally sensitive and unrelated to ability. But even the word 'literacy' connotes a standard for ability even if it is more intrinsic than extrinsic.

Although Foucauldian and Bourdieusian theories have been useful in body knowledge research, the concept of body knowledge and how it is constructed in the kinesiology curriculum could benefit from a dialectical-relational approach that does not reduce discourse to forms of power.

Repetitions of Body Knowledge as a Pedagogical Practice

What are repetitions of body knowledge and how are they used as a pedagogical practice for constructing ability and identity within the kinesiology curriculum? Kumashiro (2003), borrowing from Judith Butler (1997), argues that oppression can be characterized as the "repetition in society of regulatory practices, knowledges, and identities" (p. 68). He provides kinesiology educators with the philosophical foundations of these repetitions of regulatory practices, knowledges, and identities through his analysis of Judith Butler's discussion of hate speech. To understand repetition of body

knowledge, one must concede that repetition of regulatory practices, knowledges, and identities (from here on referred to as *repetition*) manifests itself through language and that language has the ability to harm. Hate speech, for example, does not originate in the person speaking the injurious words, because by convention hate speech is pervasive. It circulates through society and does not begin or end with an individual. In this way, hate speech has a seemingly inherent power to seep through the very fabric of a society. It gets its power from its fluidity, its ability to be iterated and, thus, understood in various social and cultural contexts.

Next, in order to understand repetition kinesiology educators must believe that language brings bodies into being. In other words, language does not describe what already exists. Instead, the body is *interprellated* through language. Butler (1997) borrows her use of the term from Louis Althusser (1972) who provides us with the example of a police officer who calls out, 'Hey, you there', in a busy intersection and everyone turns around. The police officer is given the authority to make the call by the power of the state. The 'you' the officer addresses does not exist before the call is made, but when the call is made, the 'you' becomes recognizable to bystanders. In order for a particular body to exist, it must be hailed by an authoritative power, and must be recognized by the person who is being hailed. Althusser further comments that it is ideology created by the state and its provisions that produces bodies. Ideology can be thought of as a "set of generalized and common beliefs that make people act as if the circumstances and contexts of their lives were natural and unchangeable" (Fernàndez-Balboa & Muros, 2006). Butler (1997) amends Althusser by stating that bystander

recognition is not needed in the hailing process because discourse calls bodies into being. For example, medical discourses that assert a certain range of body fat is 'normal' weight bring normative (e.g. slim) bodies into being without the consent or appropriation of those bodies it deems as normal.

Repetition is more than circulating speech acts or bringing bodies into being through language. Repetition is laden with cultural values. Butler (1997) draws attention to this through her analysis of Pierre Bourdieu's concept of *habitus*, a set of bodily dispositions an individual acquires as a result of social class standing. From a Bourdieusian perspective, kinesiology educators have a particular habitus that promotes engagement in, or watching, particular physical activities that are deemed worthy of participation by their social class. Sports like tennis or golf, or individual activities like weight training, are examples of 'lifestyle sports' valued by middle-class professional men (Wheaton, 2004). Butler troubles this perspective by speaking against what she calls interminable focus on the utterer in hate speech. For example, Butler would state the idea that a kinesiology educator who participates in leisure activities like golf that are entrenched with middle-class values is not enough to explain repetition. In other words, to understand how repetition is repeated goes beyond the individual who is actually speaking. Butler extends Bourdieu's definition of habitus by stating habitus is not just "how norms become embodied" but it is also a "cultural style of gesture and bearing" (p. 142). These cultural styles play out in undergraduate kinesiology classrooms where concepts, like exercise, are taught from a seemingly neutral position, but, in reality, are imbued with middle-class values. The very act of teaching a concept like

exercise requires a pre-existing cultural acceptance of the definition of exercise as an intentional physical activity that is "planned, structured, repetitive intended to specifically to improve or maintain physical fitness" (Fahey, 2011, p. 28). However, it does not require that exercise should occur within a semi-structured environment like a gym or fitness center under the supervision of a certified fitness professional, which is only accessible to those who can afford the membership fee. That there are both denotative and connotative definitions of exercise in the field of kinesiology illustrates how the cultural posturing of the middle-to-upper class goes unforeseen in a kinesiology curriculum.

Furthermore, the re-appropriation of language is central to Butler's (1997) rendering of repetition. Following Jacques Derrida's (1988) theory of *iterability*, which assumes that power of language rests in its ability to be repeated and understood in different contexts, Butler notes that for language to become conventional it must have the power to decontextualize, or break, with prior contexts and re-contextualize and assume new contexts. In the case of hate speech, when a disenfranchised group takes on the language of the oppressor, it has the possibility of opening up new meanings, transgressions, and possibilities. For example, some physical education scholars have argued that Western culture's contextualization of fatness as the ratio of 'energy in' versus 'energy out' eclipses other ways of talking about size (Gard and Wright, 2001), but thinking about fatness as something other than kilojoules consumed and burned can bring about alternate insights into bodies and how we come to know them as embodied and 'able' entities (Aphramor and Gingas, 2009).

Repetition, in Butler's (1993) view, is inextricably tied to normative constructions of identity, particularly social constructions of gender. Repetition of one's gender is a performative, discursive practice that delimits gender expression to constrained cultural norms. Through these limitations, bodies are capable of surfacing, becoming intelligible and being represented. Butler advises that we must distinguish between an individual's material being and that individual's identity (or subjectivity), which is invoked through gendered discourses. In sport, the masculine subject supersedes all representations of sporting bodies but it does so through its construction of the feminine. The object known as the feminine is a free-floating signifier that can be placed on *any* body within the context of sport. The ordeal of retired international footballer Graeme Le Saux who played for English national team during the 1990s is one example of ambiguities and fluidity of gendered repetitions and its power to invoke alterity. Le Saux, who married a woman and identifies as heterosexual, was constantly taunted for being gay by fellow teammates and competitors because he was sensitive, university-educated and read *The Guardian*, a leftist newspaper. In his biography he recalls an incident that occurred in 1999 while playing for Chelsea where he punched Robbie Fowler, a Liverpool player, after Fowler kept bending over in front of Le Saux and jeering him during the match (Le Saux & Holt, 2007). The feminine placed upon the body of Le Saux, through Fowler's performative act, supplanted Le Saux's professed heterosexuality and destabilized his own masculine identity and (perceived) athletic ability within professional sport. Due to this incident, Le Saux commented that he often felt like an outsider and experienced immense relief when he retired.

Representing identities and abilities in the kinesiology curriculum through visual or other means is not without its problems. To Butler (2004), identity categories are problematic as they suggest a totality, a whole and stable identity that disavows other identities. For example, Butler's identity as lesbian sets into motion a series of avowals and disavowals including the supreme disavowal, "I am not straight". Stating that "I am a lesbian" is not enough because it calls into question what is a lesbian and who defines lesbian. Butler asserts that this proclamation makes lesbian sexuality a derivative to heterosexuality by privileging heterosexuality as the sexuality of origin, one that does not need to be proclaimed. The totality of identity and ability is not immune within the kinesiology curriculum where non-normative identities and abilities are pronounced and simultaneously disavowed.

Butler (1999) further contends that gendered performances (what she names *performativity*) cannot be theorized apart from heterosexuality as it "operates to circumscribe and counter the 'materiality' of sex and that 'materiality' is formed and sustained through as a materialization of regulatory norms that are in part of those of heterosexual hegemony" (p. 15). It is this stylized repetition of bodily acts that bring seemingly durable gender identities into a material being. The materiality of which Butler speaks is not the fixed or stable identities that are inscribed on these bodies; it is the reiterative process that over time creates normative and (in terms of body knowledge) fixed boundaries of physical ability and identity that become heteronormative in nature. Butler dismantles the essential/anti-essential debate through her theory of materialization of bodies. As Annmie Halseman (2006) states:

> Butler's notions of performativity and materialization of sex aim at defining gender by avoiding essentialism, and by also escaping the opposite pole of constructivism. Already in the *Variations on Sex and Gender* (1987) and also in *Gender Trouble* (1990), Butler undermines the distinction of sex and gender which for so long has been dominated in Anglo-American feminist theory. Stressing the radical discontinuity of sexed bodies and culturally constructed genders, she concludes that the binarity of sex does not necessarily lead to the assuming the binarity of gender. When gender is theorized as radically independent of sex, it becomes a free-floating artifice instead. And what is more, sex probably is culturally constructed as gender: the so-called natural facts of sex seem to be discursively produced by various scientific discourses (p. 155).

If sex is culturally constructed as gender and gender is inextricably tied to a heterosexual hegemony, repetition, in Butler's view, cannot be theorized outside of sexuality.

Although gender and sexuality are crucial to understanding repetitions in body knowledge, it should be noted that repetition has a long history in the discipline of philosophy. Philosophers like Soren Kierkegaard, David Hume, Friedrich Nietzsche and Gilles Deleuze have all theorized on the concept of repetition. For French poststructuralist Gilles Deleuze (1994), repetition is less a materialization of bodies across time, and more a way to understanding how difference is relegated to sameness. Deleuze, citing 18th century historian David Hume, asserts that no pure repetition is exactly the same as its prior iteration. While Butler speaks of repetition primarily in terms of gendered performance and the ways it can be subverted and re-signified through parody, Deleuze argues that there are three types of repetitions: cyclical, linear, and eternal. The first two repetitions relegate difference to similarity, analogy, resemblance, and/or equivalence where the only means to understanding difference is by comparing it

to something else. *Cyclical repetitions* are those repetitions that happen on a cycle, like the changes of season. *Linear repetitions* are those repetitions that reconcile present experience with a past memory. As a dominant mode of Western thought, these repetitions yield endless comparisons of one object to its relationship with another object. For example, a woman is different from a man only to the point that she resembles him.

The third type of repetition Deleuze is a broadening of Friedrich Nietzsche's concept of the *eternal return*. Simply put, the eternal return is a future repetition, a pure repetition that enacts possible futures, what may become, an emergence, where difference exists within itself. This third repetition, unlike its former two, does not create static gender or sexual identities. It is not identity. Instead this form of repetition is shades of intensity, ebbs and flows, and affect, where any sort of identity 'coherence' is really an illusion, as it socially positions bodies through a system of binary identities like woman/man, gay/straight, rich/poor, and black/white.

Feminist theorists like Rosi Braidotti (1994) and Jasbir Puar (2007) have found Deleuzian theory of difference and repetition a useful analytic for unpacking gendered and sexualized bodies. For example, Puar argues that 'sexual exceptionalism' has become part of American politics and solidarity where some individuals of marginalized groups, specifically gay men, are used as representations of American heroism. She notes that Mark Bingham, who died on September 11, 2001 is one such example. Bingham is credited with being one of the passengers who helped to bring down U.S. Airlines Flight 93 over Shanksville, Pennsylvania during a terrorist attack on the United States. Senator John McCain known for his conservative political views and opposition to gay marriage

honored Bingham by presenting a folded American flag to his lover, Paul Holmes, during a ceremony in San Francisco for 9/11 victims. Bingham was portrayed in the media as 6'4", 225lb business man, and former collegiate rugby player who helped save American lives (King, 2009). By focusing more on Bingham's masculinity and less on his sexual identity, the news media, both mainstream and gay, created an ideal gay subject, one who is white, masculine, middle class and fights for American freedom.

Similar stories have been written about Gareth Thomas, a Welsh professional rugby union player, who publicly announced his homosexuality in 2009 while still playing, and Ian Roberts, a retired professional Australian rugby league player, who came out in 1995 after he stopped playing. An article in Sports Illustrated described the 6'3" Thomas as "225 pounds of muscle…who has broken his nose five times, fractured both shoulders and lost eight teeth" (Smith, 2010). Likewise, Toby Miller (1998) notes Roberts was well-known for his "bone-crunching hits" (p. 441) on the rugby pitch and for starting fights in bars. The performative repetition of white men, who act 'bad ass', but are gay, engenders a homonormative subject created from Western heteronormative ideals. Puar (2007) troubles this homonormative subject by questioning static identities and their intersections (e.g. race, gender, class, and sexuality) and proposing a different sort of positioning of bodies, one that does not rely on equivalence and analogy for its logic of difference.

Repetition as an analytical tool for body knowledge can help researchers trouble visual representations of identity and ability, Theorizing on the repetitions of body knowledge that occur in the kinesiology curriculum can illuminate how types of physical

ability become naturalized, prescribed, or inscribed upon particular bodies but remain elusive to others. It might also explain how ability and identity are gendered in physical education and health curricula. How repetitions of body knowledge are manifested and transmitted within the curriculum should be of interest to educators. One could trace the history of women's achievements in U.S. sport, for instance, and focus on athletes like former Olympian Mildred "Babe" Didrikson-Zaharias, or Kathrine Switzer, the first woman to officially run the Boston Marathon.

Kinesiology educators and scholars might find repetition useful for citing and supplementing repetitions of body knowledge that foster *inert knowledge* of the body, the kind of knowledge that a learner can express but does not know how to use. Judith Rink (2007) draws attention to the curricula implications for body knowledge within kinesiology when she refers to undergraduate students who can define the Krebs cycle but are unable to design an effective cardiorespiratory endurance program. She blames overspecialization in the subdisciplines for this phenomenon. In a society where knowledge is seen as a competitive advantage that potentially yields the greatest economic benefits to those who not only compete but innovate, it is easy to see why many kinesiology doctoral programs are becoming increasingly specialized and knowledge within the discipline is becoming increasingly fragmented.

For repetition to succeed it must be communicated through language (e.g. discourse), must be understood across different linguistic contexts (e.g. intertextual), and must be culturally desirable or attainable (e.g. hegemony, physical capital). Repetition operates through language and brings certain bodies, identities, and lifestyles into being

and closes off others. As such, most repetitions are not neutral. They are replete with ideology and power, and laden with cultural values that advocate or resist particular ways of being, acting, and interacting in society. The power of repetition lies in its ability to break with its current context and assume new contexts. Repetition requires constant negotiation and regulation and therefore is capable of ruptures and fractures that allow for agency, or new ways of thinking about or conceptualizing the active body in sport, physical education, and health. Educators can use this to their advantage in opening up new insights about the body and derailing those that are oppressive. Reframing the discourses on gender in sport is a prime example of the pedagogical need to explore how body knowledge is disseminated within the core curriculum.

In order for kinesiology educators to combat the repetitions that privilege partial body knowledge, we must create curricular and pedagogical spaces that work against them. It is important to note that Kumashiro (2003) does not think all repetitions are harmful and some forms of repetition can be useful in promoting social justice. That said, educators, who see themselves as proponents of social justice in physical and health education, must be cognizant of their internal biases and allegiances that privilege the specific paradigms of social justice education such as multiculturalism, critical pedagogy, postcolonial studies, or critical race theory while ignoring others. Kumashiro (2003) provides physical educators with practical ways of working against harmful repetitions. He argues that "oppression can be often characterized by the repetition in society of regulatory identities, knowledges, and practices" (p. 46). These regulatory practices, knowledges, and identities are not immune to educators who work from a social justice

lens in their teaching, research, and community engagement efforts. For example, cultural competence, which has the goal of encouraging dominant groups sensitive to the needs of others, is becoming the newest way of thinking through cultural difference in sports medicine (Cartwright & Shingles, 2011), sport psychology (Schinke & Hanrahan, 2009; Hanrahan & Andersen, 2011), and health (Hark, DeLisser, & Morrison, 2009). While useful for bringing light to cultural differences in sport and health, even cultural competence as knowledge paradigm has its limits.

Moreover, that cultural competence is beneficial just because it exposes commonsense knowledge purported by mainstream groups by making this knowledge appear 'not-so common', it does not allay the fact that cultural competence is partial knowledge and when used inappropriately has the potential to stereotype and create normalcy amongst members of marginalized groups. The repetition about gay men in sport which emphasizes 'gay male athletes are just like the straight counterparts except for whom they chose to sleep with' creates this type of exceptionalism, a dual process of both emancipating gay and bisexual men in sport and demarcating these men from other, apparently lesser able, gay and bisexual men who do not actively participate in sport.

Kumashiro (2003) tells us that students bring an array of identities and life experiences to the classroom. However, as previously stated, there are some identities and experiences which are privileged in the curriculum and the learning process. In terms of body knowledge and physical education curricula, educators create learning spaces that oftentimes gender (Garrett, 2004), race (Oliver and Lalik, 2004), class (Kirk, 2001), sexualize (Clarke, 2004), mobilize (Sparkes, 2004), and historicize (Kirk, 2004) bodies in

ways that document and privilege the experiences of white male able-bodied heterosexuals. However, replacing this body with other, marginalized bodies is problematic. Britzman (1998) makes it clear that students want to see their identities and experiences reflected back to them in the classroom. They want their identities affirmed. They need to know that who they are and what they have come to know about themselves will be represented in the classroom. But to have their identities and knowledge of themselves repeated in the curriculum poses at least three problems according to Kumashiro (2003). First, students resist thinking about themselves in different ways. Second, students resist alternative methods of teaching. And third, students resist diverse approaches to learning or acquiring new knowledge.

Kumashiro (2003) poses the examples of race, cultural relevance, and traditional teaching methods to illustrate how repetition plays a factor in how students construct and reflect their identities in the teaching and learning process. He assigned a course reading that depicted the experiences of Asian-American students in an urban high school and asked his students to discuss interracial relations in schools. The students could not resist the repetition that race in the United States is a 'black/white' issue and wanted to draw solely from this dominant framework of race relations. Moreover, students in another course felt that unless the course content reflected their own experiences it was not culturally relevant and therefore, not good teaching. In the third case, Kumashiro asked his students to journal on their experiences within a local community setting. The students were uncomfortable with this process because they felt the course readings did not address what they had been observing in their field experiences.

Applying these observations to the present study, if educators want to students to learn something they do not already know, or think about their identities and abilities as fluid and contextual, it is incumbent for us to teach against the dominant paradigms or repetitions of body knowledge that make for easy translations from one domain of body knowledge to another. The limits of equating weight difference to gender difference, for instance, create potential slippages or gaps in how students will come to view their bodies and the bodies of others. Said in another way, if educators constantly use a 'fat/thin' binary to talk about female bodies in sport, little knowledge may be gained because students, using prior and incomplete knowledge will make certain assumptions about what determines fatness or thinness. Instead kinesiology educators can decontextualize the dominant stories of body knowledge and re-contextualize these narratives in a way that makes the familiar strange. Asking students to write about fatness or thinness as poetry in women's sport and not 'energy in/energy out' is just one example. Displacing what students already know by asking them to shift their thinking and letting them experience that what they do not know is a means of teaching towards and against partial knowledge.

Kumashiro (2003) denotes that it is not just students who cling to partial and repetitive knowledge. While educators may decry the banking concept of education that Paulo Freire (1970) critiqued in *Pedagogy of the Oppressed*, many still teach from the standpoint of knowledge in/knowledge out, teacher as expert, and student as novice learner. Kumashiro (2003) admits that teaching specific knowledge and skills builds a student's cultural capital in today's economy. However, he also insists that assumptions

or presumptions about what students should know closes off other possibilities in the teaching and learning process. Educators, like students, have incomplete knowledge. Kumashiro feels that educators should guard against using rationality to have students formulate awareness of, or to challenge oppression. Ellsworth (1992) states that this approach is ineffectual because students are not detached observers. They are invested in their identities, experiences, and prior knowledge. Having students read articles and then sit around in class and discuss them does little to counter repetition in the teaching process. Students are entrenched in this process already. They expect it. A seeming paradox results in physical education when educators rely solely on these traditional classroom lecture or seminar techniques to teach body knowledge.

Through a restating of Ellsworth (1997), Kumashiro (2003) detaches rationality from the teaching process by inviting students to engage in "multiple and fluid ways of learning" (p. 54). Instead of the lock-and-step process that assumes a one-size-fits-all model of teaching, educators should design teaching environments that allows students to reflexively learn novel things, and unlearn the things they have come to know, in a way that does not privilege the teacher's authority. This might mean working against the repetition of scientific writing as the only legitimate style of writing in the physical education classroom and allowing students to explore their conceptions of body knowledge through what Laurel Richardson (2000) calls 'creative analytic practices'. Using literary approaches such as evocative writing, visual narratives, or poetic representation, students can convey their knowledge of the body that works against

repetition, what they already know, and allow them to see their bodies, and the bodies of others, in new and innovative ways.

Visual Storytelling as a Pedagogical Practice

Consider the use of visual storytelling as a pedagogical practice for teaching against repetitions in body knowledge that occur within a kinesiology curriculum. The term visual storytelling implies two things. First, it assumes that a visual story has a narrative function, a linear coherent plot with a beginning, middle, and an end. Second, the term dispels the notion that all stories are told orally or through traditional forms of writing. It insists that stories can be told using elements like charts, graphics, pictures, drawings, or photographs. Visual narratives, like other means of storytelling, are all around us, instructing us, creating histories, giving us our current perspectives, and generating potential futures. The billboards we see when driving along the highway, the television commercials we watch between segments of a favorite television shows, or the videos we watch on YouTube™ are but a few examples of the visual narratives that we experience in our everyday lives.

Eisner (1996) deems that there are five major types of visual narratives. The first type is the 'how-to' story. These stories use visuals to teach a skill. The second type is the plot-less story. These stories have simple plots and use grandiose imagery or special effects to hide that fact. The third type, the illustrated story, relies heavily on written text that is decorated with imagery. In the symbolistic story, the fourth type, images are used as symbols, or signs, to describe something else, or to express particular values, views, or

ideologies. The slice-of-life story, the fifth type, examines a segment of the human experience.

Eisner (2008) argues that humans have an innate tendency for wanting to tell stories but the actual act of storytelling requires skill. He asserts that all stories have a structure, a framework that holds the story together, despite its medium (e.g. oral, written, or visual). The function of a story is to convey information, take abstract ideas, like scientific knowledge, and make them concrete, palatable, absorbable. He proposes that stories can be told with words, images, or a combination thereof, and emphasizes that stories told using visual narratives, like graphics or other images, must deal with the problem of transmission. How the story is told through images will influence not only how the story is understood but the actual story itself. When images are used as narrative tools they sometimes produce conventions that lead to stereotyping of certain groups of people through visual portrayals of how they behave, identify, and interact within the broader society or cultural milieu.

Eisner (2008) finds stereotypical images to be a mainstay in some visual narratives, like comic books and cartoons, because the characters are often drawn from stereotypes based on "commonly accepted physical characteristics" (p. 18). These physical characteristics become standards of reference for the visual narrative where, for example, heroism is typically associated with a male protagonist with Anglo features and a slim, muscular body. Since these visual narratives have very little time for character

development, the creator usually presents a character that is culturally recognizable or familiar with the viewing audience.

In this way, we, as 'readers' of the image, invest power in it. I use the term 'reader' to call into question how images are not viewed, but read and interpreted, by the viewer. More to the point, Foucault would contend that any visual representation of body knowledge is replete with power relations as knowledge of the body exists prior to its representation (Fuery and Fuery, 2003). Said in another way, what makes a visual representation of the body possible are the ideologies that exists prior to any representation. This knowledge has an exacting force on the types of representations that are permitted and those that are disavowed. In *Discipline and Punish: A Birth of a Prison*, Foucault (1979) accounts for the various institutions that bring bodies into being. He uses the example of a public execution to undermine scientific knowledge of the body as the end-all for understanding the body and its functions. Foucault asserts that the purpose of knowledge is to control the body and make it docile to knowledge's demands. The twofold purpose of a public execution is to create a spectacle of the body (and its physical limits) and to instill fear of the State. How bodies are depicted visually circumscribe the reader's knowledge of the body. This circumscription dictates societally appropriate ways of acting in society and the consequences for the 'deviant' behavior.

What types of visual narratives will students chose to tell? What repetitions will emerge from theses narratives, and will their narratives replicate cultural or curricular representations of the body, or both?

In conclusion, kinesiology educators can resist teaching the partial body knowledge that produces harmful repetitions in the classroom. Working against regulatory identities, knowledges, and practices that deem some bodies as normal and other bodies as deviant offers the promise of fuller insights into the body in motion. Students need to know that all knowledge is partial and that how they come to understand themselves and their own bodies can hinder the learning process. Furthermore, traditional teaching methods which exalt the teacher as expert knower and the student as novice knower close off many pedagogical possibilities, including the use of creative means for students to inquire into the body and knowledge of it, in the contexts of sport, physical education, and health.

Chapter Summary

Body knowledge in Western culture is determined by two perspectives. One emphasizes scientific knowledge that dissects the physical body and views it as a productive resource under capitalism. The other focuses on social and class hierarchies (e.g. physical capital) that create a socially-acceptable standard that everyone should try and attain. If you fail, you are labeled as deviant or 'other'. Although both perspectives are useful in particular contexts, each creates partial body knowledge that when repeating over and over again as universal truths engenders partial views of the body. Kinesiology educators who teach at the university-level should recognize their own internal biases and realize that they, like their students, only have partial knowledge. This is not to suggest that educators know less than their students. It is only stands to reason that making assumptions about what students need to know is problematic because it creates a one-

size-fits-all solution when teaching about ability and identity within the curriculum. Taking on novel approaches to teaching that allows students to construct knowledge of the body in non-traditional ways, like visual narratives, may open up possibilities for countering repetitions in body knowledge, but even these pedagogical strategies run the risk of marginalizing bodies.

CHAPTER III

METHODOLOGY

This primary aim of this study was to analyze visual narratives created by students enrolled in undergraduate kinesiology programs. Students created the visual narratives as part of a major assignment in two sections of a history and philosophy of sport and physical education course and in one section of a sport sociology course. This study had three research questions and one practical purpose. One, how did students chose to tell their stories, what images and storylines were included and which were left out? In other words, what repetitive or reoccurring themes about the body in the contexts of fitness, physical education and sport emerged from these visual narratives? Two, how did these repetitions construct knowledge of active body and what were the obstacles to addressing them? In other words, did the students select images or themes that overemphasized particular gender, racial, or economic groups, or body sizes and if so what are potential road blocks to remedying them? Three, why are these repetitions of body knowledge needed? After addressing these three questions, this study aimed to provide kinesiology educators with practical pedagogical strategies for addressing (visual) repetitions of body knowledge in the curriculum. This chapter describes the techniques used to analyze visual narratives. The first part of this chapter discusses critical discourse analysis (CDA), the methodological framework used in this study and critical realism, its underlying philosophy. The second part bounds the sites, participants,

data sources, the researcher's role, trustworthiness and ethical concerns and the findings of this study.

Critical Discourse Analysis and Body Knowledge

This study relied on critical discourse analysis (CDA) as the methodological framework for its analysis. CDA has roots in the fields of anthropology, philosophy, literary studies, semiotics, and rhetoric, and it investigates how the hidden meanings of everyday life are generated through language creating 'commonsense' knowledge that governs appropriate ways of being, acting, and interacting in society. According to Wodak and Meyer (2009), there are several CDA approaches for analyzing discourse including socio-cognitive approaches, discourse-historical approaches, and Foucauldian analyses. The authors also claim that across these approaches CDA has six main research agendas: (1) understanding and explaining the impact of knowledge-based economies (KBE) on societies, (2) integrating cognitive approaches, (3) understanding new occurrences in Western political systems, (4) analyzing the impact of new media and multimodality – the blending of image, words, and sound as an emerging form of communication, (5) explaining CDA's relationship to history and the role history plays in discourse and identity and (6) integrating quantitative with qualitative methods in CDA.

Genres, styles and discourses

Fairclough (2009) through an extrapolation of M.A.K. Halliday's (1978) systemic functional linguistics model, argues multimodal signs have ideational, interpersonal, and textual functions that determine *genres* (ways of acting in their semiotic aspect), *styles*

(ways of identifying in their semiotic aspect), and *discourses* (ways of representing in their semiotic aspect). Applied to visual storytelling, the textual function describes the context in which the story is being told, the bringing together or image, sound, and text that makes the story recognizable as a photo story on YouTube™ in contrast to a motion film or TV commercial. The ideational function uncovers the 'hows' and 'whys' of textual representation (e.g. childhood obesity is caused by lack of physical education in schools). The interpersonal function analyzes the interaction between the text and the viewer. As a unit of analysis, a visual narrative may reify or challenge cultural appropriates ways of being and identifying. Thus, the stories students produce may represent how they perceive ability and identity within the contexts of sport, fitness and physical education.

Genres, styles and discourses are the theoretical foundations for CDA's framework. Although these concepts may be useful for understanding how students conceive body knowledge in their ways of telling or retelling tales of sport, physical education and fitness, Fairclough has not systematically addressed how these concepts can be used to interrogate or 'read' multimodal texts. However, CDA as an analytical framework does consider the semiotic nature of the object under investigation. In other words, how does the text (or object under investigation) produce meaning? With this in mind this study supplemented Fairclough's framework with the current visual methodology research on semiotics. Much of visual research argues that the semiotic nature of an image can be found in its paradigms and syntagms (Spencer, 2011). A *paradigm* is "the choices from a lexicon or cultural repertoire of words, images, or other

sign vehicles" and the *syntagm* is the "sequences which are put together from these elements" (Spencer, 2011, p. 146). In this study, the paradigms are the choices students made in selecting images for their narratives and the syntagms are how these choices relate to one another.

Critical realism

CDA has its foundations in dialectical critical realism, a philosophy of science that approaches social phenomena from a multi-tiered ontology. In this way, CDA opens up new possibilities for explaining how repetition functions to communicate body knowledge. Critical realism claims that ways of knowing within social worlds cannot solely be reduced to social constructions and thus explanatory critiques of social phenomena have an emancipatory potential for human agency.

Unlike most discourse analysis (DA) frameworks, CDA asserts there is a natural world that exists outside of human knowledge of it. Roy Bhaskar (1975) calls this the intransitive and transitive objects of reality. For Bhaskar, reality is what it is. It is intransitive. Many scholars, including those in kinesiology subdisciplines, seek to explain the nature of reality through transitive objects like metaphors, theories, and paradigms. CDA differs from DA in that discourse analysis is contextually dependent on the ways in which knowledge is socially constructed. CDA acknowledges the social construction of knowledge, but further argues that humans may not always be aware of all the structural limitations or capabilities of social and natural worlds (Sayer, 2000). Moreover, not all social constructions reflect reality. For example, David Ayers (2010) comments "a

critical realist epistemology does not give in to a naïve, judgmental relativism in which all social constructions of reality are equally valid" (p. 7). Critical realism rejects the relativism that truth is relative to a particular individual or social group and insists that truths exist outside of human knowledge or belief systems.

José Lopez (2003) remarks that critical realism as a philosophy of science has implications for scientific practice because it allows scholars and educators to recognize that nature will continue to exist outside of empirical observations. Consequently, researchers who use critical realist approaches steer away from finding "universal laws" (even though they may exist) and instead look for 'tendencies' which produce our social and natural worlds. In order to do this, scholars must adhere to critical realism's stratified ontology. Lopez (2003) extrapolates:

> It is important to distinguish between the empirical (those events which we are able to capture empirically), the actual (those events that do happen though they may go unnoticed), and the real, which includes the previous two as well as the realm of potential events that the interaction of different types of causal mechanisms may produce. (p. 77)

Critical realism's stratified ontology of the *empirical*, the *actual*, and the *real* permits kinesiologists to think through the complexities of body knowledge (and its repetitions) within the curriculum. Instead of looking for 'universal truths' about how the body is signified in the curriculum, educators and scholars can pay attention to the tendencies (the temporal, spatial, and cultural contexts) that oppresses some bodies. How students replicate body knowledge in the classroom has major implications for the curriculum. Which repetitions of body knowledge are likely to occur in the narratives that

students' create? And what do these narratives say about the active or skilled body in sport and physical education? Moreover, what students really think about bodies might be different from how they visually render them. How particular (visual) repetitions become actualized while others do not should be of interest to kinesiology educators and scholars.

Dialectical relations

CDA's dialectical-relational approach argues that social practices exist in many forms including discourse, individual beliefs, and intergroup social relations. The meaning-making process that is a part of any discourse stems from other social elements such as social relations, material practices, power, institution/ritual, and individual thoughts, beliefs, values and desires (Harvey, 1996). CDA's framework asserts that these social elements are interrelated but are not *reducible* to one other. By this CDA suggests that a social element such as discourse cannot fully explain other social elements such as individual thoughts, beliefs, and desires. For instance, discourses that promote healthy ways of eating as a solution for the obesity epidemic is related to, but cannot be fully explained by, how individuals think of food consumption and their body weight. There are other matters that can be considered. What about the individual's peer group and family eating habits, or having the income to purchase healthier food choices, or having the leisure time to engage in physical activity (Taylor, Poston, Jones & Kraft, 2006). In Western capitalist economies, however, the discourses that are given the most credibility stress individual autonomy and responsibility (Jessop, 2008) for one's body.

CDA asserts that social practices are dialectical. Harvey (1996) cites what he calls the six 'moments' of any social practice: discourse, power, social relations, material practices, beliefs/values/desires and institution/rituals. Each moment internalizes the other but is not reducible to the other. Each moment flows into the other and is embedded in social and material life. If each moment internalizes the other and is interwoven in the fabric of social life, the ways in which we must come to understand these moments is by translating their effects upon things like human agency and emancipation. Harvey (1996) defines discourses as the powerful ways in which the world is represented that "express human thought, fantasy, and desires" (p. 80). As a social practice, discourse occurs in institutions, is constrained by the material world and is manifested by way of social and power relations. The limits of discourse as an analytical tool for understanding a social practice, like body knowledge, lies in the dialectic of *translation* where one assumes erroneously what is said *becomes* what is done. As Harvey (1996) states, " translation from, say, what is being desired to what is being said, done, institutionalized, etc., is fraught with dangers and difficulties" (p. 80) . Therefore, hegemonic or counterhegemonic discourses of the body, though powerful, may not change or effect an individual's beliefs, values or desires about the body. There may be other things to consider like material and social relations. When interrogating body knowledge in the curriculum, kinesiology scholars and educators must be aware of this potential slippage.

Kinesiology educators can begin to understand how body knowledge is communicated within the curriculum by applying dialectical thinking to their teaching

agendas. David Harvey (1996) outlines the eleven elements of dialectical thinking: (1) it highlights systems, identifies the things or entities which compose them, and asks how these entities relate to one another; (2) it proposes that entities are constituted and sustained through flows; (3) it believes that entities are reducible to the complex processes that constitute them; (4) it maintains that entities are heterogeneous, internalize other entities, but are not reducible to them; (5) it attests that processes construct and operate within their own space and time; (6) it infers that wholes and parts mutually constitute each other; (7) thereby interchanging the relationship between cause and effect; (8) it asserts that transformation comes when the contradictions between systems and their entities confront each other; (9) it underscores that change is a part of all systems; (10) it views itself as a process that brings about new concepts, theories, and knowledge structures; and (11) it relies on a process of emergence and attempts to explore all "possible worlds" (p. 75).

Applying this dialectical thinking to body knowledge, kinesiology educators can attend to how knowledge of the body is a complex system of processes that creates its own cultural and social spaces, enduring, but constantly changing, where *physical ability* and *athletic identity* internalize each other but are not reducible to one another, as each mutually constitutes the other. For example, changes in a person's physical ability might affect that person's identity as an athlete (and vice versa) but what constitutes physical ability or athletic identity will vary from person to person. When what one 'knows' about bodies contradicts their emergent abilities and identifications, transformation

occurs. Kinesiology educators should explore the multiplicities of "possible worlds" that a dialectical engagement with body knowledge creates.

Visual analysis

CDA is also valuable for tool for visual analysis. Kinesiology educators can use CDA to examine the paradigmatic and syntagmatic codes that occur in visual narratives. As a reminder, the paradigms are the image choices students make in their narratives and the syntagms are how these choices relate to one another. Stephen Spencer (2011) defines the paradigm as "the choices from a lexicon or cultural repertoire of words, images, or other sign vehicles" and the syntagm as "sequences which are put together from these elements" (p. 146). The image choices made by students to tell their stories offers a glimpse into how they construct knowledge of the active body. Additionally, how the images are stitched or sequenced together to tell the story reflects how body knowledge is repeated within and across the narratives.

Explanatory critique

CDA borrows from Bhaskar's (2009) explanatory critique by taking an object of analysis and moving it through four analytical stages. In the first stage, the researcher considers the semiotic nature of the object under analysis. Semiotics refers to the representations of objects in society, their paradigmatic and syntagmatic relationships. Oftentimes the object under analysis concerns a social wrong that can be approached in a transdisciplinary way. In the second stage, the researcher focuses on obstacles to addressing the social wrong. In this stage, the researcher examines the discursive and

non-discursive aspects of the social wrong, selects the texts that constitute the problem, and carries out the analysis on the texts. In the third stage, the researcher considers why the problem is needed to maintain the *status quo*. The point of this stage is to move the research from 'what is' to 'what ought to be'. In the fourth stage, the researcher provides potential solutions for moving beyond the obstacles.

Translated to this study, I sought to explain visual repetitions of body knowledge with three questions and one aim. One, how did students chose to tell their stories, what images and storylines were included and which were left out? In other words, what repetitive or reoccurring themes about the body in the contexts of exercise, physical education or sport emerged from these visual narratives? Two, how did these repetitions construct knowledge of active body and what were the obstacles to addressing them? In other words, did the students select images or themes that overemphasized particular gender, racial, or economic groups, or body sizes, and if so what are the road blocks to remedying them? At the conclusion of this study I sought to demonstrate ways to negotiate repetitions when using visual storytelling as a pedagogical practice.

The Researcher's Role

As a qualitative research study, the researcher should address personal values and how these values contribute to the research process. As an educator with degree in higher education administration, I certainly value the academy and find it to be worthy place for pursuing one's intellectual, social, and moral goals. As an educator who also works in the field of instructional technology, I value the positive role that technology can play in

instruction, especially when technology is placed in the hands of the learner. However, I also believe that the use of technology for technology-sake in any environment, instructional or otherwise, is harmful, unpredictable, and counterproductive to attaining new knowledge and skill. As a person of color who identifies as a sexual minority, I lean towards theories and ways of knowing that seek to remedy human injustices in education and in the broader society and culture. I find these theories to be at times comforting and at times disconcerting when I feel that my identities are the objects of its analysis. Finally, as a fitness instructor and sports enthusiast, I think health, physical education, and sport have important roles to play in our society and how we think about our bodies. Within the context of this study, I recognize these biases. However, CDA is the sort of qualitative research that requires the investigator to take a position based on previous experiences. I commenced with this study with these perspectives in mind.

Sites and Samples

The sites for this study were selected through convenience. The researcher recruited a member of the kinesiology faculty from each of the two institutions. The researcher had co-taught with one of the faculty members and had been a co-presenter with the other.

Site 1

The first site was a history and philosophy of sport and physical education class taught at an English-speaking four-year public university in the southeastern part of the United States. The course is offered through the department of kinesiology which has

approximately 600 undergraduate students enrolled in its Bachelor of Science (B.S.) degree program. Data were collected from two sections of the course, one taught in summer 2010 and the other in fall 2010. The course is one of seven required core courses needed for the Bachelor of Science (B.S.) degree in kinesiology.

Site 2

The second course was sociology of sport class taught at a public university in the province of New Brunswick in Canada's east coast. The university is the only unilingual French-speaking institution of higher education outside the province of Québec with more than 5000 full time students. Its school of kinesiology and recreation has more than 250 students enrolled in four year undergraduate programs. The sociology of sport class is mandatory for all students of that school as well as for all students majoring in physical education.

Each of these sites follow the guidelines for teaching the history of sport and physical education and the sociology of sport that have been established by the National Association for Sport and Physical Education (see NASPE, 2010a; NASPE, 2010b).

Sample 1

The first sample was composed of fifty-one students (35 female, 16 male). Forty-eight of the fifty-one students were kinesiology majors with a concentration in aquatics leadership, sports medicine, fitness leadership, physical education and health teacher education (PETE), or community youth sport development (CYSD). Three students majored in business and were assigned to a 'sport management' concentration. Students

were assigned to groups based on their concentration areas and complete the visual narrative as a group.

Sample 2

The second sample was composed on twenty-seven students enrolled in sport sociology course. Nineteen students were kinesiology majors. Three students majored in physical education. The other students majored in psychology or interdisciplinary studies. Students were allowed to choose between writing a visual narrative or a traditional academic paper. Eight students (4 female, 4 male) selected the visual narrative assignment. Students worked individually on their projects.

Data Sources

The data sources for this study were 22 visual narratives (3 of these narratives were later excluded from further analysis). The narratives ranged from 3 to 7 minutes in length and were composed of images, text, and a soundtrack. These narratives were a major assignment in the course and are described below.

Assignment 1

The researcher designed an assignment entitled, "*Telling Digital Tales in Kinesiology: Today and Tomorrow"* which required students to choose a topic from a historical aspect of sport (or sports medicine), fitness, physical education or the Olympics, compare it to today, and predict its future (see Appendix A). The assignment included a rubric that explained how students would be assessed on the story. The rubric is a modified version of Joe Lambert's (2010) *Center for Digital Storytelling* seven steps

of digital storytelling (see Appendix B). The rubric served as a formative evaluation tool for designing the stories and as an assessment tool for the student's overall grade.

Assignment 2

At the second site, the assignment was modified by instructor and was judged on five criteria: (1) choosing a sporting event or sports-related topic and providing a historical context, (2) analyzing and questioning what was at stake from a sociological viewpoint, (3) citing at least two references, (4) designing an original layout for the story and (5) and selecting and original subject (see Appendix K).

Data Collection

Procedure 1

The data collection process at the first site was completed in four phases. In the initial phase, students selected and analyzed a topic related to physical activity. The investigator showed examples of visual narratives created by the investigator and/or by students in previous semester courses. After discussing the assignment and the assessment rubric, the investigator had students complete a story proposal which required them to (1) select a topic related to sport, fitness or physical education, (2) choose the media that would be included in the story including music and/or voice-overs and (3) write a brief description of the story's purpose (see Appendix C). After the proposals were submitted, students completed a story cycling activity which allowed peers to give them feedback on their proposals. This feedback included suggested possible titles for the

stories and how the peer might tell the story given their knowledge of kinesiology (see Appendix D).

In the second phase, students designed the story on paper. Specifically, the students were given an example storyboard (see Appendix E) and were asked to design their own. The storyboard included the title for the photo story, the story's description, and an outline of the images, text and soundtrack that composed the story, followed by credits and references. Students inserted the lyrics of the soundtrack at the end of the outline.

In the third phase, students produced the visual narratives using *Microsoft Photostory 3 for Windows* or *Windows Movie Maker* after receiving technical training from the investigator. The training was hands-on, lasted 75 minutes and focused on how to create the narratives with the Microsoft products. At the end of the training students were given links to supplemental online tutorials on the software, and were provided a list of web resources on copyright and information design principles including how to select appropriate font types, contrast colors, and manipulate images. The resources also included handouts on how to convert iTunes music files to a format that was compatible with *Windows Movie Maker* and *Photostory 3* (see Appendix F), how to design information with *Microsoft PowerPoint* (see Appendix G) , how to convert PowerPoint slides to images and how to upload the completed stories to YouTube™ (see Appendix H).

In the fourth phase, students presented their visual stories to the class. After each presentation students were given verbal feedback on their stories by their peers, the instructor and the investigator. Students then completed a written visual analysis of at least two stories (see Appendix I), turned in a peer group evaluation, and concluded the assignment with a summative evaluation (see Appendix J). The summative evaluation was conducted as an in-class large group activity by the investigator.

Procedure 2

The second site did not follow the four phase process. Instead students were shown stories created during the summer and were given the opportunity to either create a story or write a traditional academic paper. The students did not receive technical training from the investigator or the instructor. However the investigator did provide the second site with same technical training resource materials. Students used *Windows Movie Maker* to produce their stories and uploaded the stories to their own public YouTube™ channels. In contrast to the first site, students in the second site worked individually. The instructor collected the links to the stories and emailed those links to the investigator for analysis.

Data Analysis

The visual narratives were downloaded from the YouTube™ social media site (http://www.youtube.com). According to its creators, YouTube™ was founded in February 2005 and "allows billions of people to discover, watch and share originally-created videos…provides a forum for people to connect, inform, and inspire others across

the globe and acts as a distribution platform for original content creators and advertisers large and small" (YouTube, 2011). The narratives were transcribed, and coded using ATLAS.ti, a qualitative analysis tool for textual, graphical, audio and video data. ATLAS.ti allows the user to create annotations, transcripts, and memos. By annotating visual segments in the stories, the researcher was able to link similar images within and between stories in order to find similarities and disparities in themes, characterizations, and storylines. The software was provided free to the investigator by his university.

The initial analysis determined which narratives to select for further analysis. The investigator viewed each story approximately twenty times, took notes on the various themes and plots that emerged from the stories, and with these notes created transcripts for each story using ATLAS.ti. The investigator reviewed the transcripts and watched each story three to four additional times. During these viewings the investigator stopped the story, took additional notes and reconciled those notes with the transcript, and then began viewing the story again. This start-and-stop process continued until the researcher reached the end of story. The researcher was careful to note the types of physical activity that were represented in the story and how these activities constructed physical ability. In the initial analysis the researcher excluded three stories from further analysis because these stories did not meet the criteria for body knowledge framework originally proposed by Evans and Davies (2004). The framework examines the social and curricular consequences of reducing physical ability to an individual's capability of succeeding or failing at 'good' performances in sport, fitness and health. Three of the stories did not meet these criteria because they focused on injury and rehabilitation. While these stories

were related to health, fitness or sport, they examined scientific facets of sport and health, which according to the research literature is one of the primary reasons why body knowledge within the academic discipline is partial and potentially oppressive. The first story depicted the various types of modalities available in physical therapy such as massage therapy and hydrotherapy. The other stories focused on ACL injuries and their repair.

After the initial selection process, the researcher viewed each story at least ten times to capture the syntagmatic and paradigmatic relationships that were (re)presented in the stories. As a reminder, paradigmatic relations refer to the image choices the students made to tell their stories. The syntagmatic relations refer to how the images were sequenced. The investigator analyzed the paradigmatic relations by viewing each story one image at a time to determine how the image fit with the story's overarching theme, and what other images choices might have been available for the story. The investigator then analyzed the syntagmatic relations by looking at image sequences to determine what types of sequences were used to convey the messages in the story. For example, were the series of images reiterating the same point, or were the images presenting a point/counterpoint, or were they offering an account of how things were versus how things are now?

To analyze how the paradigmatic and syntagmatic relations within and across stories conceived body knowledge, the researcher followed the four stages of CDA's explanatory critique. One, how did students chose to tell their stories, what images and

storylines were included and which were left out? In other words, what repetitive or reoccurring themes about the body in the contexts of exercise, physical education and sport emerged from these visual narratives? Two, did how these repetitions construct knowledge of active body? In other words, did the students select images or themes that overemphasized particular gender, racial or economic groups, or body sizes? Three, how did these narratives reflect the formal and hidden curricula in kinesiology that maintains the *status quo*? After addressing these three questions, the investigator generated pedagogical strategies for using visual storytelling in the classroom that minimizes harmful repetitions of body knowledge.

Trustworthiness & Ethical Concerns

Interpretive research does not follow the scientific paradigm which requires objective observation and corroboration in the discovery of new knowledge. Interpretive research is subjective. It relies on the researcher's perspective and fully accepts social observation as biased. Even when researchers 'verify' their observations with co-investigators there is the chance that cultural preconceptions and misconceptions play a role in the consensus-building process. I propose the following scenario as an illustration. If there are four birds sitting on a tree branch and a child shoots at one with a pellet gun, how many birds will be left sitting on the branch? If the researcher tends towards positivistic methods of knowledge discovery, the answer might be simple: there are three birds left out on the limb. Logically, four minus one equals three. However, if the researcher has a propensity towards more experiential and 'commonsense' methods to knowledge inquiry, the answer is zero. With the noise of the gun shot, the remaining

birds would have flown away. This is not to suggest that one method of inquiry is more valid the other. It is simply to suggest that there are multiple ways to explore similar phenomena. It all depends on the research questions and the perspective the researcher is bringing to the table.

Laurel Richardson (2000) describes this approach as *crystallization*. Crystallization is a critique of *triangulation*, a commonly used technique for establishing validity in qualitative research. Triangulation seeks to validate research by investigating research questions by using and integrating different methods and sources. If similar conclusions are reached from these methods and sources then it is likely that the research is valid. In contrast, crystallization argues for mixing genres of meaning-making to account for multiple truths in the discovery process. In other words, crystallization does not objectify the researcher's interpretation. Instead it validates it as one truth within a range of multiple truths in the research process – particularly in the case of visual narrative which Richardson would name a mixed-genre text that validates itself. In other words, the sole validity for the text lies in how the researcher re-constructs it from experience and observation. As the researcher, I can observe the hidden assumptions and transgressions in the stories and get a "deepened, complex" yet "thoroughly partial understanding of the topic" (Richardson, 2000, p. 14). As such, my interpretations of these stories are not universal truths. They are an individual perspective based on my own positionality. As Richardson suggests, as the researcher expects I will come to know more and doubt what I know and understand there is always more to know. As part of the overall engagement with the validity in this study, I fully engage this process of

crystallization and state my own biases of how body knowledge constructs physical ability and identity in sport and physical education. What validates this study is the level to which my assertions can be seen as 'commonsense' knowledge within the discipline, and the logic of my argument. Finally, the whole purpose of CDA approach is to take a critical position on an apparent wrong and right it.

This study also received an exemption from the researcher's Institutional Review Board (IRB) with the agreement that the researcher de-identify any story that is on the non-public YouTube™ site. The stories that were publicly available on YouTube™ were exempt from IRB.

Reporting the Findings

Jennifer Mason (2002) argues that there is strong tendency for qualitative researchers to think of data as text-based documents and ignore the visual aspects of research. This can also be true of the findings. Luc Pauwels (2010) states that researchers should decide on what visuals to include in reporting the findings and consider how these visuals should be reported. As a qualitative study that employs visual data in its analysis, the results will include images from the stories. The images presented in this study were used to guide the reader through the story and to visually locate how body knowledge was constructed in the narratives. Images from the stories were also used to construct a counter-narrative about body knowledge in sport, fitness and physical education. Finally, the results of this study were published on a public website to serve as a resource for

kinesiology educators interested in using visual pedagogies in their teaching, with the aim of negotiating (visual) repetitions of body knowledge within the curriculum.

CHAPTER IV

RESULTS AND DISCUSSION

The purpose of this chapter is to explain how repetitions of body knowledge were conceived in nineteen student-produced visual narratives. This chapter is divided in two parts. In the first part of the chapter I provide a brief description of each story. In the second part of this chapter I identity the dominant repetitions that emerged in the stories and apply CDA's explanatory critique to explain how repetition functions in the narratives.

Describing the Stories

To give the reader an overall glimpse into the visual narratives the students chose to write about as well as the narrative strategies the students employed as part of the overall engagement with the visual storytelling assignment, I wrote a brief description for each story. I chose to describe each of these stories in order to later articulate and explain the repetitions of body knowledge that emerged within and across the narratives. Thus, the purpose of this section is not to convey a 'thick description' (Geertz, 1973) as I will not interpret the intentions of the individual 'performing in front' of the camera or the ones 'performing behind it'. Instead, in keeping with the aims of this study and its methodology, I plan to limit this section to a 'thin description' and keep it to the 'whos', 'whats', 'wheres', and 'whens' of each story.

Visualizing sport history: The first eleven stories

The stories from the first site were produced in a sport history course that was taught in the summer and fall of 2010. The first site produced 14 stories. However, 3 of the stories from the fall semester were related to sports medicine or physical therapy and were excluded from further analysis. Although these stories conceived body knowledge, they were about scientific (e.g. medical) professions and less about the sports that were being represented. Of the remaining 11 stories, 6 were related to sport. Two stories were about physical education, and 3 stories were about fitness and health. Students, working in groups, were asked to choose an aspect related to sport, fitness, or physical education and visually depict how it changed over time.

Basketball: The Rules Have Changed

The first story, titled *Basketball: The Rules Have Changed*, opens with images of basketball's early origins as game developed by Dr. James Naismith and the Springfield YMCA with two peach baskets, a soccer ball, and 13 rules in 1891. It takes the reader through what it calls a 'time warp' of basketball history, a random collage of photos mostly of NBA athletes like Larry Bird (see Figure 1) from the National Basketball Association (NBA) and the National Collegiate Athletics Association (NCAA). The story explains how 13 rules in 1891 became 64 rules in 2010 and draws attention to the major rule changes for players, including dribbling when in possession of the ball and players shooting their own free throws when fouled. The story also explains how speed on the court has become a significant factor in the on-going development of

the sport. In considering the future of the professional basketball, the story predicts that robots might replace or at the very least assist player performance on the basketball court.

Figure 1. Larry Bird screams with Celtic pride (Santiago, 2010, 1:04)

Eventing: The Equestrian Triathlon

The second story, *Eventing: The Equestrian Triathlon*, explains the three phases of Olympic equestrian eventing: dressage, show jumping and cross country. It details how the 1932 Olympic eventing teams were all commissioned officers and maintains that women and civilians were not permitted to participate in the sport. The story explains how rotational falls (where the horse hits a solid jump with the upper forelegs causing the rider to fall ahead of the horse) occurs primarily in the cross country phase of the event (see Figure 2). These rotational falls lead to injuries and, in several cases, death. For

instance, according to the story, the U.S. Eventing Association reported 11 deaths from rotational falls during the 2006 season. Although changes in equipment, like air vests that contain CO_2 canisters, have been required since 2008 to reduce the risk of injury, equestrian athletes experience serious injury every 350 hours (compared to that of motorcycle riders who experience serious injury every 7,000 hours.

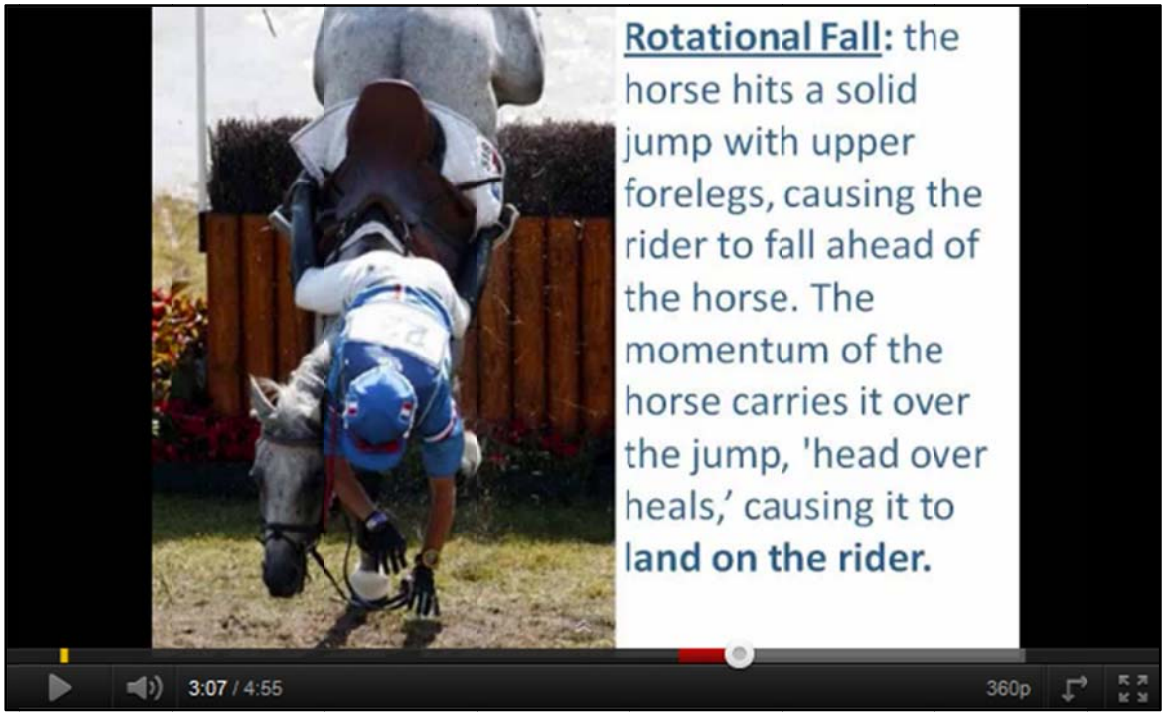

Figure 2. Horse and rider experience the rotational fall (KIN351, 2010a, 3:07)

Fast Food Mania

Fast Food Mania begins with a 1950s-style family seated around a dinner table and moves to images of children eating in a school cafeteria and swinging on monkey bars on a playground. It then shifts in time and asks "Where did all the children go?" as it pans to an empty playground. The story equates obesity with government regulations and

subsidies for food production, questioning why American food sources contain 25% cornmeal and why there is contradiction between the kinds of food produced in the U.S. and federal nutrition guidelines. The story leaves the reader with questions about globalization and obesity and the influence of reality TV (e.g. programs like 'The Biggest Loser') on social constructions of obesity (see Figure 3).

Figure 3. Personal trainers Jillian Michaels and Bob Harper (KIN351, 2010b, 2:40)

The Evolution of Fitness

The Evolution of Fitness depicts the modern obsession of trying to achieve the perfect body. It links physical inactivity with the Industrial Revolution of the 19th century and then leaps ahead to the 1980s and the advent of fitness video craze. The story focuses primarily on celebrity fitness enthusiasts like Jane Fonda, Richard

Simmons, and Chuck Norris and explains how fitness videos changed with each decade. For example, the aerobics craze of the 1980s shifted to 'physique toning' era in the 1990s and 2000s. Movies like *Terminator* series and *GI Jane* influenced the combative-style fitness training methods depicted in these fitness videos. Moreover, advances in technology have created products like Wii Fit and P90x which may set future trends for at-home fitness instruction (see Figure 4).

Figure 4. The P90X fitness training system (KIN351, 2010c, 3:07)

Lack of Physical Education: When Will It Get Noticed?

Obesity and parental responsibility were the major themes in *Lack of Physical Education: When Will It Get Noticed?* The story connects childhood obesity with a number of future health implications including heart disease, hyperlipidemia, diabetes,

sleep apnea, coronary heart disease and adult diabetes. The story concludes that parents need to get involved in the lack of PE classes in today's schools (see Figure 5).

Figure 5. Parents should fight for more PE in schools (KIN351, 2010d, 3:06)

Olympic Swimming: 1896 to 2008

Olympic Swimming: 1896 to 2008 depicts technological changes in Olympic swimming from its early beginnings in the modern Olympics to the Beijing Olympic Games held in China in 2008. From time clocks to stop watches, boats to diving docks, the open sea to the indoor pool, one-race competitions to multi-event qualifiers, and the numerous advances in swimwear technology, the story shows how technological change is directly related to human performance in elite swimming where a millisecond might determine the victor (see Figure 6). The advances in technology are depicted as

improvements for the sport.

Figure 6. Olympic swimwear 1896 versus 2008 (KIN351, 2010e, 0:50)

Money in the Bank

Money in the Bank examined salary inequities between celebrity and 'average' players in the National Basketball Association (NBA). The story associates free agency, the ability for a player to sign with another team or franchise after the expiration of the player's contract, with the growing and seemingly gross salary disparities that currently plague the NBA. LeBron James is represented as a notable example (see Figure 7). James grossed $14,500,000 with the Miami Heat in the 2010 season. The story argues that NBA has broken its 'piggy bank' and that in the future we will see decreases in NBA players' salaries.

Figure 7. How the salary structure of the NBA has changed (KIN351, 2010f, 0:21)

Where Has PE Gone?

This story questions the Bush administration's *No Child Left Behind Act of 2001* and its effects on physical education in schools. It addresses the problems of the Bush policy and its effects on the physical education classroom (see Figure 8). It argues that physical and health education is a necessary component to a student's overall and life expectancy and that all students should be active. The story implores parents to take a more active role in their children's physical education.

Figure 8. How the bar has been lowered in schools (KIN351, 2010g, 0:26)

Whose A.S.S is Best?

Whose A.S.S is Best? plays upon the skill-related fitness concepts of (A)gility, (S)peed, and (S)trength and depicts how fitness has changed from the period of Ancient Greece, circa 776 B.C., to present day . The story contrasts the "natural" ways that the ancient Greeks used to become fit to compete like body-weight exercises, running, and wrestling with the pull-up bars, free weights, and other equipment used by athletes today (see Figure 9).

Figure 9. Pushing a weight sled (KIN351, 2010h, 1:58)

Football, Fùtbol, It's All World Cup to Me

Football, Fùtbol, It's All World Cup to Me celebrates the Fédération Internationale de Football Association's (FIFA) World Cup soccer players, stadiums, referees, and equipment and explains how technology has changed the World Cup ball over time (see Figure 10). The story shows the growth of professional soccer to its status as a global sport, and the rise of its World Cup to the second largest international sporting competition. The story covers everything from the changes in cleats to the changes in media technologies and coverage that made the World Cup into the spectacle that it is today.

Figure 10. Technology and the soccer ball (KIN351, 2010i, 2:49)

Going the Distance: The Marathon

Going the Distance: The Marathon takes the reader on a compelling trip through the history of the Boston Marathon. The story opens with the marathon's mythical beginnings in ancient Greece where the messenger Pheidippides purportedly ran to announce the fall of the Persians in the Battle of Marathon, leading up to its contemporary instantiation in the modern Olympics in 1896, where Spyridon Louis was the first winner. The story takes into account how speed has become a focal point for the marathon. For example, John McDermott completed the Boston Marathon in two hours and fifty-five minutes in the 1897 but this pales in comparison to the two hours, nine minutes, and thirty-seven second run by Australian Derek Clayton in the Fukoka

Marathon in Japan in 1967, or the contemporary leading marathoners of the world like Haile Gebrselassie of Ethiopia who won the Berlin Marathon in 2008 in two hours, three minutes and fifty-nine seconds.

Moreover, the story unfolds the complexities of the 26 mile run and pays close attention to the current incidents and controversies that have plagued the marathon, most notably, women's participation in the sport and the stereotypical notions of gender that equates femininity with weakness. The story highlights the story of Kathrine Switzer, the first woman to officially run in the Boston and her ordeal in 1975 where an official tried to forcibly remove her from the competition (see Figure 11), and then moves to a photo of Joan Benoit, the first woman to win the women's marathon when it was introduced in 1984 in the Los Angeles Olympics.

Citing that the top ten marathoners of the world were born and raised in less developed nations like Ethiopia and Kenya, the story considers how Western culture has produced sedentary societies through its overreliance on technology. Notably, the last Americans to win an Olympic marathon and a Boston Marathon were Frank Shorter in 1972 and Greg Meyer in 1983, respectively. This leads the story to contemplate how human performance is oftentimes shaped by technology (see Figure 12). The story asks if humans have reached a pinnacle performance, how do humans go beyond our apparent limitations, and what role does technology play? What is the solution? Is it the advances in footwear that allow athletes to run faster for longer? Or is running barefoot the

answer? Where is the line between human ability and mechanical advantage and have humans, in essence, become machines?

Figure 11. Kathrine Switzer being pushed by an official (KIN351, 2010j, 1:57)

Visualizing sport sociology: The final eight

The next series of stories were written in the fall of 2010 by students enrolled in an undergraduate sport sociology course. The students were given the option to write a twenty-page paper or create a visual narrative related to an inequity in sport. Of the twenty-seven students enrolled in the course, ten chose the visual narrative option and wrote their narratives individually. Two of these narratives were not published to YouTube™ and were unavailable for analysis. All of the stories focused on an aspect of sport. These group narratives also differed than the previous group because the students

who created them were enrolled at a Canadian university where French is the primary written and spoken language.

Paralympique VR

Paralympique VR opens with a photo of Stéphanie Dixon, a Canadian paralympian swimmer who was born with one leg. Dixon became a competitive swimmer by age 13 and at age 14 joined the Canadian national Paralympic team (see Figure 12). The story continues with a brief history of the Paralympics and explains how the games were founded by German neurologist, Sir Ludwig Guttman in 1960 as the Stoke Mandeville Games and were held alongside the Olympic Games in Rome. The story, through a series of photos, continues to describe the history of the games. For example, the games went from 400 athletes from 23 countries in 1960 to 3951 athletes from 148 countries in the 2008 Beijing games. The story asks, "Est-ce que les paralympiens ont leur place dans les aralympic s olympiques?" or "Do paralympians have a place in Olympic competitions?" and notes that Olympic records have been broken in the Paralympic Games.

The story returns to Stéphanie Dixon and reminds the reader of her many accomplishments in Olympic swimming including five gold medals in the 2000 Paralympics Summer Games in Sydney, Australia; and her one gold medal, six silver medals, and one bronze medal in Athens in 2004. The story briefly shifts its focus to Ray Grassi, a double amputee who won a gold medal in hockey at the 2006 Paralympic Winter Games in Turin, Italy. The story ends with a series of photos of Paralympic

athletes from various sports and claims that these athletes break the negative stereotypes that are usually inscribed on the bodies of individuals with physical disabilities.

Figure 12. Stephanie Dixon, paralympic athlete (Resche, 2010, 0:02)

Violence au Hockey

Violence au Hockey opens with an image of Rock'em, Sock'em robots, fists raised and ready to box. The next thirty seconds features a series of photos of athletes from the National Hockey League (NHL) engaging in fisticuffs on the ice. The story then switches to an image of Don Cherry's bestselling video series, "Rock'em, Sock'em Hockey". Cherry, a commentator the Canadian Broadcasting Corporation's long-running television show Hockey Night in Canada, is well-known for his flamboyant, militaristic outbursts. The story highlights segments from Cherry's video series including aggressive

checks, slams into the boards, and more pugilism between hockey players, and then asks what are the consequences for portraying hockey violence in the media? The author of the story answers this question by showing several short video segments of youth hockey players engaging in violence, and suggests that this is the reason why parents are putting their children in 'less aggressive' sports like volleyball, baseball, soccer, and handball. The story ends with an image of hockey player with a red stop sign on the back of his jersey as a symbolic effort the stop the gratuitous violence that plagues the sport of men's hockey (see Figure 13).

Figure 13. Hockey jersey (Larouche, 2010, 3:14)

Planchodrome de Dieppe

The next story explores skateboarding and the development of the skateboarding community in the city of Dieppe, a predominately French-speaking suburb of Moncton, New Brunswick. The story begins provocatively with an image of traffic sign that reads "Skateboarding is Not a Crime" and then takes the reader through a brief history of skateboarding as a recreational activity created by surf boarders in Los Angeles, California in the 1960s as a means of surfing on flat waves.

A brief visual and evolutionary history of the skateboard comes next. The original surf board came in various shapes and sizes and was made from wood or polyurethane. The story then argues that skateboarding has been relegated to a non-sport by the International Olympic Committee (IOC) and is considered to be a delinquent act, or at least a nuisance, by many. The story asks, "Will not the skate park in Dieppe be safe? And why are so many against the idea of it?" To make its point, the story shifts to a video segment of two men jogging on the street. Chastised by motorists and pedestrians and cited by the police for illegal behavior, the two joggers become a metaphor for how skateboarders are treated in today's society. The story ends with a series of images on the benefits of skateboarding including its ability to combat childhood obesity and girls and women's participation in the sport (see Figure 14).

Figure 14. Skateboarding in Dieppe, NB (Comeau, 2010, 3:09)

Drogue et Tricherie dans le Sport

Drogue et Tricherie dans le Sport or *Drugs and Cheating in Sport* draws attention to how drugs and cheating in sport are related to an athlete's celebrity status. It cites the IOC's *Historical Evolution of the Doping Phenomenon* (IOC, 1997) which claims that the first doping-related death was in 1896 when Arthur Linton, a Welsh cyclist, died at the age of 24 from consuming a pre-competition mixture of cocaine, strychnine and caffeine.

The story turns its attention to doping in the modern Olympics and the increasing problem of doping since the 1968 Mexico City games. The reader is then exposed to a series of images of celebrity athletes whose careers were tainted with doping or drug

scandals such as Carl Lewis, Ben Johnson, Martina Hingis, Andre Agassi and Marion Jones. The story refers to other forms of cheating in a series of images of professional athletes breaking the rules in basketball, soccer, volleyball and boxing. For instance, the story shows a photo from a 1997 boxing match where Mike Tyson bit off part of Evander Holyfield's ear. Two minutes into the story the Marion Jones incident becomes the central focus of the story. In a 90-second video segment, the reader see a tense Jones standing in front of a podium at a press conference asking for forgiveness for taking steroids and misleading federal investigators.

The story argues that is too late for forgiveness or apologies and shows a sequence of photos of professional athletes, like Mitchell Sargent, hanging their heads in shame, crying out, or holding their heads in their hands in apparent despair. Sargent, a retired Welsh rugby league player, had his contract terminated with the North Queensland Cowboys for testing positive for cocaine in 2006 (see Figure 15). It's too late for apologies for many celebrity athletes, the story argues, due to the number of drug related deaths in sport. The story ends with a photo of the grim reaper followed with a succession of images of athletes including professional wrestlers Curt Henning (1958 - 2003), Chris Kanyon (1970 – 2010), Eddie Guerrero (1967 – 2005), Sherri Martel (1958 - 2007), and Umaga (1973 - 2009); Major League Baseball (MLB) player Darrell Porter (1952 – 2002); NHL star John Kordic (1965 – 1992); NBA player Len Bias; and professional surfer Andy Irons (1978 - 2010).

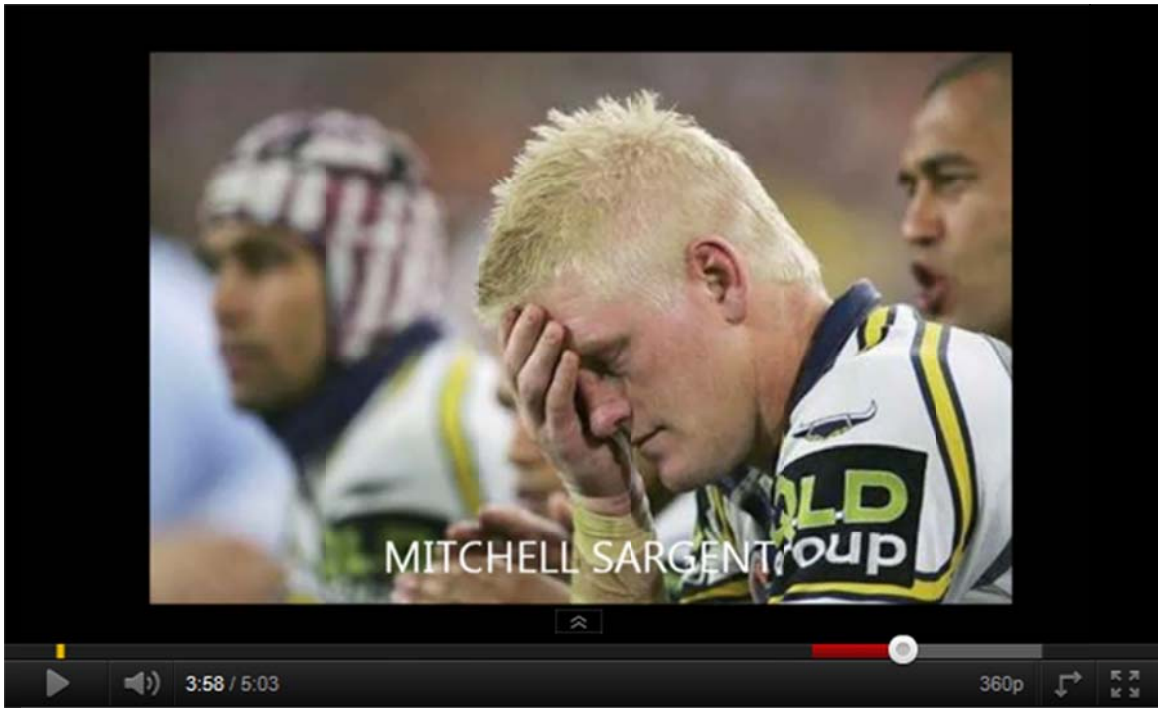

Figure 15. Mitchell Sargent (Julien, 2010, 3:58)

Stéréotypes Raciste dans le Sport

What are some of the major stereotypes in sport? *Stéréotypes Raciste dans le Sport* questions the stereotypical views that pinpoint sports like swimming as 'white sports' and other sports like running as 'black sports'. It hints that sports in the early 20th century were controlled or dominated by white men but in the 21st century women and people of color are more active in sport and physical activity. The story presents the statement "Whites cannot run" (*Les Blancs peuvent pas courir*) followed by a stream of photos of women and men of color competing in various racing events including a photo of Jesse Owens at the 1936 Berlin Olympics. The story then states "Blacks cannot swim" (*Les noirs ne peuvent pas nager*) followed by two images of white men, women, and children engaged in leisurely and competitive swimming. The statement "Whites cannot

jump" (*Les blanc ne peuvent pas sauter*) precedes a series of photos of professional black male basketball players dunking a basketball and black female track athletes performing the long jump. The story then asks "But is this true" (*Mais est-ce la vérité?)* and concludes with a counter-narrative featuring images of white male and female athletes performing long jumps and a pole vault and images of black female and male athletes swimming (see Figure 16).

Figure 16. Swim team (MacKenzie, 2010, 2:20)

La Discrimination des Femmes dans le Sport

La Discrimination des Femmes dans le Sport asserts that female athletes continue to face discrimination in sport. To substantiate this claim, the story looks to history where at one point in time women were allowed to participate in sports which were

deemed socially acceptable by men such as tennis and equestrian (see Figure 32). To counter this injustice, the story argues, women fought back to claim their rightful place in sport and uses the case of Kathrine Switzer and the 1967 Boston Marathon as an example. Switzer was the first woman to officially run in the Boston Marathon but was almost forced off the course by a male official (see Figure 17). The story shifts from 1967 to the present to see how things have changed for women in sport. Through a succession of images of women and girls participating in sports like soccer, track and field, rugby, and basketball, the story intimates that women have more opportunities to participate in leisure, amateur and professional sports.

But has women's sport truly evolved? Although women have more opportunities to become involved in sport, the story claims sport continues to be a male-dominated terrain. Men's sport comprise about 75% of the sports covered in the news media and approximately 89% of photos published in the media are of male athletes, according to the narrative. Moreover, the photos of female athletes are usually provocative and more about sex than sport. To makes it point, the story analyzes photos of professional female athletes like Anna Kournikova and Danica Patrick whom are depicted in suggestive poses that have nothing at all to do with their sport (tennis and race car driving, respectively). This is in contrast to photos of professional male athletes like professional football safety Troy Polamalu who are more often than not depicted in powerful and intimidating poses. To illustrate that women are just as powerful and impressive as men, the story borrows a video segment from a 2003 Adidas women's world cup commercial depicting the rivalry between the U.S. and Chinese soccer teams. In the video, the Chinese athletes put an

impressive display of gymnastics while maintaining control of a soccer ball. The story advocates for equal representation of women athletes in the media and for the media to cease portraying women as sexual objects for men. Through a series of images of women athletes the story uses the words “courage”, “force”, and “determination” to describe female athletes and their plight in sport. The story ends with a plea for women to find the “Kathrine Switzer” in them, that it is important to children because children emulate what they see.

Figure 17. Kathrine Switzer, 1967 Boston Marathon, redux (Cormier, 2010, 0:28)

L'illusion dans le Monde du Soccer

Video arbitration, or the lack thereof, in world cup soccer is the topic of *L'illusion dans le Monde du Soccer*. The story makes the case that with the number of infractions

by players, FIFA, like the International Rugby Board (IRB) and the National Hockey League (NHL), should implement video arbitration. The story traces the history of soccer beginning with medieval folk game where masses of people would play in the street for days at a time to the modern day spectacle of the World Cup. The story also notes the major achievements in the history of soccer. The first known non-university soccer club, the Sheffield Football Club, was founded in 1857 in Sheffield, England. The Football Association (FA) Challenge Cup, the oldest soccer competition in the world, began in 1872 and FIFA, the international governing body of soccer was founded in 1904. In 1930, FIFA held the first World Cup for men's teams in Uruguay. The story acknowledges that while women had been participating in soccer since the late 19th century, the first unofficial international competitions for women were held in the 1970s. FIFA held the first Women's World Cup in 1991 in China.

The story blames FIFA's hegemonic stronghold on soccer for the lack of video arbitration in the game (*Deplus la FIFA use de son pouvoir hégémonique et refuse l'usage du video arbitrage.*). The story explains why video arbitration in international soccer is needed through a series of short video segments depicting illegal head-butting and ball handling. The story argues that very few have dared to challenge FIFA, noting a few outspoken proponents like Dimitri Yachvilli, a rugby union player and Pascal Garibian, a former soccer referee and the chairman for the disciplinary committee for the Ligue de Football Professionnel (FLP), a French league that organizes French and Belgian clubs. The story ends with an image of a finger pointing at the reader (see Figure

18) and the statement, “You must act to make your opinion known to FIFA” (*Alors à toi d’agir, pour faire entendre ton opinion à la FIFA*.)

Figure 18. Pointing the finger at FIFA (Lindor, 2010, 3:59)

Les Femmes dans le Sport au Nouveau-Brunswick

The final visual narrative is about female athletes from the New Brunswick province of Canada. Unlike *La Discrimination des Femmes dans le Sport*, this story is less about discrimination women face in sport and more about the importance of sport in the lives of girls and women. The story, *Les Femmes dans le Sport au Nouveau-Brunswick* , begins with a series of photos depicting women in track and field, volleyball, rugby, soccer, figure skating, tennis, swimming and hockey. It illustrates how New Brunswick women have made significant achievements in sport, mentioning Marjorite

Lindsay, an early pioneer who was named to the New Brunswick Sports Hall of Fame for her successes in badminton, basketball and golf. Lindsay is most known for her four consecutive wins of the Maritime Singles Badminton Championships between 1933 and 1937. The story also acknowledges the accomplishments of other athletes including Linda Vahlra, who won a silver medal during the first winter Canadian Games in 1967 for figure skating, and Lynn Roy, the first woman to win a gold medal in archery at the summer Canadian Games in 1977. The story briefly mentions the sports women participating in during the Arcadian Games. Founded in 1979, the Acadian Games celebrated the heritage of the Acadians, the French-speaking population in New Brunswick.

In the next segment the story focuses on a local Acadian athlete, Geneviève LaLonde, who participated in the 2010 World Junior Championships, held at the University of Moncton in Moncton, New Brunswick. The World Junior Championships sponsored by the International Association of Athletics Federation (IAAF) is an international sporting competition for elite athletes ages 19 and 20. LaLonde set personal bests in the 1500 meter, the 2000 and 3000 meter steeplechase. Citing quotes from LaLonde from various media sources, the story asserts that sport creates “unforgettable experiences” for women and makes women stronger.

The final segment of the story focuses on a New Brunswick athlete who competes in the traditionally-male sport of mixed-martial arts. Vicky Nadeau participated in first mixed martial arts match on September 18, 2010. Through quoting Nadeau, the story

infers that female athletes can and should compete in sports that are typically viewed as ‘male sports’, that every young woman should be allowed to realize her dream, and that more New Brunswick women, in general, and at the University of Moncton, in particular, should be encouraged to play sports. The story presents several short video segments of female athletes from the University of Moncton advocating for women’s participation in sport. Next, images of women participating in hockey, track and field, and volleyball appear, followed by the statement, “When children play everyone gains” (*Quand les enfants jouent tout le monde gagne*).The story closes with a tribute to sports women from New Brunswick (see Figure 19).

Figure 19. Playing hockey in New Brunswick (Frentte, 2010, 3:32)

Repetition and Body Knowledge: Interpreting the Stories

When students enter the classroom they are not empty buckets waiting for educators to fill them up with knowledge. Critical educator Paulo Freire (1970) critiques this banking style of education that ostensibly continues to pervade in higher education, especially in disciplines rooted in scientific knowledge and positivistic methods to knowledge discovery. What happens when students are given a chance to explore alternative methods of inquiry like new media technologies to engage knowledge of the body? Following Laurel Richardson's (2000) assertion that new writing practices like poetic representation can enliven the scholarly process, this study originally sought to uncover how students might use visual storytelling in their quests of discovering 'new' knowledge about sport, fitness, health and physical education. However, throughout this process, I determined that students often regurgitated knowledge fed to them by the popular media and that the formal kinesiology curriculum did little to counter these media effects. With this in mind, I designed the present study to investigate what kinds of body knowledge students tend to revere and repeat in their visual narratives, and what this knowledge says about the body and its ability to perform in sport, fitness and physical education.

This study blends two theoretical frameworks: body knowledge and anti-oppressive education. Body knowledge is concerned with how knowledge of ability, identity and health is communicated through the curriculum (Evans & Davies, 2004). Anti-oppressive education views oppression as the repetition of regulatory identities, abilities, and knowledge (Kumashiro, 2003). Repetition brings particular bodies into

being while excluding others in a way that normalizes or naturalizes bodies. For repetition to work it must be culturally desirable, acceptable or attainable, must be understood across varying social contexts, and must have the capability of being transmitted through discourse.

This study relied on CDA's revision of Roy Bhaskar's (2009) explanatory critique to ascertain the role that repetition played with representing body knowledge in the students' visual narratives. Bhaskar's (2009) explanatory critique takes an object of analysis and moves it through four analytical stages. Oftentimes the object under analysis concerns a social wrong that can be approached in a transdisciplinary way. In the first stage, the researcher considers the semiotic nature of the object under analysis. Semiotics refers to the representations of objects in society, their paradigmatic and syntagmatic codes. In this case, the paradigmatic codes are the image choices students made to tell their stories. The syntagmatic codes refer to how the images were sequenced. In the second stage, the researcher focuses on obstacles to addressing the social wrong. The goal of this stage was to analyze the discursive and non-discursive elements of the social wrong, select the texts that constituted the problem, and carry out an analysis on the texts. In the third stage, the researcher considers why the problem is needed to maintain the status quo. The point of this stage was to move the research problem from 'what is' to 'what ought'. In the fourth stage, the researcher provides potential solutions for moving beyond the obstacles.

Of all the repetitions that occurred in the visual narratives, the one that stood out was gender oppression. While gender oppression was not the only repetition – there were also repetitions of race and class in these narratives – it was gender that appeared to be a dominant site of struggle for the students in their recapitulations of sport, fitness and physical education discourses. Following this strand in the stories, I decided to analyze how ability is discursively gendered in the visual narratives. Kumashiro's (2003) theory of oppression attends to all forms of oppression including race, gender, class and sexuality, and while it is tempting to reduce disparities in race, gender, class and sexuality to a unitary model of oppression, this study sought to resist this by focusing on gender and its interlocking oppression of sexuality. Theoretically this makes sense because, as Judith Butler (1993) argues, it is the repetition of normative, gendered performances that materializes bodies in space and time.

Repetitions and Body Knowledge: The Repetitions

To address the problem that repetitions of body knowledge pose in the kinesiology curriculum, I identified and troubled the repetitions that occur within and across the visual narratives (giving particular attention to the semiotic aspect of these repetitions). In other words, I outlined what regulatory physical abilities were depicted within and among the stories. I then explained how these repetitions reinforced culturally conceived notions of gendered and sexualized identities. In this study I identified four interrelated repetitions: (1) ability, especially in sport, is a masculine preserve, (2) in sport, women are as able as men, (3) children are less able due to the lack of physical education in schools, and (4) technology enhances human ability in sport and health.

Repetition #1: Ability, especially in sport, is a masculine preserve

The first repetition discursively maintains that ability in sport is a (heteronormative) masculine enclave. By heteronormative, I am holding to the view that much of Western society advances culturally-appropriate ways for individuals to behave based on their biological sex. This takes into account what sports, or sports-related topics, the students seem to be most interested in and how ability is constructed in the narratives. How are these stories representing ability in sport and what are the implications for one's sporting identity? Are these narratives ascribing to, or resisting, heteronormative constraints of gender? For example, what images were used to represent the ideas the stories were conveying, and what images or ideas might have been included but were left out?

The first repetition was most evident in the stories about sport. The stories that most often generated this repetition were *Basketball: The Rules Have Changed*; *Money in the Bank*; *Violence au Hockey*; *L'illusion dans le Monde du Soccer*; and *Football*, *Fùtbol: It's All World Cup to Me*. Repetition in these stories was disguised as these narratives deemed themselves to be talking about things other than gender. But each of these stories through the power of visual representation celebrated the ways in which some male bodies perform. For the most part, these stories were about elite male athletes. Each story reduced gender to heteronormative masculine performances in different ways. The first story legitimized sport as a male domain. The second story presented an inequity in sport as an issue that only affects men's sport. The third story used heteronormative masculine imagery to try and counter a systemic problem in sport. The fourth and fifth stories, like

the first reduced legitimate sport to a masculine domain by almost entirely ignoring non-normative masculine performances, but the fourth went further by insinuating that only other men can police the practices of other male athletes. The fifth story equated masculine articulations of capital and consumerism as narratives of progress for sport where both men and women were depicted as consumptive spectators.

In *Basketball: The Rules Have Changed*, the reader is taken through a history of how basketball became a popular sport purportedly through changes in the rules of the game. What is visually understated is how the players, notably male, have become bigger, faster, and stronger, and how basketball has both harvested and mediated these gendered performances. The fourth image in the story is captioned "Before Dr. James taught the world to play…" and depicts seven young men circling a peach basket placed on the top of a pole. One must ask, "Who is the world? And who is Dr. James Naismith teaching to play?" The story takes the reader through what it calls a "a quick time warp through history" by a bombardment of images of black NBA players, like Shaquille O'Neal and LeBron James, leaping through the air and performing slam dunks. And then a photo of Larry Bird, mouth agape, materializes on the cover of Sports Illustrated followed by the caption "Celtic Pride". Again, one might ask why does the story place such value on this type of imagery? This narrative reinforced the idea that for basketball to be valued it must be played by men who exhibit aggressive behavior on the court. Moreover, the racial and cultural overtones of how masculinity should be expressed as part of player's identity could not be ignored. This theme emerged in several instances of the story. In another instance the story asked, "Has the game sped up or slowed down?"

and depicted adjacent images: one of a white and black male basketball players and other of three black male sprinters. This leads the reader to conclude that physical ability is culpable to identity in that particular abilities are 'natural' for certain bodies.

Unlike, the aforementioned story that equated basketball with men's basketball, *Money in the Bank* clearly articulates its gender focus of the story by showing the NBA logo in the first frame. In its narrative the story describes the history of salary inequities in professional men's basketball, how it came to be with free agency, and how the 'piggy bank' is about to break. However, this story neglected to consider why there is an enormous salary gap between the NBA's celebrity and non-celebrity players, and more importantly, why women's basketball has much smaller salaries and team salary caps. According to the Women's Sport Foundation (2008), the minimum salary for a WNBA player was $31,200 in 2005 compared to a minimum salary of $385,277 for NBA players. Likewise, the team salary cap for the WNBA was $673,000 compared to $46 million for teams in the NBA. If the purpose of this story was to illustrate the gross salary disparities in professional basketball, not mentioning the salaries of the WBA was a major omission. It seems more likely that the unstated purpose of this story was a concern for the future of professional men's basketball and how salary inequities have come to hurt the game over time.

Violence au Hockey criticizes a social aspect of hockey, namely, the recurring practices of male-to-male violence in men and boy's hockey. While this story attempted to disrupt the hegemonic and heteronormative masculine performances, visually it reified

the violence. From the very beginning of the story to nearly the very end, the reader is exposed to images of male hockey players fighting. The story suggests masculine identity and ability in hockey are directly related to how players can throw a punch. While the textual statements in the story conveyed a counter-narrative about the negative ramifications of hockey violence, the visual imagery which composes much of the story, did the exact opposite with two notable exceptions. The first exception is the image of a fallen Eric Lindros apparently unconscious on the ice. The second exception is the last image of the story which portrays a hockey jersey with a tiny red stop sign above the player's number. This story may have been asking for an end to hypermasculine violence in hockey, but visually it may have reified the masculine violence it sought to reject.

The next two stories contemplate soccer (or what is also commonly known as association football). *L'illusion dans le Monde du Soccer* and *Football, Fùtbol: It's All World Cup to Me* are like the other stories in that they primarily depict elite male athletes. *L'illusion* addressed a social issue in world soccer while *Football, Fùtbol* described the history of the World Cup. *L'illusion* takes FIFA, the international governing body for soccer, to task for lack of video arbitration in the sport citing numerous examples of players cheating. What demarcated this story from the others is how imagery was used to compel the reader to act and take a stand on this issue. Eight of the last nine images depict men pointing fingers at the reader demanding action. With images of 'Uncle Sam' and professional golfer Tiger Woods pointing the finger suggest that men (using surveillance technologies) are the only legitimate arbitrator for professional sport. It also calls into account how masculine assertions of authority often materialize as solutions for

alleged problems in sport. In contrast *Football, Fùtbol* eulogized soccer. For seven minutes the reader is exposed to images of professional male soccer players, coaches, stadiums, equipment, flags, or other emblems that symbolize the sport. Through a perpetual barrage of 'before and after' photos, this story compared 1930s soccer to the contemporary soccer and embellished the mass accumulation of soccer goods and services as narratives of progress. Furthermore, the story neglects any mention of women's World Cup. For much of the story women are represented as consumers of the sport, waving in the stands of soccer stadiums around the world.

These stories have in common a repetition that holds sport to a heteronormative masculine preserve. While maybe not intentionally, these stories attempted to disguise gender by depicting the normative biological sex as male, and the normative gender as masculine. Moreover, by couching socio-historical issues of equity and progress as being 'male issues' in sport, these stories suppressed how these issues also affect athletes of non-normative genders and sexualities. Had the students chosen sports that are dominated primarily by women such as field hockey or by men who perform non-normatives masculinities like figure skating, different stories might have been told that may not have prescribed sporting ability as performing bigger, faster, or stronger; or identity as being male and aggressive.

Repetition #2: In sport, women are just as able as men

The second repetition was a counter the first. This repetition allocates that women are just as able as men. It was found in seven stories about sport: *Equestrian*

Eventing, Going the Distance: The Marathon, Paralympique VR, Planchodrome de Dieppe, Stéréotypes Raciste dans le Sport, Les Femmes dans le Sport au Nouveau-Brunswick, and *La Discrimination des Femmes dans le Sport*. In these stories, gender equity is advocated on the premise that women are just as strong and able as men.

Equestrian Eventing, Going the Distance: The Marathon, Les Femmes dans le Sport au Nouveau-Brunswick and *La Discrimination des Femmes dans le Sport* created this (counter)repetition by detailing how women when included have made significant achievements in advancing the goals and aims of sport. In *Equestrian Eventing*, the reader is told how women and civilian men were not included in Olympic equestrian teams until 1952. To show the advances of gender equity in sport, the story highlighted Becky Holder, Karen O'Connor, Amy Tyron, and Phillip Holder, four members of the 2008 U.S. Olympic team (but surprisingly does not mention that nine members of the fourteen member team were women). The story also informed the reader of the physical demands required by two of three events, specifically showjumping which tests the equestrian athlete's "agility and fitness", and cross country which necessitates "endurance and courage". *Going the Distance* features the stories of Kathrine Switzer, the first woman to run the Boston Marathon and Joan Benoit, the first woman to win an Olympic marathon and refuted the stereotype that women are weak and cannot endure grueling competition. *Les Femmes* told the story of the history of women's participation in sport in the New Brunswick province of Canada featuring the all-around athlete Marjorite Lindsay and a local track athlete Geneviève LaLonde who participated in the 2010 World Junior Championships in Moncton, New Brunswick. *La Discrimination* took

the reader through a pictorial history of women in North American sport beginning with photos of sports that men deemed socially acceptable for women and ending with a vast array of images of women participating it sports that were at one point in time considered to be men's sports.

In *Paralympique VR*, *Stéréotypes Raciste dans le Sport*, and *Planchodrome de Dieppe* the repetition of ability and gender is indirectly stated. Focusing on other inequities and social injustices in sport, *Paralympique VR* makes the claim the physically disabled athletes can compete on the same level as their 'able' counterparts. It makes this claim by highlighting the achievements of Stéphanie Dixon, a Canadian paralympian swimmer, who won five gold medals in the 2000 summer Paralympics in Sydney, Australia. The story boldly states "Save your sympathy for her opponents." In contrast, *Stéréotypes* uses a photograph of black women swimmers to combat the stereotype that swimming is a white sport. *Planchodrome* remarks that skateboarding although considered to a deviant or nuisance sport in mainstream culture has a number of girls and women who participate in it.

As Kumashiro (2003) notes, not all repetitions are harmful to the curriculum. Some can and should be used in the cause of social justice. Repetition that exposes the challenges that women face in sport has merit as it brings gender oppression to the forefront of the curriculum. Least of all is exposing the harmful repetitions that privilege heteronormative abilities and identities in sport and physical culture. And by ability, I am not referring to its material nature; I am referring to its discursive aspect which is

oftentimes embedded in curricular discourses. When most of the photos that students see in the curriculum are of male bodies, it naturalizes ability in the male body, and semiotically positions other bodies as less able.

Despite the positive benefits of this second repetition kinesiology educators should be cautioned of its potential drawbacks, especially when using it visually in pedagogical practice. The first drawback is that it could fail. There are limited resources students (or educators) can draw upon that feature women's abilities in sport (in comparison to men). For example, there are few images of professional WNBA players slam dunking a basketball. By visually representing particular skills in sport, students are privileging certain physical abilities where some men might have a physiological advantage over some women. More importantly, by privileging these skills it hides the question of why particular skills are valued over others in competitive sport. Kinesiology educators should have students question why this is the case.

The second drawback is that even when these visuals are used by students in their narratives there runs the risk of normalizing particular women's bodies as strong or able and thereby inadvertently positioning other women's bodies as weak, unable, or 'unnatural'. In *La Discrimination*, for instance, the story rightly demonstrates that the bodies of female athletes are oftentimes sexualized in the media. However, by using photos of all white female athletes the story culturally reinforces the 'able' female athlete body as slim, sexy, and white. The narrative critiques how certain female bodies are represented in sports media without troubling the whole idea of what is the female athlete

body, who owns this body, and its representation (see Figure 20)? Why, for example, was not the body of Serena Williams featured on the cover of the Sports Illustrated swimsuit edition? This is not to say that Williams should be featured on the cover, but as a pedagogical tool for inquiring into the status of women and their representation in sports media, this question is worthy of attention as it asks, " What does inclusion in professional sport really mean for women?"

Figure 20. Anna Kournikova, tennis player (Cormier, 2010, 1:43)

The third drawback is the potential for blaming women (and girls) for their lack of ability of sport. By not questioning how and why certain women have access to certain sports creates the misconception that all women have equal access to sport if they put in the effort. This misreading semiotically constructs ability as an individual responsibility

and is secured with slogans like “A girl in every game. A game for every girl”. None of these discourses address the structural constraints that make sports participation difficult to impossible for some women (and girls).

Repetition #3: Children are less able due to the lack of physical education in schools

The next repetition disguises the effects of gender by not considering the implications of gender at all, making stories appear to be genderless. The third repetition is also problematic in that it discursively equates the level of child’s physical ability with the level of physical education in schools. This repetition is produced in *Lack of Physical Education* and *Where Has PE Gone*. *Lack of Physical Education* is rife with contradictions between image and text as it seemingly tries to expose the reasons for why so many children are overweight and obese in America. Near the beginning of the story the reader is exposed to a photo of an overweight boy sitting on the bleachers watching his classmates climb ropes. The photo is captioned, “Physical education in school system…where is it going?” Another photo of children jumping rope apparently laughing at another overweight boy who is holding the ropes and not jumping appears a few seconds later. This photo is captioned, “Humiliation?” (see Figure 21). Both photos depict gymnasiums where students, in the case boys, are being ridiculed by other students for their lack of ability. How this behavior will contribute to encouraging physical activity and stemming childhood obesity is flawed in its logic. *Where Has PE Gone* presented a stronger case by contributing the lack of physical education (and health education) in schools to standardized testing created by the Bush administration’s policy of “No child left behind”. This story in contrast to *Lack of Physical Education* creates a

decisive moment where the 'reader' is left to ponder how government policies might be contributing to childhood obesity.

Figure 21. Children jumping rope (KIN351, 2010d, 0:34)

The repetition that childhood physical ability is linked to flaws in the K-12 curriculum is harmful to the university curriculum in several ways. First, this repetition plays a blame game. In the stories, parents are held ultimately responsible for their children's obesity and were implored in the stories to do something about it. Second, this repetition enacts the misconception that children are genderless. What *Lack of Physical Education* conceived visually but did not conceive textually is that school gymnasiums are not safe havens for children, especially boys, who are expected to perform to particular levels of ability. Or of girls who are expected to under-perform. Third, this

repetition like the second puts emphasis on individual responsibility for one's ability, in this case parents are held responsible for the children's bodies.

Repetition #4: Technology enhances human ability in sport and fitness

The fourth repetition discursively (de)legitimizes the role of technology in enhancing human ability. This repetition is most apparent in *Whose A.S.S. is Best*, *The Evolution of Fitness* and *Going the Distance: The Marathon*. *Whose A.S.S. is Best* and *Going the Distance* question if technology has enhanced human ability to perform in sport, whereas *Evolution* presents the history of technology in the fitness industry in a seemingly neutral fashion. All three stories discounted how sport and fitness technologies are mediated by gender.

Evolution makes universal claims about how fitness videos are for members of the general public who did not have time to exercise in a recreational facility. But the visuals in this narrative tell another story. In the narrative we see images of women aerobicizing to videos of Jane Fonda and Richard Simmons, and developing their muscles with personal trainers Susan Powter and Billy Blanks (of Tae Bo fame). The narrative shifts to home fitness programs like P90x which are marketed primarily to men. Although the story blames celebrities for the popularity of many fitness products it does not consider (with one or two possible exceptions) how these fitness technologies are designed to build the 'ideal' body based on a one's biological sex. With the exception of a few products like Wii Fit which are designed to be 'fitness games' and are marketed primarily to the parents of children, fitness technologies are intended to be gender-specific (see

Figure 22).

Figure 22. The Tony Little Sprintmaster (KIN351, 2010c, 2:48)

Whose A.S.S. and *Going the Distance* diverged from *Evolution* by asking the question about which is better: technology or natural human ability? *Whose A.S.S.* makes the points that ancient Greeks relied on body weight exercises to build strength, sprinted to foster speed, and wrestled to enhance agility (the ability to make quick changes in any direction). This all changed in modern times with the shift to free weights for building muscular strength and the vast array of fitness equipment to assist athletes with agility and speed maintenance (thus the play on acronym A.S.S. which stands for agility, speed, and strength). *Going the Distance* asks "How do we go beyond?" Is the answer to speed maintenance new types of running shoes, or is running barefoot best? Are these

technologies we develop to augment human performance dehumanizing? *Going the Distance* is right to inquire into the role of technology in human performance (see Figure 23). In many ways, this story appears to be aware of the repetition that promotes technology as a solution to human lack. As such, this story could also serve as a teachable moment to help students understand that technology is not gender neutral.

Figure 23. Cyborg human (KIN351, 2010j, 4:17)

There are three photos in *Whose A.S.S* that construct women's ability in sport and fitness. In the first photo, a slim, muscular woman is preparing to perform a squat (see Figure 24), an exercise where a barbell sits on the top of the back below the neck and promotes upper and lower body muscular strength and endurance. In the second photo, a woman performs a box jump, a plyometric exercise designed to promote cardiovascular

and muscular endurance. In the third photo, a woman's buttocks are shown in what appears to be a beach volleyball bikini. The reader was left to guess *Whose A.S.S. is (Really) Best*? Is it the butts of ancient Greek (male) athletes or the butts of (female) athletes today? This representation not only produces the repetition that women are just as able as men; it also leaves the reader with the sense that technology is gender neutral. When a woman choses to participate in exercise regimes that were intentionally designed for men and men's sport, is it a form of gender resistance a form of gender compliance? Are these gendered performances a form of mimicry that reinforces masculine standards of what it means to be physically fit, or do they have the potential to blur gender lines?

Figure 24. Barbell squat (KIN351, 2010h, 1:03)

It should be noted that some technologies are considered to more appropriate than others. Some self-technologies that athletes might use to enhance performance are publicly stigmatized (e.g. steroids) while others are considered to be legitimate by organizations like the World Anti-Doping Agency. *Drogue et Tricherie dans le Sport* critiques the use of these technologies.

These four repetitions have at least one thing in common. They all do gender work within a heteronormative systems of sport, physical education, and health by (re)producing regulatory knowledges, identities, and abilities. Before speaking to how kinesiology educators might get around these repetitions in body knowledge when using visual narratives as a pedagogical strategy, this study considered the obstacles to addressing repetitions.

Body Knowledge and Repetition: The Obstacles

Media culture and sport

There are several obstacles to dismantling gendered constructions of ability when using visual narratives in the kinesiology curriculum as a pedagogical practice. The first of which is the influence of media culture. Western culture is a media-rich culture and the knowledge about sport that students bring with them into the classroom oftentimes originates from the web, print and television. Notwithstanding, cultural influences play a significant role in determining which gendered performances students value in sport and physical culture. And while new media technologies like YouTube™ can provide alternative stories and insights, much of what is seen on YouTube™ are reiterations of

the values of mainstream culture or reactions to those values. It should not be surprising that students select one of those two paths in the stories that they tell. Cultural hegemony in Western society that places heteronormative masculine values above any other is not immune to sport. In fact, it could be argued that sport, in its capitalist form, intentionally enacts societal norms that may not have existed prior to this enactment.

Sport is a foremost transmitter of physical or body capital in our society (Shilling, 1999, 2004). When centered in the curriculum, it will be a major obstacle in combatting harmful repetitions of body knowledge because sport has been historically and socially represented through various media as a male domain. Sport locates bodies not only on the playing field but off where knowledge of certain sports in certain social spaces allocates social capital to an individual, provided that one is performing appropriately to gender expectations. Since playing sport or being 'fit' provides at least some social capital to its participants in spite of the individual's biological sex, it becomes a valued commodity, a thing worthy of attainment. This is not to say there are spaces where these expectations cannot be dismantled and non-normative gender performances occur. It is to say that classroom is a volatile space where there are possibilities for either disrupting or adhering to normative expectations of ability and identity. Sport actively subsumes and resources non-normative bodies, making these bodies invisible or representing them as exceptions, and occasionally noteworthy exceptions, to the rule.

Masculine hegemony

While two of the six stories were critical of heteronormative masculine performances, the visual ways in which they critiqued these performances reified a masculine hegemony and its stronghold over sport. In a story that criticized the violence in hockey, *Violence au Hockey,* twenty-nine of the fifty incidents presented visual displays of violence including fights and body checking. The other images were mostly of men and boys scoring goals. A short video segment featured a young man speaking out against the violence, but there were no images of parents, referees, or coaches addressing the level of violence that occurs in men's and boys' hockey. Unlike *Violence au Hockey*, the other story, *L'illusion dans le Monde du Soccer,* did not overemphasize aggressive male behavior. Instead it depicted six incidents of cheating or violence to makes its claim that video arbitration is needed in international men's soccer. But what this story did infer, perhaps unintentionally, is men should be the primary arbiters for policing the acts of other men in sport. Through a sequence of eight photos of men pointing the finger at the viewer to act against this apparent atrocity of FIFA, this story sends a clear message that it is the duty of men to regulate the bodies and abilities of other men in sport (see Figure 36). As such this story was somewhat complicit with the masculine hegemony that privileges heteronormative physical ability.

These two stories written by young college-aged males suggests when young men try to critique overt masculine behavior in sport there is the tendency for them to conceptualize nonconformity through a heteronormative lens. Using heteronormative images as a means to combatting heteronormative expectations (Butler, 2003) in sport

does not subvert gendered stereotypes of ability, and is potential obstacle for dealing with repetition. By allowing oppressive sport systems to self-monitor, sport is buffered from counterhegemonic and anti-oppressive pedagogical strategies. This finding concurs with some of the research on masculinities, abilities and sport. According to Wellard (2006) the ability to perform appropriate masculinities in mainstream sport is a type of 'exclusive masculinity' where the playful aspect of sport in childhood is superseded with more "traditional forms of aggressive and competitive bodily masculine practices" (p. 106) in adult sport. This repetition is the most pervasive of the four as it not only conceives ability as forms of physical capital and physical literacy that students should aspire to (Wright & Burrows, 2006), it also demarcates ability according to gender lines that are not limited to one's biological sex.

Body reflexive practices

Moreover visual storytelling may serve as a body-reflexive practice (Connell, 2005), the idea that bodies are both objects and agents of practice. This obstacle coincides with the Connell's (2000, 2005) research on masculinities and with the research on how ability is gendered in PE (Beckett, 2001; Martino & Beckett, 2004; Wellard, 2006a; Wellard, 2006b). As a body-reflexive practice, visual storytelling captures not only the bodies being depicted in the stories, but also tells stories about the agents (the students) who created them. In the case of this first repetition, visual storytelling may have been a way for both young men and women to reflect their own identities and abilities back into the curriculum, allowing them to reinforce and reshape their own sensibilities.

Shilling (2003) noted that the second-wave feminist movement in the 1960s was one of the four key historical events that swayed how we think about the body. Therefore, the second repetition found in this study, which advocates that women are a physically-able as men should hardly be surprising to kinesiology scholars and educators. M. Ann Hall (1996) was one of the first in the discipline to attend to the sociological intricacies of feminism and sporting bodies and the insights it offered into how the masculine regimes in Western culture through its dualisms of mind/body, male/female, and nature/culture have sought to historically-produce and undermine the female body as natural, weak and feminine. Additionally, kinesiology scholars have questioned how gender dualisms from the wider culture are imbricated within the curriculum and re-taught by educators (Gard, 2001; Kirk, 2001; Martino & Beckett, 2010; Wright, 1998). And others, like Pronger (2000, 2002) have examined how sport as a system incorporates non-normative bodies (e.g. women and gay men) by requiring them to adhere to its dominant structures and appropriating their 'otherness'.

Risk

Certain discourses inscribe risk on certain bodies fostering repetitions in body knowledge. In visual narratives produced by students, two social groups stood out: women and children. The repetition that sport is a male preserve demarcates women's bodies as 'other' in sport, but the counter repetition that woman are just as able as men is complicated by two obstacles. One, for the reasons mentioned above, many individuals despite their biological sex, embrace the social benefits that sports knowledge and sports participation confers. Two, sport, in its heteronormative form, sources bodies in a manner

that limits what bodies can participate and under what circumstances. Therefore, when women, and other non-normative bodies, embrace sport they do so with an implicit knowledge of sport's boundaries. Three, feminist scholars have questioned if policies like Title IX which advocate for women's equity in sport have really transformed sport (Birrell & Richter, 1986) or maintained its heteronormative stronghold by likening equity to equality. The difference is equity likens recognition to representation while equality demands emancipation from cultural constrictions of one's identity. The quest for recognition plays with discourses of risk where women's bodies are positioned as in need of salvation from sport's inequitable practices. It makes visible bodies that ascribe to heteronormative standards.

Next, the perception that children are helpless and their bodies are at risk is an obstacle to easing the repetition that childhood obesity is due to lack of physical education in schools. This finding coincides with research that questions the linkages between dwindling physical education programs in schools and childhood obesity (Gard, 2004; Gard & Wright, 2001; Wright, 2005). The repetition that children's bodies are less able due to the lack of PE in schools was reproduced in *Lack of Physical Education* and *Where Has PE Gone*. Each of these stories made its case in different ways. *Lack of Physical Education* depicted obese children all through the narrative (see Figures 9 and 10), whereas *Where Has PE Gone* targeted government-sponsored policies, in this example the *No Child Left Behind Act of 2002*. Both narratives implored parents to do something about (the lack of) physical education in schools (see Figure 15).

The discourse of childhood innocence puts children's bodies in a double-bind. At one end of the spectrum, the ideal body is held to the level of the divine, devoid of both gender and sexuality. On the other end, the body is stigmatized as one of risk. This spectrum perpetuates social constructions of childhood obesity where the ideal child's body is signified as one in need of salvation and intervention by adults. As Michael Gard (2004) notes relatively few studies find a relationship between school-sponsored physical education programs and childhood obesity. He argued that the few studies that have are ignored by sport science researchers due to lack of clinical competency of the researcher. How children's bodies are discursively deemed to be at risk by the media (Burrows & Wright, 2004) and how young male bodies negotiate that risk by displaying competence through PE and sports programs (Wellard, 2006a, 2006b, 2007) fuels the repetition that physical education is the primary cause of childhood obesity. *Lack of Physical Education* and *Where Has PE Gone* depict children as genderless and ignore how PE classes socially construct physical ability through gendered performances. This finding brings to light the tendency for students to reach the same conclusions about childhood obesity even when they visually approach this issue from different perspectives.

Technology

The preeminence of technology in a global society presents another obstacle to addressing repetitions in body knowledge. Technology pervades the core of Western society with competition for innovation and the perpetuation of new communication technologies. Technology under the guise of neutrality drives the body to perform in ways that were impossible bodies of the past making the human body 'posthuman'

(Hayles, 1999) or cyborg (Haraway, 1985, 1991). The technologies that modify 'natural' human capacity are embraced and considered to be an essential aspect in high performance sport (Butryn, 2003; Butryn & Masucci, 2009). This cyborg culture manifests in and outside of sport and makes the combatting repetitions of body knowledge, gender-related or otherwise, in the curriculum. Moreover, as has been shown in previous research, technology genders bodies by prescribing gender-appropriate bodily regimes in sport and exercise (Cole, 1993, 1998)

The formal or official curriculum

The official curriculum is an obstacle for all of the repetitions outlined in this study. Physical and health education programs whether under the guise of kinesiology, physical education, or sport and exercise science are entrenched with scientific knowledge that privilege partial knowledge of the body. In this way, the official curriculum leaves students with little leeway to consider how ability is gendered. The guidance documents published by the National Association for Sport and Physical Education (NASPE) are a case in point in how ability is gendered in the curriculum. These documents recommend the minimum competencies of knowledge needed by undergraduate students. The documents that govern scientific knowledge within the discipline (e.g. physiology, motor development, and biomechanics) either construct gender as one's biological sex or do not mention gender at all. In the *Guidelines for Undergraduate Exercise Physiology in a Physical Education Teacher Education Program's* section, the guidelines state that one of the basic concepts a student needs to attain is an understanding of "gender-related differences in fitness that occur at the onset

of adolescence" (NASPE, 2006, A5). In the *Minimum Competencies in Undergraduate Motor Development*, students are to describe "lifespan sex differences and similarities in motor development" (NASPE, 2004a, II8) and "gender and individual differences in physical growth and physiological development including the adolescent (secondary) growth spurt" (NASPE, 2004a, III3). The *Guidelines for Undergraduate Biomechanics* mention nothing about sex or gender-related differences at all (NASPE, 2003).

There are two noteworthy exceptions in the guidelines that allow for teaching ability outside of a gender binary in motor development and exercise physiology. In the motor development guidelines students should be able to identify "characteristics of the physical environment…and the socio-cultural environment (e.g. SES level, childrearing practices, significant, cross-cultural practices) that can affect motor development" (NASPE, 2004a, IIIC3). In the exercise physiology guidelines, students are to "recognize the physical, psychological, social, and health implications of obesity in childhood" (NASPE, 2006, E1) and "demonstrate knowledge concerning the prevalence of obesity in youth and understand the multiple factors contributing to obesity in children and adolescents" (NASPE, 2006, E2). Are these competencies taught? If so, one must question why some of these competencies are not reflected in the students' visual narratives on childhood obesity in schools.

The documents that guide the history, philosophy, or sociology of sport and physical education also inform how ability is gendered in the curriculum. The *Suggested Guidelines for Teaching Undergraduate History of Physical Education and Sport in a*

Physical Education Teacher Education Program (NASPE, 2010a) suggest that the history should be taught chronologically beginning with the study of the ancient world. The role of women in sport and physical education is not mentioned until the 1800s when Catharine Beecher's system of calisthenics was introduced. The guidelines also suggest that key developments in the history of men's and women's intercollegiate athletics should be taught separately. The guidelines recommend the teaching the history of women's physical education and the impact of Title IX on competitive sports for women and girls. Like the other guidance documents, gender is constructed as a binary, and with little mention of women's sports participation prior to the 1800s, the guidance document reifies that ability in sport is a masculine preserve (without explicitly stating so).

The *Guidelines for Teaching Undergraduate Sport Sociology* (NASPE, 2010v) and the *Minimum Competencies for Teaching Undergraduate Sport Philosophy Courses* (NASPE, 2004b) include several recommendations that have the potential for engaging gender and ability in the kinesiology curriculum without reducing them to binaries of biological sex. The sociology guidelines contain a section dedicated to gender, race, ethnicity, and ability and recommends that students should understand gender and power relations in sport, the extent to which Title IX has addressed gender inequities in sport, and should know "the ways that sports serve as sites for celebration of dominant forms of masculinity and why some people define girls, women, gay men and lesbians as invaders in sports" (NASPE, 2009, p. 3). The guidelines for philosophy state that students should not only understand the ethical issues in sport, citing gender equity, as one, but that they

"should understand ethics and ethical theories such as universality, paternalism, teleological ethics, and deontological ethics" (NASPE, 2004, p. 4).

The hidden curriculum

The hidden curriculum is a potential obstacle when trying to teach against gendered constructions of ability in kinesiology. Kevin Kumashiro (2009) states the hidden curriculum, what educators teach "indirectly, unintentionally, and often, unknowingly" (p. 718), has a profound effect on the formal curriculum. The hidden curriculum is pervasive because it echoes the cultural messages students receive in the media and from peers and family members, and it rarely goes unchallenged by educators. Even when the curriculum provides opportunities for dispelling harmful repetitions of body knowledge that gender ability, will educators take advantage of these opportunities in their pedagogical practices?

Interdiscursivity

The aforementioned obstacles are interdiscursive. They do no operate in the vacuum. They play off each other's discourses. Sport cannot maintain its hegemonic stronghold on what it considers to be legitimate forms of ability in sport. Technology, media, and the curriculum all play a role in how students conceive and gender ability in the visual narratives they create: the curriculum downplays the cultural 'realities' of gender, technology produces gender-appropriate exercise and sports equipment all under the guise neutrality, and the media legitimizes masculine, heteronormative discourses of

sport through its dissemination of ideological imagery.

Dialectical relations

There are other obstacles to addressing gendered constructions of ability that are not related to discourse. There are material consequences as some students may have limited access to the multimedia technologies needed to produce the stories and they may not have skill translate their ideas to a visual medium. In other words, when asking students to visually write about topics in the history or the sociology of sport, the stories they can tell are limited to the resources that are available to them and their level of technical proficiency. This poses yet another obstacle for educators working against repetitions in body knowledge. When using images from the web, students are limited to images that can be found from searches of Google, Flickr, or Wikimedia Commons that are free from copyright or available as fair use. This also applies to images students can scan from print documents. Students need not only understand issues related to copyright and fair use, but they must be competent in scanning images, and putting together presentations that follow sound information and communication design principles, including knowledge of the differences between print and digital images, and understanding digital video compression for the web. Additionally when students work together in peer groups, intragroup social relations are also an obstacle. Some students have more social capital than others and their ideas might be pressed upon the other students in the group. This affects not only the topics the students chose to write about, but also determines how stories are told.

Body Knowledge and Repetition: Why Is It Needed?

Simply put, repetitions that gender ability in sport and fitness are needed to support the status quo. In order for sport to maintain its masculine identity, it must put its energies into technologies, media, and knowledge that perpetuate its heteronormative agendas and subsumes alternative ways of thinking, behaving, or being. It must differentiate masculine sporting ability from other forms of physical ability such as health-related exercise, play, or activities for daily living (ADLs). The repetitions that sport produces pose a number of problems for the kinesiology curriculum because ability, centers the core curriculum.

What can kinesiology educators do to contest the repetitions of ability to make visual storytelling a viable pedagogical practice within the curriculum? First, we must acknowledge that sport, while legitimately a physical activity, should not be the focus of the core curriculum. Physical activity encompasses a wide variety of human movement, the least of which is sport (especially elite sport) and many of our students will become employed in occupations that are unrelated to sport, or unrelated to the level of sport they are studying within the curriculum. For example, teaching the history of the Olympic games is not relevant to the career choices of many of our students. Even when students are seeking careers in sports-related fields like sports medicine or athletic training, it might suit them better to learn the history of their chosen profession. When teaching sport in the curriculum, educators have two pedagogical tools at their disposal for addressing repetition in visual narratives. The first tool, citation refers to the way oppression is created through the "citing of particular discourses, which frame how people think, feel,

act, and interact" (Kumashiro, 2000, p. 40). The second tool, supplementation, refers to ways of altering harmful histories which are brought into the classroom.

Countering repetition #1:
Ability, especially in sport, is a masculine preserve

Countering this repetition in the aforementioned visual narratives requires kinesiology educators to first acknowledge that it exists and then design productive pedagogies in the undergraduate core curriculum that encourage students to rethink ability in sport and physical education. In the history course, students should be able to appraise the ways in which physical ability has been represented and gendered in the history of sport and physical education. Teaching the descriptive history of a physical educator like Dudley Allen Sargent (who he was, what he did, and when and where he did it) does not prepare students for critically thinking about physical ability. Students need to experience interpretative historical pedagogies that will allow them to interpret how and why Sargent, through his anthropometric measures and health machines, became a chief architect in how we conceptualize masculine ability today (de la Peña, 2003). Students need to be aware that they are storytellers. The 'realities' that they convey about physical ability in their stories will only be partial perspectives and may not even reference a true reality. Even when it does, their tales will always have gaps and omissions.

In the story selection process, educators need to make tough decisions about which stories are worthy of being produced and which stories will foster the repetition that 'real' ability in sport and physical education is a masculine preserve. This repetition

already exists in hidden curriculum (Fernandez-Balboa, 1993). It should be minimized at all possible costs in the formal curriculum. Although educational environments are often represented as open spaces for scholarly debate, this is not the case. The classroom is a volatile space and can be repressive for particular bodies. When students are choosing their stories, as educators challenge them to tell their stories as future professionals who appreciate and are aware of the limitations and possibilities of physical activity.

Countering repetition #2: In sport, women are as able as men

Additionally, kinesiology educators, when using visual storytelling as a pedagogical practice, ought to be cognizant of how ability is gendered and subsumed by sport. Sport does more than purport itself to be a masculine preserve. As a system it incorporates non-normative bodies by requiring them to comply with its heteronormative standard all under the guise of being 'inclusive'. The visual narratives students create may or may not advocate for this inclusion without troubling the ways in which (non)normative bodies are included or excluded in sport. Two stories, *Going the Distance: Marathon Running* and *La Discrimination des Femmes dans le Sport* use marathon running as a vehicle for showing the injustices against women in sport and challenging stereotypes of women's ability in sport. Both make reference to the Kathrine Switzer incident. In 1975, Switzer became the first woman to officially run the Boston marathon. Her case became famous when an official tried to remove her forcibly from the competition (see Figure 21). Both stories use this incident as an example of why women can and should perform on par with men in sport. *La Discrimination* takes the narrative a

step further by depicting how the sports media sexualizes and dehumanizes the bodies of female athletes.

Kumashiro (2003) posits that not all repetition is harmful or oppressive and that some can and should be used in the interests of social justice. Most students are probably unaware of sport's harmful histories. Making these histories visible has merit within the curriculum, but it also has drawbacks, the limits of which are the narratives of progress that assert women have made noteworthy strides in sport. At play are the politics of representation that prescribe recognition as a sort of equality. This makes women's bodies both visible targets and hidden resources for sport. Sport can incorporates women's bodies and at the same time demand that women play by heteronormative rules in order to be included. Those bodies that do not play by the rules, or cannot play the rules, are inscribed with deviance. The bodies that do play by the rules can be represented in any way sport deems appropriate to reinforce its masculine ideologies. The structural constraints that limits sports participation for women, gay, bisexual, and transgender athletes are obstacles for addressing this repetition.

A practical strategy for countering this repetition is teaching towards the realities and the actualities of sport and its echelons of inclusiveness. There are some bodies that sport deems more worthy for incorporation and the ways in which sport demarcates these bodies cannot be solely reduced to biological sex or gender. It is important that students comprehend that gender is not the equivalent to one's biological sex and that gender in North American sport is more than a "white female" issue, just as race in North American

sport is more than a “black male” issue. Gender is a culturally determined standard for performing of one’s biological sex that either one either subscribes to or circumvents through parody. Kinesiology educators can cite these performances in the student’s narratives and supplement them with discussions on how sport deals with non-normative gender performances. For a sociology course, an example might include South African sprinter Caster Semenya and the discourses that sought to excavate Semenya’s biological sex. Another example, for a history course, is how the media framed Mildred ‘Babe’ Didrikson-Zaharias’ sexuality and the influence it had on her performance in sport.

Countering repetition #3:
Children are less able due to the lack of physical education in schools

Countering the third repetition requires educators to have students explore body hierarchies and consider the roles they will play as mediators and managers of risk and (Burrows and Wright, 2004; Evans and Davies, 2004). Kinesiology educators must caution students to be mindful of how they represent other people’s bodies in their narratives and the biases they have about ability, weight, childhood and gender. When using visual storytelling to teach the history of sport and physical education, students must mentally break with current discourses on childhood and health and choose stories that are more historical. There are plenty of historical stories students could use for their narratives including topics related to play and games.

Countering repetition #4:
Technology enhances human ability in sport and health

Countering this repetition is difficult because not only do we live in a society driven by media, we also live in a society entrenched in technologies. This techno-culture drives the idea that technology is not only gender neutral but is instrumental to all (Borgman, 1984; Feenberg, 1999). Kinesiology as a discipline relies on technology to enhance or to sustain human movement and human ability. However, students should be aware that technology has it downsides. To counter this repetition, the philosophy of physical activity must be brought back into the discipline. Students need to differentiate between the instrumentalist, determinist, substantivist and critical schools of thought on technology (Feenberg, 1999) and apply this knowledge to the stories they produce. Students should also be able to apply this knowledge to the types of technologies that are used in sport, namely, self-technologies, implement technologies, rehabilitative technologies, movement technologies, and database technologies (Butryn, 2003; Butryn, 2007).

Teaching the socio-historical aspects of sport as narrative

Another way to counter repetition is to teach the socio-historical aspects of sport from a 'storied' perspective. Because sport tends to emphasize the histories, values, and narratives of the dominant culture, even when we discuss the oppression in sport, we tend to teach the values of inclusiveness and anti-discrimination. Less often we teach students that some forms of sport are irreparable and should be dismantled. Having students discover the mediated narratives that sport produces about gender and ability is one

means of countering repetition. Also, having students investigate the major historical themes of physical activity that surfaced during particular time periods and allow them to debate these themes as 'truths and fictions' (Booth, 2005) is another means of countering repetition.

Writing local stories with multiple voices

When constructing their visual narratives students should write local stories. Instead of searching for images from the web, they should generate their own images, and find local stories that they cannot readily replicate from their textbooks or the media. They should be encouraged to incorporate contradictory perspectives by including the voices of the people they are writing about in their narratives. Students may work collaboratively in visual project given the demands of photographing and interviewing members of the community, but they should also be required to produce their narratives individually. This ensures that each student's voice is heard through providing multiple insights into the same topic thus lessening the effects of repetition.

Working against (normative) abilities and identities

Although this study focused on how physical ability is transmitted and received through the curriculum, body knowledge is about ability *and* identity. How identity is visually conceived in sport and physical culture and how these identities enter pedagogical spaces play a key role in minimizing harmful repetition. Butler (1994) has argued that the invocation of identity wards off other possibilities. By invoking the normative ideal of ability and identity as the young white masculine heterosexual male who performs well in sport, other possibilities are for closed off not only from non-

normative groups like women and gays, lesbians, bisexual, and transgender athletes, but also for white men and boys who cannot obtain this ideal gender performance. The photo of Larry Bird in *Basketball: The Rules Have Changed* is an example of how men in particular sports are limited to representations that exhibit overtly masculine behavior (see Figure 2). It also hides *real* ability from *actual* ability. By this I mean, a photo that depicts a muscular young man wearing a basketball, baseball or football uniform is a Westernized representation of athletic skill which at the individual level may or may not be true.

As part of the overall engagement with this study, I created a website (Owens, 2011) that provides practical strategies for kinesiology educators when using visual storytelling in pedagogical practices. This website features a visual narrative entitled "Fixing Sport" that serves as a meta-narrative of the stories analyzed in this study.

Chapter Summary

This chapter described and analyzed 18 visual narratives produced by undergraduate kinesiology students at two different universities. The chapter outlined four common themes or repetitions that emerged within and across the stories. Each repetition was about physical ability and gender within the contexts of physical education, sport or fitness. Each repetition either fostered or countered culturally normative aspects of gender expression in these domains. This chapter explained why these repetitions occur and how they might be countered by kinesiology educators in their teaching practices.

Despite all of this, repetition will occur in the students' visual narratives. Kinesiology educators can cite these repetitions in the teaching process and supplement them with knowledge that counters the repetition, qualifies, or challenges it. When students write about the history of men's basketball and use visual statements that the changes in the rules have benefited the sport, as kinesiology educators we can them who benefits, and why? When students advocate that it is the lack of physical education in schools that leads to childhood obesity, educators can students inquire the other social aspects of obesity and why they think children are in need of being saved, from who and for what purpose.

As kinesiology educators we must learn to acknowledge repetition. It will always exist in the curriculum even though we may now always be aware of which repetitions are present or absent in our pedagogical spaces or practices. Students bring repetitions with them into the classroom but not all of them will actualize. Furthermore, when we look for repetitions that could disrupt our instructional objectives, we might find repetitions that are not really there.

CHAPTER V

RECOMMENDATIONS AND CONCLUSION

This study was designed to demonstrate how kinesiology educators might incorporate visual storytelling as a type of creative analytical practice (Richardson, 2000) in their teaching. It was also intended to show how students enrolled in kinesiology and related disciplines could use images as a form of writing to convey their thoughts on a socio-historical aspect of sport, health, and physical education. This study was undertaken to assess the viability of visual storytelling in the classroom, with specific attention to gender oppression and how physical ability is construed in undergraduate programs of study. In this chapter I discuss the findings by comparing and contrasting them to theoretical frameworks of body knowledge and anti-oppressive education in order to demonstrate how these frameworks intersect and inform not only how physical ability is gendered and replicated in the visual narratives students create, but also to provide kinesiology educators with an anti-oppressive ways of conceptualizing the active body in the curriculum. In order to accomplish this objective, I re-state the research questions, summarize the results, discuss the implications of this study and make suggestions for further research.

Statement of Research Questions

The purpose of the following research questions is to address how body knowledge was represented in students' visual narratives. This study had three research questions and one practical purpose. One, how did students chose to tell their stories what images and storylines were included and which were left out? In other words, what repetitive or reoccurring themes about the body in the contexts of exercise, physical education and sport emerged from these visual narratives? Two, how did these repetitions construct knowledge of active body and what were the obstacles to addressing them? In other words, did the students select images or themes that overemphasized particular gender, racial, or economic groups, or body sizes and if so what are potential road blocks to remedying them? Three, why are these repetitions of body knowledge needed? After addressing these three questions, this study aimed to provide kinesiology educators with practical pedagogical strategies for addressing (visual) repetitions of body knowledge in the curriculum.

The study brought together HPE's theoretical framework of body knowledge (Evans & Davies, 2004) with anti-oppressive education's theory of repetition (Kumashiro, 2003). Specifically, this study examined visual representations of physical ability within the context of gender oppression. This study engaged a critical discourse analysis (Fairclough, 2009) methodology to investigate four questions about gender and physical ability: (1) what repetitions of gender and ability tended to occur in the visual narratives; (2) what were the obstacles to addressing these repetitions; (3) why does the

undergraduate kinesiology curriculum need these repetitions; and (4) what are some of the ways around these obstacles.

We may think of body knowledge as the ways we come to know or not know the body within society. This interpretation of body knowledge is broad and does not necessarily attend to how the body is constructed within specific social structures like education. Although there are myriad of social institutions that teach us about the body, this study utilized Evans and Davies' (2004) theoretical framework of body knowledge which observes how body knowledge is transmitted and received through the institutional practices and policies of schooling. In *Body Knowledge and Control: Studies in Physical Education and Health*, Evans and Davies (2004) address the ways in which knowledge of the body is received and transmitted within the sport, physical and health education curricula. Their framework examines how physical abilities and identities are social constructed, transmitted, and received in the curriculum. Although Evans and Davies (2004) situate their framework in primary, middle, and secondary schools, this study found the framework applicable to higher education where the next generation of physical educators is trained.

We may think of oppression as the ways in which bodies are subjugated to physical or social control. This too may be a limited definition as it does not consider how oppression is communicated through language. This study drew on Kevin Kumashiro's (2003) definition of oppression as the repetition of regulatory identities, practices, and knowledge. Kumashiro (2003) inferred that for repetition to work, it must

be culturally desirable and attainable and have the capacity for being communicated through language as discourses, the socially-acceptable ways of speaking about things like physical activity and physical ability. The classroom is not immune to repetition because as Kumashiro (2003) suggests students are not blank slates. They bring knowledge, abilities, and identities with them into the classroom that they want to see those things reflected back in the kinesiology curriculum. Moreover, kinesiology educators bring their own biases towards specific ways of knowing, experiencing and being into the classroom.

Keeping all of these things in mind, this study sought to explain how particular bodies are oppressed at the expense of other bodies in the kinesiology curriculum. By bringing together *body knowledge* and *repetition* to explain how *physical ability* is *gendered* through institutional practices and policies of schooling, this study looked at the practice of teaching and learning and the viability of using visual storytelling as a pedagogical practice for dismantling the repetitions that students bring with them into the classroom. This study argued that educators should not only care how repetition works in their classrooms, but should also be attentive to how emergent technologies influence pedagogical practice.

Summary of Results

This study found four major repetitions in the visual narratives: (1) *Ability, in sport, is a masculine preserve,* (2) *In sport, women are as able as men (and therefore should have the right of participation),* (3) *Children are less able due to the lack of physical education in schools***,** and (4) *Technology enhances human ability in sport and*

health. Each of these repetitions regulates how ability is constructed in sport, physical education and health. This study also identified eight obstacles for addressing these repetitions: (1) media culture, (2) sport, (3) masculine hegemony, (4) body reflexive practices, (5) risk, (6) technology, (7) the formal curriculum, and (8) the hidden curriculum.

Discussion

These findings are supported by much of the physical education literature on sport, education and ability, the feminist and masculinities research on sport, and the sport sociology research on technology and human performance. How sport is a masculine preserve was first noted in the sport studies research by Eric Dunning (1986). Health and physical education (HPE) scholars have examined how ability is gendered in PE and sport (Beckett, 2001; Martino & Beckett, 2004; Wellard, 2006a, 2006b) and through the pedagogical practices of PE teachers (Gard, 2001; Kirk, 2001; Martino & Beckett, 2004; Martino & Beckett, 2010; Wright, 1998). This study found that students often replicate the discourses of ability in sport and PE. Additionally, the masculinities studies research has argued that bodies are both objects and agents of practice (Connell, 2005). This study found that visual storytelling may serve as a body-reflexive practice for students to reflect their personal identities and abilities back into the curriculum, allowing them to reinforce and reshape their own sensibilities about physical ability. Moreover, sport studies scholars have considered how technology dehumanizes and creates cyborg bodies (Cole, 1988; Cole, 1993; Butryn, 2003; Butryn, 2007). What this study adds to the present literature is how new media narratives, when used as a pedagogical practice, tend

to reproduce normative and oppressive constructions of ability within the contexts of sport, physical education and health. This study also suggests possible ways around these issues in order to make visual storytelling a viable pedagogical practice.

These results have several implications for the academic discipline of kinesiology as well as other health-related disciplines. When using visual storytelling (and other visual pedagogies) as a teaching method the runs the risk of students reflecting stereotypical knowledge they attained outside of the discipline back into the curriculum. This is not to say that this teaching technique cannot be used but it goes to show how careful attention must go into the analysis, design, development and implementation of visual pedagogies. If students are only regurgitating knowledge that anyone outside of the academic discipline could also tell, then we must question whether practices like these have any instructional value for the core knowledge of the discipline.

We must acknowledge that sport, while considered a physical activity, should not be the focus of the core curriculum. Physical activity should be the focus (Gill, 2007). Physical activity encompasses a wide variety of human movement, the least of which is sport (especially elite sport) and many of our students will become employed in occupations that are unrelated to sport, or unrelated to the level of sport they are studying within the curriculum. For example, teaching the history of the ancient or modern Olympic movement is not relevant to the career choices of many of our students. Even when students are seeking careers in sports-related fields like sports medicine or athletic training, it might suit them better to learn the history of their chosen profession, or

develop the critical skills needed to conceptualize how 'active' bodies are socialized and historicized in our culture (Andrews, 2008). The NASPE guidelines for teaching undergraduate sport sociology (NASPE, 2010b) and teaching undergraduate history of physical education and sport (NASPE, 2010a) need to be revisited and re-examined for how these documents address ability in sport.

Kinesiology educators should also be aware of how the hidden curriculum works in pedagogical practices. Not only are our students bringing outside (and anti-disciplinary) knowledge into the classroom with them, but we, as educators, are also bringing our aptitudes and biases toward certain knowledge and ways of knowing with us. Kumashiro (2009) states the hidden curriculum, what educators teach "indirectly, unintentionally, and often, unknowingly" (p. 718), has a profound effect on the formal curriculum. The hidden curriculum is pervasive because it echoes the cultural messages students receive in the media and from peers and family members, and it rarely goes unchallenged by educators. As educators we need to take advantage of any opportunity to dispel repetitions that gender, race, or class physical ability as it impedes our instructional goals.

Kinesiology educators must also consider the narrative aspect to knowledge and how stories are told in the history and sociology of sport. Because sport tends to emphasize the histories, values, and narratives of the dominant culture, even when we discuss the oppression in sport, we tend to teach the values of inclusiveness and anti-discrimination. Less often we teach students that some forms of sport are irreparable and should be dismantled. Having students discover the mediated narratives that sport

produces about gender and ability is one means of countering repetition. Also, having students investigate the major historical themes of physical activity that surfaced during particular time periods and allow them to debate these themes as truths and fictions (Booth, 2005) is another means of countering repetition.

Kinesiology and other kinesiology-related disciplines must bring the philosophy of physical activity back into the curriculum as it can counter the neutrality of technology. Technology is pervasive in our society. To counter its repetitions, students need to differentiate between the various schools of thought on technology (e.g. *instrumentalist*, *determinist*, *substantivist*, *critical*) and apply this knowledge to the stories they produce. Students should also be aware of the types of technologies that are used in sport, namely, *self-technologies*, *implement technologies*, *rehabilitative technologies*, *movement technologies*, and *database technologies* (Butryn, 2003, 2007) and their ethical uses, misuses and abuses in sport.

When constructing their visual narratives students should write local stories. Instead of searching for images from the web, they should generate their own images, and find local stories that they cannot readily replicate from their textbooks or the media. They should be encouraged to incorporate multiple if even contradictory perspectives by including the voices of the people they are writing about in their narratives. By approaching their topics from a multiplicity of perspectives this lessens the repetition of a particular ability surfacing as the 'norm' in their narratives. Students may work collaboratively in visual project given the demands of photographing and interviewing members of the community, but they should also be required to produce their narratives

individually. This ensures that each student's voice is heard through providing multiple insights into the same topic thus lessening the effects of repetition.

Educators must take care cite and supplement repetitions that gender, race, or class physical ability. *Citation* refers to the way oppression is created through the "citing of particular discourses, which frame how people think, feel, act, and interact" (Kumashiro, 2000, p. 40). *Supplementation* refers to ways of altering harmful histories which are brought into the classroom. By encouraging students to reflect on their own thinking processes we can help challenge beliefs that they have taken for granted. We should also supplement the stories student produce with alternative knowledge and alternative ways of thinking about bodies and their abilities.

As educators, we must also understand that repetition does not operate in a vacuum. Repetition is intertextual and it interplays with discourses of sport, technology and the media. Sport cannot maintain its hegemonic stronghold on what it considers to be legitimate forms of ability in sport without this interplay. Technology, media, and the curriculum all play a role in how students conceive and gender ability in the visual narratives they create. The curriculum downplays the cultural 'realities' of gender, technology produces gender-appropriate exercise and sports equipment all under the guise of gender neutrality, and the media legitimizes masculine, heteronormative discourses of sport through its dissemination of ideological imagery.

As educators we must be aware of other obstacles that support repetition in visual storytelling. The first is the student's access to technology. The second is the student's

technological competency needed to produce the stories. The third is the student's ability to translate ideas to a visual medium. Fourth is a student's access to the resources, in terms of photos and other visual imagery, which the student will need to have in order to tell the story. Students have a wide range of competencies and access to resources and some of them may not be suitable for telling stories that are anti-oppressive.

Limitations

This study has several limitations. First, this study did not include the student's voice on how they might have felt about this limitation, especially at the first site where the story was a requirement. Bringing in the student perspective might have given me a different outlook on issues of power and privilege that operate when students are expected to use technology in the classroom. Second, although this study makes recommendations on how to address repetitions in visual storytelling it does not fully implement these recommendations. This may be the case with most critical discourse work: it makes recommendations and expects policy makers and practitioners to put these recommendations into place. Third, this study was limited to gender oppression. It should be noted that anti-oppressive education focuses on all areas of oppression. Fourth, this study only considered two groups of students enrolled at two different universities in North America.

Suggestions for Future Research

More research needs to be done on how body knowledge is constructed within the higher education curriculum. This study is one of the few that has considered how body knowledge is conceived and transmitted through the social practices and policies of

institutions of higher learning. Additionally, this is the only study that I am aware of that examined body knowledge from a critical discourse analysis (CDA) perspective and its philosophy of critical realism. Much of the current research on body knowledge relies on post-structural methodologies which are limiting because these studies usually only consider the roles of discourse, ideology, and power (and ignores their dialectical relationships). Moreover, how some bodies are actualized while others are not (and the empirical methods used to actualize those bodies) is needed.

Finally, while this study focused on ability as a construct of body knowledge, repetition and body knowledge are both inextricably tied to identity. How repetition produces certain identities in sport and physical culture is also an under-theorized in the socio-historical of sport and physical activity. Future studies on how repetition functions in the production of (non)normative sporting identities and organizational practices would be beneficial to the field. How identity is visually conceived in sport and physical culture and how these identities enter pedagogical spaces is worthy of future research.

Moreover, the socio-historical of sport and physical activity needs more visual studies that use critical approaches for interrogating the role of the visual in all aspects of our 'active' physical and social worlds.

Conclusion

Repetition must be acknowledged in the curriculum. As such, repetition will occur in visual pedagogical practices. Educators must cite these repetitions in the teaching process and supplement them with knowledge that counters the repetition,

qualifies, or challenges it. When students write about the history of men's basketball and use visual statements that the changes in the rules have benefited the sport, as educators we can them who benefits, and why? When students advocate that it is the lack of physical education in schools that leads to childhood obesity, we can have them inquire into the other social aspects of obesity and question discourses that position children as in need of being saved. Asking students from whom and for what purpose opens up new possibilities and insights into how bodies are located within the hidden and the formal curriculum.

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APPENDIX A

PHOTO STORY PROJECT

Telling Digital Tales in Kinesiology: Today and Tomorrow

This assignment will be completed as a small group project. You and the members of your research team are investigators. You will create a 3 – 5 minute digital photo story (also known as a digital story) to investigate an aspect of kinesiology including but not limited to Olympism, sports (medicine), physical education, community youth sports development, or fitness that addresses this two-part question:

1. How is sport (medicine), physical education, fitness, community youth sports development, or Olympism different today (than it was in the past)

2. How might it change in the future?

Reflect on the readings and lectures from class. You should also draw on knowledge you have learned in other kinesiology courses that might fit your topic, but keep in mind that you will be framing your topic from the position of a historical investigator. Your group's research should focus less on explaining WHAT happened in the past or WHAT may happen in the future and more on asking "HOW did this happen?" or "WHY did it happen?"

Think through how best to document the topic you have chosen. Will you interview different people about this; will you explore this issue in using images like photographs

with voiceovers or a music soundtrack? The tools you will use to create the story are *Microsoft Photo story 3 for Windows* and/or *Windows Movie Maker*.

In order to prepare you for this assignment, you will also complete a **proposal**, a **story cycling activity**, and a **storyboard.** Each of the components are of the assignments are described below.

Assignment Descriptions

- Story proposal The proposal is just a one to two paragraph synopsis of your Photo story. The proposal should (a) identify which area you will be covering sport (medicine), fitness (leadership), PE, Olympics), (b) the names of the other students in the group, and (c) the issue you wish to focus on (e.g. technology, a specific sport, athlete, locale, or event)

- Story cycling activity

  This activity will be completed in class but you should read the other story proposals prior to class and come with ideas on how to improve your classmates' proposals.

- Storyboard/Script

  This is an outline of your photo story or your proposed script for the story. It should at least be a two-page outline **or** a 300 – 500 word script.

- Digital Photo story

  This is the culminating project that will be done using the *Windows MovieMaker* or *Microsoft Photo story 3 for Windows*.

APPENDIX B

PHOTO STORY RUBRIC

This rubric is a set of criteria used to assess quality and identify areas for improvement. You will want to refer to it often as you develop your script and storyboard as it will help you stay on track for this assignment.

ELEMENT	**Excellent**	**Good**	**Satisfactory**	**Needs Improvement**
1. Point of View				
- Purpose	Establishes a purpose early on and maintains a clear focus throughout. It is clear that the authors care about their video and feel that they have something important to	Establishes a purpose early on and maintains focus for most of the presentation.	There are a few lapses in focus, but the purpose is fairly clear.	It is difficult to Figure out the purpose of the presentation.

	communicate.			
- Audience	Strong awareness of audience/viewer in the design. Students can clearly explain why they felt the vocabulary, audio and graphics chosen fit the target audience.	Some awareness of audience in the design. Students can partially explain why they felt the vocabulary, audio and graphics chosen fit the target audience.	Some awareness of audience in the design. Students find it difficult to explain how the vocabulary, audio and graphics chosen fit the target audience.	Limited awareness of the needs and interests of the target audience.
-Content	The content of the story uses primary and secondary sources and engages with historical narrative. Content	The content of the story uses primary and secondary sources and engages with historical		

	not only describes but interprets history. Content appropriately and selectively blends other aspects of kinesiology (e.g. sociology, psychology, biomechanics, physiology, motor behavior) with historical knowledge.	narrative but only describes and does not interpret. Content does not blend other aspects of kinesiology (e.g. sociology, psychology, biomechanics, physiology, motor behavior) with historical knowledge.		
2. Dramatic Question	Content is engaging – viewer is left with thought-provoking ideas and/or the story develops in a	Content is interesting – viewer is left with thought-provoking ideas and/or the story	Some surprises and/or insights, but realization barely differs from the expectation.	Predictable and not very interesting. Realization and expectation

	way that's different from initial expectations. Useful for prompting discussion and dialogue.	develops in a way that's different from initial expectations.		do not differ.
3. Script/Voice				
- Script	Compelling and well written – concise use of words to make important points. Deftly integrates course themes into the video (e.g., cultural diversity, multiple	Well written – makes important points. Speaks to some of the course themes (e.g., cultural diversity, multiple perspectives on	Adequately written, but sometimes meanders or is confusing. Addresses at least one course theme (e.g., cultural diversity, multiple perspectives on a	Difficult to understand the point. Doesn't address course themes. Doesn't reference course

	perspectives on a topic, integrative thinking across the discipline of kinesiology). Integrates at least one quote from course readings – not tacked on, but integral to the meaning of the piece.	a topic, integrative thinking across the discipline of kinesiology). Integrates at least one quote from course readings.	topic, integrative thinking across the discipline of kinesiology). Uses at least one quote from course readings.	readings.
- Audio	Voice quality is clear and consistently audible throughout the presentation. If music is used, it enhances the piece and matches the story line.	Voice quality is clear and consistently audible throughout the majority (85-95%) of the presentation. If music is used, it	Voice quality is clear and consistently audible through some (70-84%) of the presentation. If music is used, it is not distracting – but it also does not	Voice quality needs more attention. If music is used, it is distracting, too loud, and/or inappropriate

		matches the story line.	add much to the story.	to the story line.
- Pacing	The pace (rhythm and voice punctuation) fits the story line and helps the audience really “get into” the story.	Occasionally speaks too fast or too slowly for the story line. The pacing (rhythm and voice punctuation) is relatively engaging for the audience.	Tries to use pacing (rhythm and voice punctuation), but it is often noticeable that the pacing does not fit the story line. Audience is not consistently engaged.	No attempt to match the pace of the storytelling to the story line or the audience.
4. Emotion	Emotional dimension of the piece matches the story line well. Viewers are encouraged to care about the topic,	Emotional dimension of the piece somewhat matches the story line.	Emotional dimension of the piece is distracting (over the top) and/or does not add much to the story.	Emotional dimension of the piece is inappropriate OR absent.

	person, organization, etc.			
5. Images	Illuminating: Images create a distinct atmosphere or tone that matches different parts of the story. The images may communicate symbolism and/or metaphors. The meaning of the story is transformed by the use of images.	Interpretive: Images create an atmosphere or tone that matches some parts of the story. The images may communicate symbolism and/or metaphors. The story relies on images to convey meaning.	Illustrative: An attempt was made to use images to create an atmosphere/tone but it needed more work. Image choice is logical. Images are decorative – the story is not altered by the use of images.	Inappropriate: Little or no attempt to use images to create an appropriate atmosphere/tone. Images interfere or are at cross-purposes with the story's meaning.
	There are at least 12 images. Four images must be taken from primary sources. Eight images must be			

	taken from at least two resources (e.g. web, archives, magazines, photos you have taken yourself, etc)			
6. Economy	The story is told with exactly the right amount of detail throughout. It does not seem too short nor does it seem too long. **Approximately 3 – 5 minutes**	The story composition is typically good, though it seems to drag somewhat OR need slightly more detail in one or two sections.	The story seems to need more editing. It is noticeably too long or too short in more than one section.	The story needs extensive editing. It is too long or too short to be interesting.
7. Credit	All people, organizations, quotes, ideas, music, and contributors are appropriately	There is no “in between”		People, organizations, quotes, and contributors are not comprehensi

	credited. Permission has been obtained (or Creative Commons license information provided) for images and audio not created by the author. **The clip has a title at the beginning and credits at the end**		vely credited.

APPENDIX C

PHOTO STORY PROPOSAL

Name**:** _____

Other members of group: _____

Focus area: Sport or Sports Medicine / Olympics / Fitness / PE / CYSD

Technologies you are planning to use:
___ Voiceovers or _X_ Music
___ Both voiceovers and music
_X_ Images (required)
_X_ Text (required)

Our photo story will focus on the past, present, and future of marathon running. Marathon running can be traced back to 490 B.C. and was a part of the first modern Olympics in 1896. Over the years the marathon distance has been standardized and women have been accepted into marathon running. Due to the jogging boom during the 1960's many marathons in various cities around the world have been established. Currently in men's marathon running Africans, specifically Kenyans, are dominating the sport. The future may hold hope for other countries to contend through new technologies such as shoes or lack thereof. New developments in prosthetics will also be included in relation to the future of marathon running.

APPENDIX D

STORY CYCLE ACTIVITY

The purpose of this activity is to help another group refine its digital story proposal by making it more interpretative. Part 1 asks you to list potential titles for the story. Part 2
Story # _____ Group # ____

Part 1. List 3 possible titles for the digital story. The title must be interpretative and include a *Why* or *How* question.

Title 1	
Title 2	
Title 3	

Part 2. Given the knowledge you have learned in this class, and your other kinesiology classes, how would you tell this story. Consider PURPOSE, AUDIENCE, and CONTENT

Purpose	
Audience	
Content (e.g. psychology, sociology, biomechanics, motor behavior, physiology, history, philosophy)	

APPENDIX E

STORYBOARD ACTIVITY

Name: _____ Group #_____
Music track: _____*Listen* by Index Case, theme song from the Ultimate Fighting Championship_____

Proposal: Performance enhancement in sport has been around since the Ancient Greek times. The purpose of this digital story is to show the effects of performance enhancement in sport and the broader society. We focus primarily on the BALCO incident.

Slide#	Description
1	• Title slide: Welcome to the Dopeocracy • Image: A man's back. He has a mechanical arm • Music track: "Listen" by Index Case
2	• Image: various pharmaceuticals including a syringe
3	• Image: Ancient greek Olympics • Text: The story begins …the story continues
4	• Image: Transgendered athlete • Text: Gender?
5	• Image: WWE wrestler Chris Benoit • Text: RAGE?
6	• Image: WWE wrestler Eddie Guerrero • Text: Addiction?
7	• Image: Eddie Guerrero and Chris Benoit clasping hands • Text: Headline "Champions" • Text: Birth and death dates of both wrestlers
8	• Image: Marion Jones sprinting • Text: LIE?
9	• Image: Marion Jones at a press conference • Text: truth
10	• Image: Barry Bonds in BALCO jersey
11	• Image: Barry Bonds on the cover of Sports Illustrated, Truth and Steroids
12	• Image: BALCO presents "homerun champs"
13	• Image: BALCO presents "homerun champs" • Transition: photo negative
14	• Image: BALCO chemist Patrick Arnold

	• Text: BALCO chemist pleads guilty…gets 3 months jail time
15	• Image: BALCO president Victor Conte flexing his muscles
16	• Credit slide • Image: high school football player
17	• References

Lyrics, “Listen” by Index Case:

Have you ever thought something you forgot
Wired eyes are blinking
Shattered minds are thinking
So is this a decision to live with
The sin keeps on dripping
This will never stop

Where do you get off thinking
Your disintegrating
Come on it's enough this breaking
Listen to listen
Where do you get off thinking
Your disintegrating
Come on it's enough this breaking
Listen to listen

Listen
This is just a vision
My final decision
Silence is a feeling
The feeling is right
I can just picture you
Huddled in your corner
Picking up your pieces
This will never stop

Where do you get off thinking
Your disintegrating
Come on it's enough this breaking
Listen to listen
Where do you get off thinking
Your disintegrating
Come on it's enough this breaking
Listen to listen to

Now you got nothin to show (I ignore you)
Now you got nothin to show (I ignore you)
Now you got nothin to show (I ignore you)
Now you got nothin to show (I ignore you)

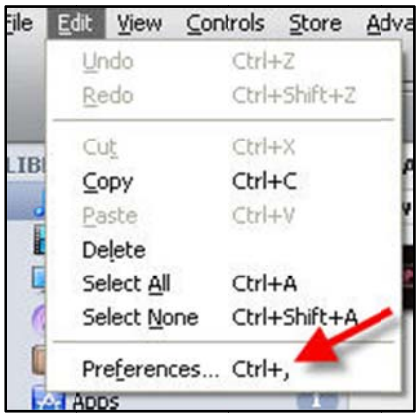
Now you've got nothin to show
Nothing to show
Nothing to show
Nothing to show
Nothing to show
Nothing to show
Nothing to show

APPENDIX F

CONVERTING TO MP3 FROM ITUNES

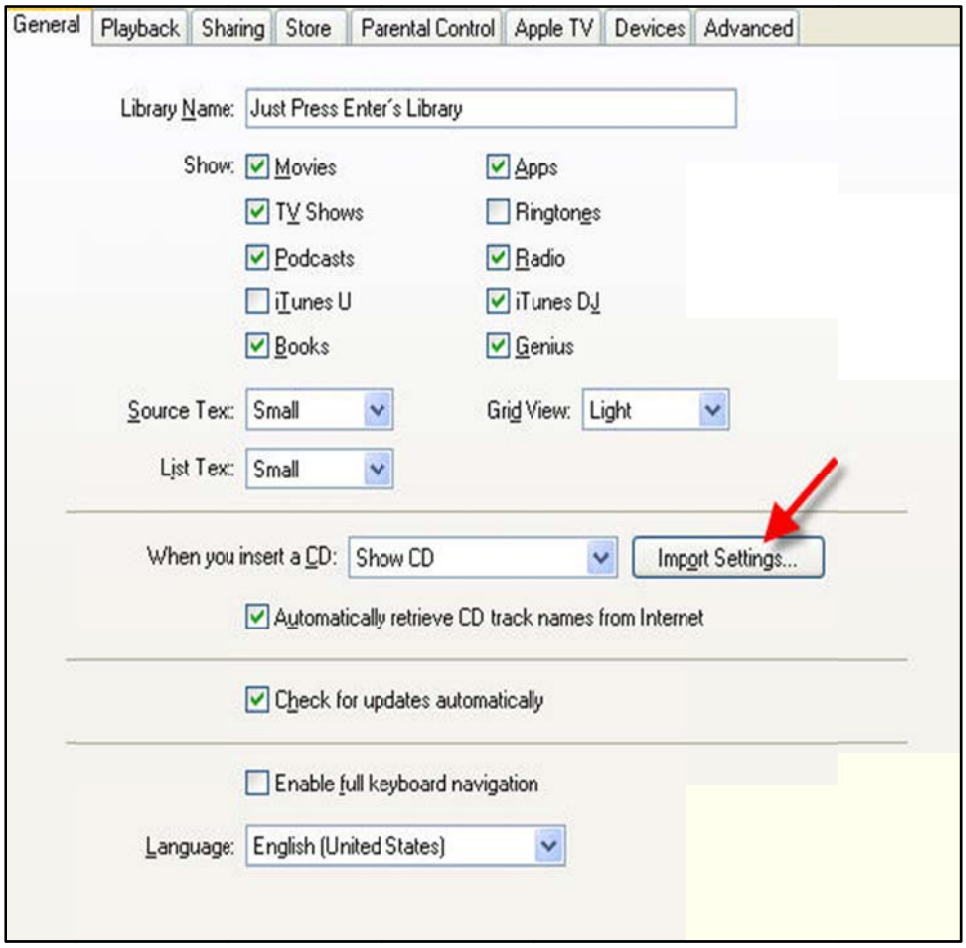
To convert a song's file format:

1. Open iTunes
   Windows: Choose **Edit > Preferences.**
   Mac: Choose **iTunes > Preferences.**

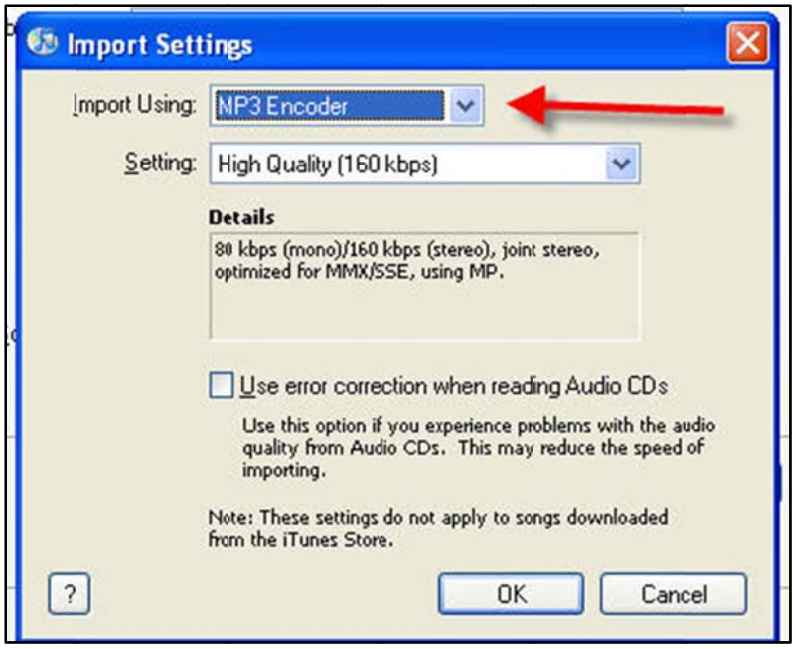


2. Select the General button, and then click the Importing Settings button in the second section of the window.

3.



4. From the **Import Using** pop-up menu, choose the encoding format that you want to convert the song to, then click OK to save the settings.



5. Select one or more songs in your library, then RIGHT-CLICK and select **Create MP3 version**

6. An MP3 version of the song will be saved in your iTunes Music folder.

APPENDIX G

INFORMATION DESIGN PRINCIPLES FOR POWERPOINT

Information Design Principles for PowerPoint

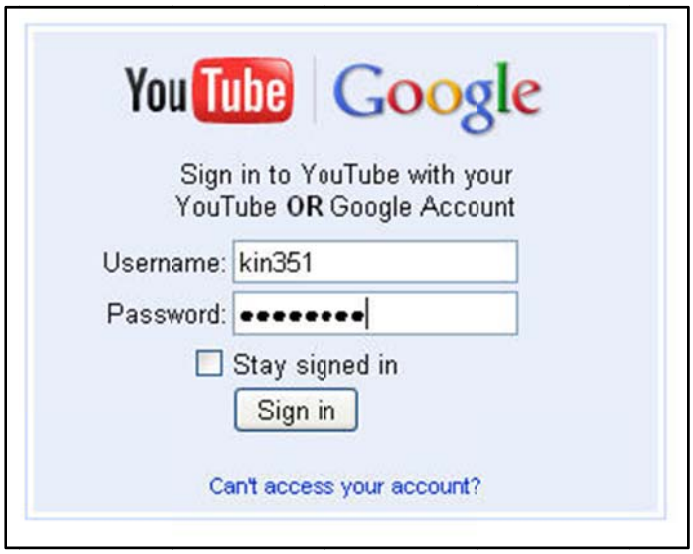
- ✓ Font-size for the TITLE slide should be 28 pts pts or larger
- ✓ Font-size for the PRESENTATION slides should be 28 pts or larger
- ✓ Font-size for CREDITS slides 28 pts or larger
- ✓ Font-size for REFERENCES can be smaller than 28 pts (suggested is 14 – 20 pts)
- ✓ Font could be of the SANS-SERIF family for better readability
- ✓ Font color should contrast with the background color of the slides for readability
- ✓ White space should be used to separate text
- ✓ White space should be used to separate images
- ✓ White space should be used to separate text from images
- ✓ No more than one sentence per slide. The font needs to be readable
- ✓ Use short phrases to get your point across

APPENDIX H

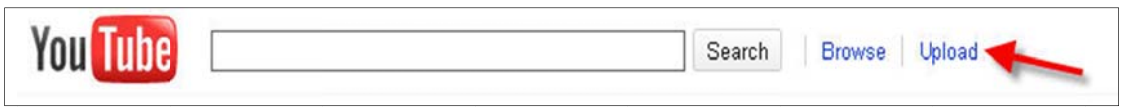
UPLOADING PHOTO STORIES TO YOUTUBE

Please note that when publishing from Photostory 3 for Windows or Windows MovieMaker, the file resolution should be 640 x 480. The file output should be Windows Media Video (.wmv).
Go to http://www.youtube.com and click Sign In

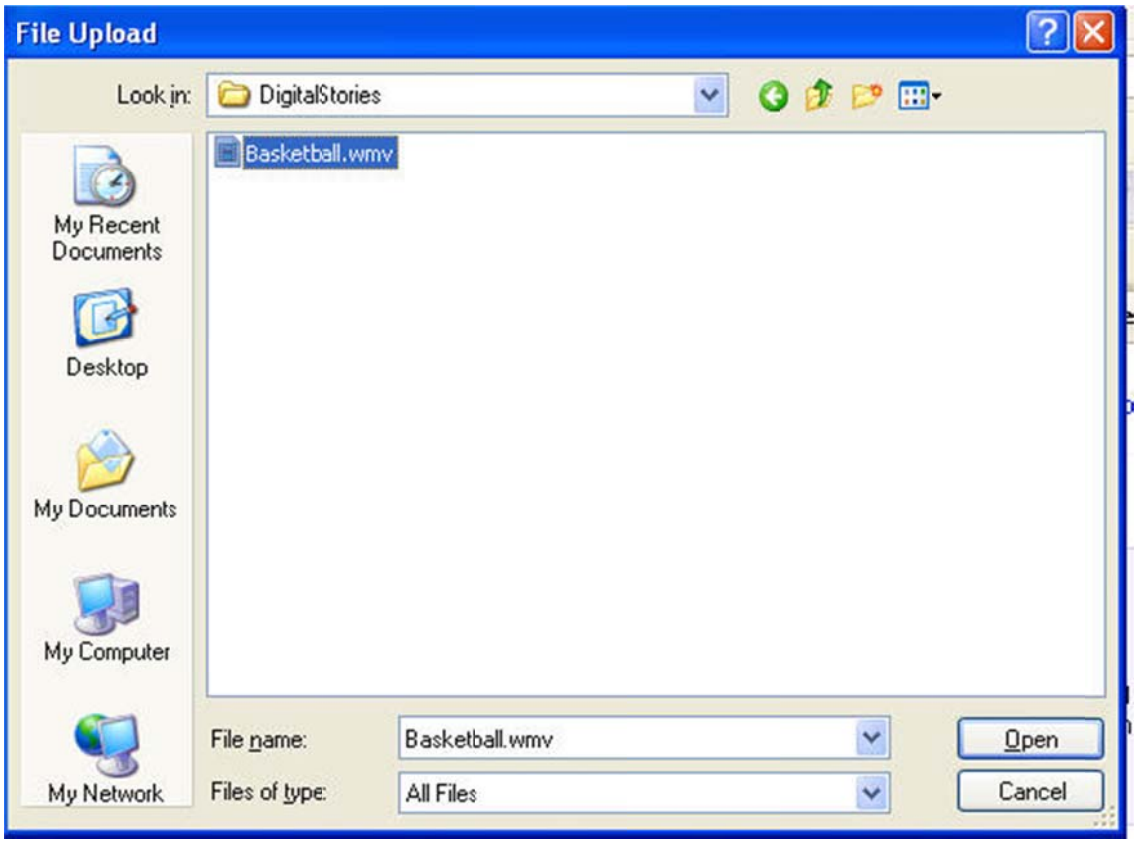
Enter **kin351** for the username and _____ for the password.



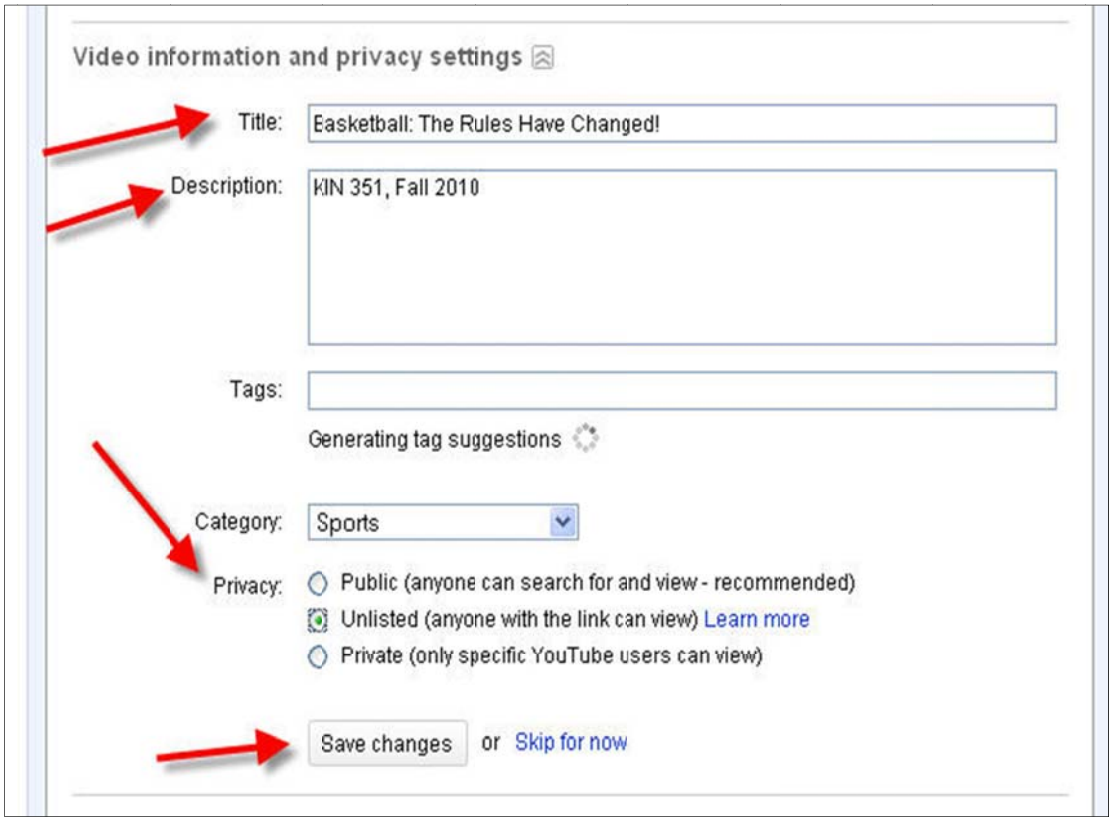
Select UPLOAD



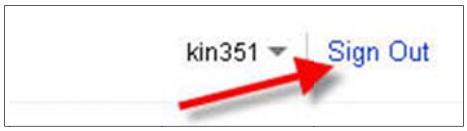
Click the UPLOAD VIDEO button and browse for your file.



While the video is processing, enter the Title, Description ("KIN 351, Fall 2010"), and under Privacy, click UNLISTED. And click SAVE CHANGES



SIGN OUT after the PROGRESS BAR reaches 100 percent,. You do not have to wait until YouTube generates tag suggestions.



If you have questions about this process, please email Rob Owens at (reowens@uncg.edu)

APPENDIX I

VISUAL ANALYSIS

1. What messages were being conveyed through the story?

2. If you had to re-tell the story, how would you have told it?

APPENDIX J

PLUS/DELTA ASSESSMENT

Telling Digital Tales in Kinesiology -- Today and Tomorrow	
+ Plus What did you like about the process (e.g. what should we keep)?	**Delta** What should be changed in the future?

APPENDIX K

TRAVIAL MAJEUR: MINI - DOCUMENTAIRE VISUEL

Vous avez à présenter un mini-documentaire visuel (ie : *digital story telling*) d'une durée de 3-5 minutes à la classe en utilisant *Microsoft PhotoStory 3* pour *Windows* ou *Moviemaker* ou autres tout en vous assurant d'y inclure:

1) L'historique et le contexte du phénomène ou de l'événement sportif
2) L'analyse et le questionnement des enjeux sociologiques +/-
3) Deux références minimums
4) Une mise en page originale
5) Un sujet original

Voir les exemples de travaux antérieurs suivants:

Money in the Bank http://www.youtube.com/watch?v=zJsHrvpdS6w
Fast Food Mania http://www.youtube.com/watch?v=2BPHF5auKuI
Physical Education for Children http://www.youtube.com/watch?v=OvOvHRE3L1o
Olympic Swimming http://www.youtube.com/watch?v=k4Gq8VM6j_0
Equestrian Eventing http://www.youtube.com/watch?v=BtsEH6pduyg
The Evolution of Fitness http://www.youtube.com/watch?v=RnG6YfnixW8