First-Year Kinesiology Students’ Learning Experience in a Practice-Based Course

by

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A thesis submitted in conformity with the requirements for the degree of Master of Science
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Abstract

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The purpose of this study was to investigate first-year kinesiology students’ learning experience in a practice-based course. Semi-structured interviews were conducted with eleven first-year kinesiology students following their completion of a first year practice-based course. The six core tenets of experiential learning theory were used to structure the interview protocol and framed the initial steps in data analysis. The results show that the practice-based learning experience is different for all students. Despite such differences, four central themes emerged from the data: the importance of connection, consideration for the individuality of all learners, the influential role of the instructor, and the importance of the learning space. The significance of these findings is discussed and recommendations are provided for the enhancement of student learning in practice-based or experiential learning environments.
Acknowledgments

I would first like to thank my supervisor, Dr. David Frost for his support and meticulous review of this thesis. I would also like to express my gratitude to the members of my committee, Dr. Gretchen Kerr and Dr. Ashley Stirling for their support and guidance throughout my research journey.

I would also like to recognize the students who participated in my study, their insight and honesty made this work possible. Your involvement is greatly appreciated.

I am extremely grateful to my family and friends. Their patience, support, and encouragement over the past ten years has allowed me to get to where I am today, even when others (and maybe even when I) doubted my potential.

Finally, I would like to thank my partner. His support, honesty, conversation, and friendship have made me a better person and researcher.
Table of Contents

Abstract ........................................................................................................................................ ii
Acknowledgments ...................................................................................................................... iii
Table of Contents ....................................................................................................................... iv
List of Tables and Figures ......................................................................................................... x
List of Appendices .................................................................................................................... xi
Chapter 1: Introduction ........................................................................................................... 1
  Personal Reflection .................................................................................................................. 2
  Organization of Thesis ............................................................................................................ 5
Chapter 2: Literature Review .................................................................................................. 6
  Student Success in Kinesiology Undergraduate Programs .................................................. 6
  Experiential Learning Theory ............................................................................................... 6
    Six tenets of experiential learning theory. ............................................................................ 7
      Tenet one – Learning is a process. .................................................................................... 7
      Tenet two – Learning is grounded in experience. ............................................................ 8
      Tenet three – Learning involves the mastery of all approaches to learning. ............... 9
      Tenet four – Learning is a holistic process of adaptation to the world. ....................... 10
      Tenet five – Learning involves an interaction between individuals and their environment. ................................................................................................................... 10
      Tenet six – Learning is the process of creating knowledge. ......................................... 11
  Practice-based learning ........................................................................................................ 12
  Experiential learning cycle. .................................................................................................. 15
  Learning styles ...................................................................................................................... 16
  Developmental phases of experiential learning theory. ..................................................... 17
The Use of Experiential Learning Theory in Kinesiology Programs .................................... 19
The Learning Space ................................................................................................................. 20
Summary of literature ............................................................................................................. 22
Statement of purpose .............................................................................................................. 22
Chapter 3: Methodology and methods ................................................................. 23
  Methodological Approach ............................................................................... 23
  Theoretical Grounding .................................................................................. 24
  Methods ......................................................................................................... 24
    Course description ....................................................................................... 24
    Participants ................................................................................................... 25
      Inclusion criteria ....................................................................................... 26
      Exclusion criteria ...................................................................................... 27
      Sample size ............................................................................................... 27
      Recruitment strategies ............................................................................. 27
      Online questionnaires .............................................................................. 28
    Procedures ..................................................................................................... 29
      Interviews .................................................................................................. 30
      Journal ....................................................................................................... 30
      Coding systems ......................................................................................... 31
      Member checking ....................................................................................... 31
    Ethical considerations .................................................................................. 32
      Ethics regarding study participation ......................................................... 32
      Ethical considerations during the interview .............................................. 32
      Ethical considerations following data collection ....................................... 33
  Summary of Methods ...................................................................................... 33

Chapter 4: Results ............................................................................................. 34
  Description of Student Participants ............................................................... 34
  Findings from the Interviews ......................................................................... 35
    Tenet one – Learning is a process ............................................................... 35
      Prior knowledge .......................................................................................... 36
        Type of prior knowledge ......................................................................... 36
        Influence of prior knowledge ................................................................ 37
      Change of view of exercise and fitness as a result of the course ............ 39
        How view has changed .......................................................................... 39
        Factors influencing change ................................................................... 40
Progression from course. ................................................................. 41
Lack of connection to future learning. .............................................. 41
Uncertainty regarding progression. .................................................. 42
Clear connection to future learning. .................................................. 42

Tenet two – Learning is grounded in experience. ............................ 44
Advancement and progression of learning experience. ....................... 44
Progression of course content. .......................................................... 44
Advancement in class difficulty. ......................................................... 46
Progression in depth of reflection occurring in class. .......................... 46

Expectation versus experience. .......................................................... 46
Experience surpassing expectation. ...................................................... 47
Experience falling short of expectation. ................................................. 47

Tenet three – Learning requires the use of all four approaches. ............ 48
Opportunity to experience, think about, apply, and reflect. .................. 48
To experience – Concrete experience.................................................. 48
To think about – Abstract conceptualization. ........................................ 50
Application – Active experimentation. ................................................ 50
Importance of reflection – Reflective observation. ............................... 52

Alignment of learning style with course. .......................................... 53
Clear alignment. ................................................................................. 53
No alignment. .................................................................................... 53
Some alignment. ................................................................................ 54

Tenet four – Learning is a holistic process. ....................................... 54
Feelings. ............................................................................................. 54
Positive feelings. ............................................................................... 54
Negative feelings. ............................................................................. 55

Behaviour in the classroom. ............................................................... 56
Behaviour. .......................................................................................... 56
Enhancing the learning environment for self and others. ...................... 57

Perceptions. ....................................................................................... 58
View of course and influence on learning. ............................................ 58
Involved and active when others may not be ........................................... 59

**Importance of motivation and engagement.** ........................................ 60
Motivation .................................................................................................. 60
Engagement ............................................................................................... 60

**Intersection of motivation, engagement, interest, and learning.** ............. 61

**Tenet five – Learning occurs through interactions with the environment.** ........ 61

**Role of instructor.** ............................................................................... 62
Important role of the instructor ................................................................. 62
Examples of interactions ......................................................................... 63
Positive .................................................................................................. 63
Negative ................................................................................................ 64

**Working with others.** ....................................................................... 65
Connection with others ........................................................................... 66
Potential limitation of working with others ............................................. 67

**Space of the classroom.** .................................................................. 69
Atmosphere of the class .......................................................................... 69
Physical environment ............................................................................... 70

**Tenet six – Knowledge is created through learning.** ................................. 72

**Repetition.** ....................................................................................... 72
Influence on feelings and behaviour ...................................................... 72
Influence on knowledge acquisition ....................................................... 73

**Autonomy in the class.** ..................................................................... 73
Perception of choice in the class ............................................................ 74
Expectation of having choice .................................................................. 75
Influence of having choice ...................................................................... 75

**Assessment.** ..................................................................................... 76
Influence on feelings and behaviour (Tenet four – Learning is a holistic process) .... 77
Frustration ............................................................................................. 77
Influence on behaviour .......................................................................... 78

**Lack of control (tenet six – Knowledge is created through learning).** ....... 79
Discrepancies between classes ............................................................... 79
Alignment of mark with effort and understanding ................................................................. 81
Clarity of expectations (Tenet two – Learning is grounded in experience) ...................... 82
Assessments ......................................................................................................................... 82
Leadership mark .................................................................................................................... 83

Chapter 5: Discussion .......................................................................................................... 86
Comparison ........................................................................................................................... 86
Connection with others ......................................................................................................... 86
Connection with learning material ...................................................................................... 89

Student Individuality ............................................................................................................. 91
Learning style ......................................................................................................................... 91
Developmental stage .............................................................................................................. 92

Influence of Instructor .......................................................................................................... 96
Instructor characteristics and behaviour ............................................................................. 96

The Learning Space .............................................................................................................. 98
Perceived space ..................................................................................................................... 99
Conceived space ................................................................................................................... 100
  Belonging ............................................................................................................................ 100
  Autonomy .......................................................................................................................... 102
  Assessment ......................................................................................................................... 103
Lived space ............................................................................................................................ 107

Applied Recommendations ................................................................................................ 109
Connection ............................................................................................................................. 109
Individually of the learner .................................................................................................... 113
Instructor and teaching strategies ....................................................................................... 114
Learning Space ..................................................................................................................... 116
  Perceived space .................................................................................................................. 116
  Conceived space ................................................................................................................ 117
  Lived space ........................................................................................................................ 121

Considerations ...................................................................................................................... 123

Chapter 6: Conclusions ....................................................................................................... 125
List of Tables and Figures

Figure 2.1. Tenets of Experiential Learning Theory .......................................................... 12

Figure 2.2. Modes of Learning .............................................................................................. 17

Figure 2.3. Learning Styles .................................................................................................. 18

Figure 5.1. Gibbs (1988) Model for Reflection .................................................................... 117
List of Appendices

Appendix A: Letter of Information and Informed Consent Forms ........................................... 142

Appendix B: Learning Styles Document Sent to Study Volunteers (sample) ............................. 149

Appendix C: Demographic and Learning Style Questionnaire .............................................. 151

Appendix D: Full Interview Guide .......................................................................................... 157

Appendix E: Interview Summary (sample) ............................................................................. 161

Appendix F: Additional Statements from Participants (tenet two, tenet five, and assessment).. 167

Appendix G: Sample Information Form and Activity for First Day of Class ....................... 174
Chapter 1: Introduction

In the past twenty-five years, the study of kinesiology has become increasingly important due to increased social relevance, the current obesity epidemic, and the growing societal importance of sports and athletics (Jenkins & Haiback, 2016). This has led to an increase in the labour market for kinesiology-related professionals and accordingly, increased enrolment in kinesiology programs across Canada and the United States (Thomas, 2014). Many students enroll in these programs with the goal of entering into careers related to physiotherapy, athletic therapy, medicine, physical education, or sport and exercise biomechanics, physiology or psychology (Jenkins & Haiback, 2016). As most of these careers are applied professions (Thomas, 2014), it is essential for educators in kinesiology programs to focus on the development of practical skills related to communication, collaboration, movement observation, assessment, demonstration, and implementation in addition to the theoretical concepts and critical thinking skills that are traditionally taught in most university programs (Chan, Brown, & Ludlow, 2014). These practical skills are essential to the success of those wishing to enter kinesiology-related fields following graduation (Hoffman, 2009b).

In order to develop students’ practical-skills, the kinesiology curriculum at the university at which this thesis was conducted includes practice-based courses ("Learning through experience," 2016) that are structured to align with the characteristics of experiential learning theory (ELT; Kolb, 1984). ELT suggests that learning is a “process whereby knowledge is created through the transformation of experience” (Kolb, 1984, p. 38). The six central tenets of the theory provide a rationale as to why learning may best occur when students are given the opportunity to experience, to watch, to think about, and to apply (Evans, Forney, Guido, Patton, & Renn, 2010). The use of experiential learning is often cited as a means of enhancing learning in higher education (Kolb & Kolb, 2005) and its use has been supported in a number of academic contexts such as foreign languages (Castro & Peck, 2005), political science (Brock & Cameron, 1999), engineering (Sharp, 2000) and technology studies (Sutliff & Baldwin, 2001).

Despite support for the use of experiential learning in these academic programs, little is known about students’ perceptions of such learning environments. Furthermore, most studies investigating the influence of ELT on student learning have been grounded in Kolb’s learning
styles or the learning cycle (e.g. Brock & Cameron, 1999; Castro & Peck, 2005; Claxton & Murrell, 1987; Sharp, 2000; Sutliff & Baldwin, 2001), rather than the six tenets of learning on which the theory is founded (Stirling, Kerr, Banwell, MacPherson, & Heron, 2016). In addition, it appears that most studies have taken a quantitative approach when investigating the influence of the use of ELT in student learning (e.g. Castro & Peck, 2005; Forney, 1994) and as such, there is little known about students’ perspective of their experience in these learning environments. Further, research pertaining to teaching and learning within kinesiology programs is currently in its infancy and as such, there is not, to the knowledge of the researcher, evidence documenting kinesiology students’ perceptions of practice-based courses.

Therefore, the purpose of this study was to explore the first-year kinesiology student learning experience in a practice-based course through the theoretical framework of the six core tenets of ELT. A better understanding of the student learning experience in practice-based courses could lead to future curricula development that allows for enhanced student learning to occur within the university setting. It is important to note, however, that in order for this to be true, we must assume that there is a relationship between students’ perceptions of their learning experiences and the learning that is occurring within the course. This assumption depends on the answer to a number of alternative questions, such as what is learning and how does one know if they have learned. Taking these assumptions into account, it is my goal that this research will provide educators and researchers with insight regarding the students’ perception of their learning experience that can be used to shape future curriculum or course development. In the long term, it is hoped that the results from this study assist in the development of practice-based learning environments for all students in programs requiring the development of practical skills. Ultimately, it is my hope that, if needed, the findings of this research will lead to changes in current curricula such that students become better prepared for life following their undergraduate education.

**Personal Reflection**

In research, it is often difficult for those studying social phenomenon to be completely unbiased by their own personal experiences, beliefs, and thoughts at any time throughout the inquiry process. As such, this qualitative research project was approached through the social constructivist lens. As a constructivist researcher, I recognize that my interpretation of other
people’s experience is shaped by my own experiences and background. I understand that what has been perceived and interpreted in this study is subjective and largely influenced by my own values, beliefs, and experiences (Creswell, 2012). For this reason, it is important for me to discuss my own experience in kinesiology practical courses as both a student and an instructor, and what has encouraged me to complete this research.

While completing my undergraduate degree in Physical and Health Education, I was required to complete a number of ‘practicum’ courses, which share a similar curriculum to that of the practicum course required of the students at the university at which my current research was conducted. Similar to previous years at my current institution, these courses were typically thought of as ‘gym’ classes where students were required to learn the rules of various sports (e.g. rugby or soccer) and to take part in low organizational games or swimming instruction. These courses were not linked to any of my lecture-based courses and I completed them without drawing any connection between the learning objectives and life after university. This was the viewpoint of many of my fellow classmates and truthfully, the classes were typically not viewed as anything but a way to increase our university grade point averages (GPA).

Some time following graduation, I began working as a strength and conditioning coach for the varsity athletes at the university at which this thesis was completed. It was while in this position that I began to draw on a number of the skills I learned in many of my lecture-based courses as well as the certifications I had pursued following graduation. However, in my view, the activities completed in my practice-based classes did not assist me in my new position. As a strength and conditioning coach, I was also given the opportunity to teach the newly constructed practice-based courses in the undergraduate kinesiology and physical education program at the university. The practice-based courses at this university had traditionally been structured and taught in a similar fashion to the courses I was required to complete during my undergraduate degree; however, when I began teaching, instead of focusing on different sports and activities, the new curricula focused and still focuses on the development of kinesiology-specific skills relating to movement observation, movement assessment, and movement prescription as well as interpersonal skills such as collaboration and communication. Essentially, the new curricula provides students with a practice-based learning environment in which they are given the opportunity to apply concepts taught in lecture-based courses and to develop an understanding of
new knowledge in a hands-on or applied setting. I immediately saw the benefit of these new courses for the future success of kinesiology students. In my experience, graduates of kinesiology programs (such as myself) are required to either enroll in additional schooling, to volunteer in their areas of interest, to complete internships (paid or unpaid), or to pay to complete certifications or courses in order to develop the practical and interpersonal skills that are necessary in finding a career (most of which I have done). I saw these courses as a way for students to develop interpersonal and professional kinesiology-related skills while still in school, and therefore, be more career-ready and employable following graduation. Given my belief in the ability of these courses to maximize the benefit of the university’s kinesiology program, it was my goal to create an optimal teaching and learning environment while in my role as an instructor in these classes.

In order to do this, I began to collect anonymous feedback from students on a weekly basis so that I could modify my instruction such that students saw greater benefit from the class. I very quickly came to realize that when students are included in the construction of their own learning, they are much more likely to engage in the course material and classroom activities. From this experience and my interactions with students, I became very interested in the role of motivation and engagement in student learning, and how understanding students’ perception of their learning environment may be helpful in creating learning environments that empower students to take control of their own learning and development.

From the beginning of my research experience, have been interested in the personal development of youth and students. I believe that all students have the potential to achieve success and see it as my role to support students in achieving personal success throughout their university experience. In order to support students I have come to believe that it is first essential that we, as educators and researchers, understand their learning experience.

Kinesiology is a relatively new field of study in higher education, and as such, there is little research dedicated to understanding teaching and learning in this field. Therefore, my thesis originated from my belief in the benefit of practice-based learning, the applicability of experiential learning, my desire to support student learning, and the current lack of information pertaining to the study of teaching and learning in kinesiology.
Organization of Thesis

This thesis will begin in Chapter 2 with a review of the current and relevant literature relating to student learning in kinesiology programs and of literature relating to experiential learning, which will provide the theoretical framework for this study. Experiential learning consists of six tenets of learning, four modes of learning, and four learning styles, all of which will be discussed in detail. Current research relating to the use of experiential learning in kinesiology programs will also be discussed, as will the literature relating to the learning space of education given its relevance to the tenets of experiential learning. Chapter 3 will outline the methodological approach and methods used for data collection and analyses. This will include specific information regarding the recruitment of participants, and the structure of the interview and participant validation process (i.e. member check). In Chapter 4, results of the analyzed data will be discussed and Chapter 5 will provide my interpretation of these findings with reference to previous literature. Practical implications and suggestions for future research resulting from these findings will also be discussed. To end, Chapter 6 will provide a summary and concluding statements.
Chapter 2: Literature Review

Student Success in Kinesiology Undergraduate Programs

In the past thirty years, the number of full-time university students has more than doubled, despite a decrease in the number of individuals in this age group (i.e. age eighteen to twenty-four; Enrolment, 2011). A large portion of the growth in enrolment has been in kinesiology programs due to society’s increased interest in health, fitness, and human movement (Thomas, 2014). According to Wojciechowska (2010), the number of undergraduate kinesiology students increased by more than 50% between 2003 and 2008, making kinesiology programs the second fastest growing program in higher education.

Kinesiology programs cater to students who are interested in pursuing careers related to physiotherapy, athletic therapy, medicine, physical education, or sport and exercise biomechanics, physiology or psychology (Jenkins & Haiback, 2016). Many of these career choices are applied in nature, meaning that students will rely on a number of practical skills, such as communication, observation, and physical assessment, in conjunction with the theoretical knowledge that is acquired in a traditional university program (Thomas, 2014). As the demand for kinesiology programs has increased, educators have been presented with the challenge of balancing the needs of an increasingly diverse student population (Enrolment, 2011) with the unique academic requirements of kinesiology students (Jenkins & Haiback, 2016).

Experiential Learning Theory

Experiential learning is a widely used term, and has been defined and used by a large number of educational scholars (Beard & Wilson, 2013). For use in this thesis, Kolb’s (1981) theory of experiential learning has been chosen to provide a framework for exploration of the first-year kinesiology student learning experience. In its most general terms, Kolb (1984) defined learning as “the process whereby knowledge is created through the transformation of experience” (p. 38). This definition was largely constructed through analyses of the work of Dewey (1958), Lewin (1951), and Piaget (1972), three development and learning theorists, whose work Kolb relied on heavily in the creation of this theory of experiential learning (Kolb, 1981a). Although Kolb’s ELT is best known for its four-stage learning cycle (Kolb, 1984) and is commonly used to assess different learning styles (Kolb, 1981a), both aspects of ELT were
derived from the six tenets on which the theory was founded (Kolb, 1984). This study will be grounded specifically in the six core tenets of ELT.

**Six tenets of experiential learning theory.** The purpose of ELT is to provide a perspective on learning that integrates existing experiential, perceptive, cognitive, and behavioural theories of learning (Kolb, 1984). As stated above, ELT shares a number of common characteristics with the work of Dewey (1958), Lewin (1951), and Piaget (1972), as well as a number of other prominent learning or developmental theorists. The integration of various models of learning allows for ELT to provide a unique outlook on learning and development that includes behavioural and cognitive perspectives on learning and development. According to Kolb (1984), this perspective can be characterized by six core tenets that together provide a unique understanding of human learning and development. Below, each of the six tenets and the work from which it was derived is described.

**Tenet one – Learning is a process.** The first tenet states that learning is best understood as a process rather than in terms of outcomes (Kolb & Kolb, 2005). In this sense, ideas are not fixed or permanent concepts, but rather they are continuously formed and reformed through experience (Kolb, 1984). Piaget (1970a) first came to this conclusion while completing his work in genetic epistemology. He saw that while studying and researching, he was constantly going through a process of thinking, making observations, and trying out different solutions. Using ELT terms, Piaget was describing an interaction between the process of acquiring new knowledge and integrating it into existing knowledge (discussed in detail below; Kolb, 1981a). In relation to the population of students being investigated in this thesis, the idea that learning is a process can be exemplified through consideration of how students in kinesiology come to understand the rehabilitation process of specific injuries. At first, students are taught a very clear set of guidelines on how to rehabilitate, for example, an ACL injury: Step 1 – Alleviate symptoms; Step 2 – Restore function; Step 3 – Minimize complications (Myklebust & Bahr, 2005). However, it is not until students have the opportunity to experience this process in a placement scenario that they begin to see that the steps may not be linear or that there may be other things that need to be taken into consideration (Kartus et al., 1999). It is through a process of experience that students are able to construct and continuously modify their understanding of injury rehabilitation to arrive at a solution that is appropriate.
The notion that learning is a process also emerged in the work of Bruner (1966) who was a senior research fellow at the New York University School of Law and who, while studying at Harvard University, wrote the book *Process of Education*, which has since been an influential contributor to education and curriculum theory. In a sequential book, *Toward a Theory of Instruction*, he wrote that “knowing is a process, not a product” (p. 72) and as such, educational institutions should stimulate inquiry and critical thought, as opposed to memorization. Later, Freire (1974) built on this idea and described knowledge creation as the result of continuous reflection on experience in the world, with the world, with other people, and with oneself. Evidently, the idea that learning is a process as presented by Kolb (1984) is strongly supported by previous educational literature on education, curriculum development, and instruction.

**Tenet two – Learning is grounded in experience.** Building on the work of several prominent learning and development scholars, Kolb (1984) concluded that learning is also grounded in human experience. This realization stems from the historical research of human consciousness conducted by William James, a 19th century psychologist. James (1890) concluded that human consciousness is continuous – we wake every morning with memory of the same thoughts, feelings, and sense of whom we are that we went to sleep with the previous evening – and therefore, our understanding of concepts and ideas is predominantly shaped by experience. Because meaning is remembered and integrated into human consciousness, it will influence actions, behaviours, and thoughts of the current day. Building on this notion, Dewey (1938) explains that every experience will also go on to influence the understanding of future experiences. Learning that occurs in one situation becomes the starting point of understanding for the next, and so on. This process continues throughout life (Kolb, 1984).

Kolb (1984) noted that at times, humans may be subject to miscommunication, misunderstanding, or erroneous judgment and despite coming to incorrect conclusions or being inaccurate, it is in the interaction between what is expected (based on previous experience) and the new experience when true learning takes place. Applied to the educational settings, this implies that all learning is actually relearning (Kolb, 1984). Relating to this thesis, all students would have enrolled in the practice-based kinesiology course with preconceived notions about the curriculum and its relevance to their own goals or interests. The instructor must then modify or remove previous ideas that may be incorrect or incomplete while attempting to instill new
ideas and knowledge. For example, students may believe that it is undesirable to let the knees travel past the toes when performing a squat; however once given the opportunity to experience the squatting pattern and reflect on the causes or consequences of particular motion patterns, his or her understanding may evolve to include exceptions to this rule (Czaprowski, Biernat, & Kedra, 2012). It is through the experience of working with different people and reframing their perspective that students come to develop a deeper understanding of the material (Kolb & Kolb, 2005). In this sense, learning relies on previous knowledge or experience, and on the ability to adapt previous understanding to new ideas and experiences.

Tenet three – Learning involves the mastery of all approaches to learning. In the Lewian (1951), Dewian (1958), and Piagetian (1972) model of learning, each scholar describes learning as the result of conflicting approaches to problem-solving. The Lewin (1951) model highlights the interaction between experiencing and thinking, and observing and doing. Similarly, Dewey (1958) discusses the conflict between the motivation to act on ideas and the rationale directing the behaviour. Finally, Piaget (1972) sees conflict as being between the application of new ideas into current behaviours and using new experiences to modify existing beliefs. To summarize the incongruity of ideas, Freire (1974) describes the process of internal conflicts as “reflection and action upon the world in order to transform it” (p. 36). In this sense, it is through opposing approaches to learning that individuals are able to make sense of new experiences and to incorporate the meaning of these experiences into existing knowledge as a deeper understanding of the material is developed.

Regardless of which specific model of learning being considered, all scholars would agree that learning is driven through tension and conflict. According to Kolb (1984), in order for individuals to be successful through this process of inner turmoil, all four approaches to learning must be used – concrete experience (i.e. feeling), reflective observation (i.e. watching), active experimentation (i.e. doing), and abstract conceptualization (i.e. thinking; all discussed in detail below). Applied to the squatting example used above, in learning the complexities of the squatting motion, students must rely on their experience while performing the motion, and their reflection of the entire process. This requires students to move back and forth between opposing modes of reflection and action, and feeling and thinking (Kolb & Kolb, 2005).
Learning is a process driven by conflict, differences, and disagreement (Kolb & Kolb, 2005) and thus to develop an understanding of a particular concept, students must navigate these challenges. This process is not always easy and can, at times, be painful and off-putting (Beard & Wilson, 2013); however, according to Snell (1992), if viewed as an opportunity to learn, these painful experiences can result in some of the most permanent learning. Therefore, it is through conflicting approaches to problem solving or learning that true learning occurs.

**Tenet four – Learning is a holistic process of adaptation to the world.** ELT describes the way that humans adapt to the social and physical environments of the world (Kolb, 1984) and considers all aspects of a human being – feelings, perceptions, behaviours, and thoughts (Kolb & Kolb, 2005). ELT integrates many theories of human behaviour. Kolb (1984) provides a comparison of various models of adaptation and describes how despite utilizing different terms, the concepts underlying the problem-solving process (Pounds, 1965), the decision-making process (Simon, 1947), and the creative process (Wallas, 1926), share similar characteristics to that of the process of scientific inquiry (Kelly, 1955). Experiential learning has incorporated these theories of adaptations and, as described below, is thought of as the cyclic process of experiencing, reflecting, conceptualizing, and experimentation (Stirling et al., 2016). ELT frames learning as a holistic process spanning all situations in life; be them at work, in school, or in personal interactions (Kolb, 1984).

This tenet is extremely important in discussing the practice-based course being investigated in this thesis because the purpose of the curriculum is to equip students with the knowledge and experience to be successful not only in subsequent courses, but also in real-life and career situations in the future (Frost, 2016a). Without consideration for the holistic nature of the learning process and for the integrated functioning of all human experiences, it is unlikely that the course will be successful in satisfying its learning objectives. Investigating the course through this tenet also allowed me to better understand the student benefit of the course.

**Tenet five – Learning involves an interaction between individuals and their environment.** According to Kolb (1984) the interaction that occurs between an individual and his or her environment can be described as being both subjective and objective. The objective component refers to the internal state of the individual – how he or she feels or perceives the
environment – and describes the environmental aspects of experience such as the duration or location. Dewey (1938) wrote, “experience does not simply go on inside a person” (p. 42), which implies that the transactional aspect of experience gives equal weight to individuals’ internal state and the environment (Kolb, 1984). Such interactions suggest that the person-environment relationship is not a one-way interaction but rather a complementary process in which the individual interacts with the environment and the environment (e.g. other people, a book being read, or the material objects in the surrounding area) influences the behaviours, thoughts, and perceptions of the individual (Dewey, 1938; Piaget, 1970b). As such, learning, according to ELT is the result of a reciprocal relationship between the perceptions of an individual and the people, discussions and objects within his or her environment.

**Tenet six – Learning is the process of creating knowledge.** According to ELT, learning is a constructivist process in which social knowledge is created in the personal knowledge of the learner (Kolb & Kolb, 2005). Social knowledge, as described by Dewey (1958), is an objective understanding of the meaning of past situations, whereas personal knowledge includes the subjective aspects of those experiences – the feelings, perceptions, and intuitions. This suggests that learning occurs through the construction of knowledge resulting from the integration of facts, theories, and concepts into personal perceptions and pre-existing beliefs.

Kolb (1984) also suggests that in order to understand knowledge acquisition, an appreciation for the psychology of the learning process and the epistemology of knowledge is essential. According to Piaget (1978), knowledge can only be understood by the learner and in return, the learner develops an understanding of his or her self through developing an understanding and experiencing new knowledge. This suggests that in order to guide an individual’s learning, one must consider the psychological aspects and epistemology of learning and the characteristics of the individual. Trying to teach someone to become emotionally aware, for example, is much different that aiming to instill an understanding of Newton’s laws of motion. Different approaches are required to facilitate learning in either example, although both must consider the individual. For this reason, ELT purposes that it is critical to understand how the different approaches to learning (described below) interact and support each other in knowledge inquiry. Ultimately, learning should be individualized and students should be
encouraged to take some ownership of their experience by developing multiple approaches to enhance their knowledge and skills (Stirling et al., 2016).

<table>
<thead>
<tr>
<th>Tenets of Experiential Learning Theory</th>
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<tbody>
<tr>
<td><strong>1. Learning is a process.</strong></td>
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<tr>
<td>- Learning is a continuing reconstruction of experience.</td>
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<td>- Learning is ongoing and occurs when students acknowledge and integrate previous informal and formal learning and experiences.</td>
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<td><strong>2. Learning is grounded in experience.</strong></td>
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<td>- The learning process draws out students’ beliefs and ideas about a topic.</td>
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<td>- Old beliefs and ideas are examined, tested, and integrated with new ideas.</td>
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<td><strong>3. Learning involves mastery of all four learning approaches</strong></td>
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<tr>
<td>- The learning process is fuelled by conflict, differences, and disagreement.</td>
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<tr>
<td>- Learners are required to move back and forth between opposing modes of reflection, behaving, feeling, and thinking.</td>
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<tr>
<td><strong>4. Learning is a holistic process of adaptation.</strong></td>
</tr>
<tr>
<td>- Learning involves the integrated functioning of the total person, which includes thinking, feeling, perceiving, and behaving.</td>
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<tr>
<td><strong>5. Learning results from an interaction between a student and his or her environment.</strong></td>
</tr>
<tr>
<td>- Learning occurs when students integrate new experiences with previous knowledge, and translate existing concepts into new experiences.</td>
</tr>
<tr>
<td><strong>6. Knowledge is created through learning.</strong></td>
</tr>
<tr>
<td>- Knowledge is created and recreated in the personal knowledge of the learner.</td>
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Figure 2.1. Adapted from Kolb & Kolb (2005); Stirling et al., (2016)

**Practice-based learning.** Practice-based learning is not a term currently used in the academic literature, but has been chosen to describe the course that was investigated in this thesis. The course is thought to be unique and dissimilar to any other kinesiology course offered
across the country (and perhaps the world) and therefore, its structure does not align with any current academic definition. Practice-based learning environments provide students with the opportunity to apply theoretical concepts in a non-lecture hall environment (in this case, in a physical activity setting). For example, when learning about the stretch-shortening cycle of a muscle, students may complete a series of vertical jumps and depth jumps (jumping from a height and immediately jumping as high as possible) from a number of heights, and record the jump heights. According to stretch-shortening principles, when an active stretch or eccentric contraction of a muscle is immediately followed by a muscle shortening or concentric contraction of that same muscle, the force produced will be greater than of that produced by a concentric contraction in isolation (Komi, 2003). Thus, in the jumping activity, students should see increased jump height in the depth jumps as opposed to the vertical jump. Some students; however, may only experience an increased jump height for certain depth jump starting heights or will achieve a higher height via the vertical jump as a result of lack of training, lack of muscular strength, or fatigue (Nicol & Komi, 2003). It is only through experience that students will come to thoroughly understand the intricacies of the theory.

The practice-based learning environment aligns with majority of the central components of the ELT and shares a number of the characteristics with experience-based learning (EBL; Andresen, Boud, & Cohen, 2000). EBL focuses largely on the experience of the learner over all other aspects of teaching and learning. Learning in the EBL classroom requires students to analyze an experience by reflecting, evaluating, and recreating it in order to reach an understanding of its meaning (Andresen et al., 2000). Unlike previous approaches to instruction that are largely didactic, teacher controlled, and focused on knowledge regurgitation (Andresen et al., 2000), these learning environments emphasize student participation, student-centered instruction, and encourage students to take ownership of their learning (Boud, Cohen, & Walker, 1993). EBL differentiates from other approaches to teaching and instruction due to a number of key characteristics. First, it is a holistic process requiring contribution from the intellect, feelings, and senses of an individual (Andresen et al., 2000). In the practice-based courses, for example, students must rely on theoretical frameworks (i.e. intellect), perceptions of theory application (i.e. feelings), and intuitive feelings regarding how and why a situation occurs (i.e. senses). Because every experience is influenced and shaped by previous experience (Kolb,
1984), every new learning experience in these environments is also dependent on meaning derived from previous relevant experiences.

The second unique characteristic of EBL environments relates to the role of the facilitator or instructor. EBL classrooms assumes a relationship based on equality between the leader (i.e. instructor) and the student (Andresen et al., 2000) in which students are provided to make decisions in their process of learning (e.g. methods of assessment, topics discussed). This dynamic allows the student to have a substantial control and autonomy over his or her learning. This feature of EBL also aligns with ELT, whereby learning, is viewed as a process, not as a set of outcomes (Kolb, 1984). Andresen et al. (2000) suggest that assessments in EBL courses should mirror this belief and take the form of “individual or group projects, critical essays located in the learners’ own experience, reading logs, learning journals, negotiated learning contracts, peer assessment, and self-assessment” (p. 2) that can be completed using a variety of methods and presentation styles.

EBL environments also center on the learners’ experiences. However, every experience will not facilitate learning because individuals may be overwhelmed by the experience itself and thus miss out on the opportunity to critically reflect and to derive meaning from the experience (Pearson & Smith, 1985). For this reason, debriefing or critical reflection following an experience is an important phase in the process of learning. Instructors of EBL environments must highlight the significance of this step and organize lesson plans to include time for meaningful reflection (Andresen et al., 2000; Pearson & Smith, 1985).

In summary, EBL environments utilize students’ experiences to facilitate learning. Such environments are learner-centered, provide students with autonomy, and require individuals to take responsibility over personal learning success. Like EBL, the practice-based learning environment investigated in this thesis centers on the students’ experience and has reflection and evaluation integrated into the course lesson plans. Practice-based learning differs slightly from EBL in the way that experience is used to facilitate learning. Like EBL, the practice-based environment centers around the learners’ experience, however, unlike EBL, experience in practice-based learning is also structured to ensure that students develop the understanding of specific concepts and knowledge applications (Frost, 2015). As such, assessment in the practice-
based course requires students to exemplify their understanding of theoretical knowledge as well as its practical application in addition to the reflection on learning that occurs within EBL environments.

**Experiential learning cycle.** According to ELT, there are four major approaches to learning (Kolb, 1984), which include concrete experience (CE) reflective observation (RO), abstract conceptualization (AC), and active experimentation (AE). As shown in Figure 2.2, these stages are not developmental stages as it is sometimes misunderstood, but rather four distinct approaches to learning. Kolb & Kolb (2005) note that these four modes of learning do not have to occur in a sequential manner as individuals will often choose the approach that best reflects their personal preferences, past experiences, and/or phase of development. According to Evans et al. (2010), learners must make use of all four stages in order to learn effectively, though everyone will have a preferred approach. Because learning may be the result of opposing abilities (Kolb, 1984) – CE and AC are needed to take in information, whereas, AE and RO are required for applying or making the information meaningful (Evans et al., 2010) – it is important for learners to develop strengths in all learning approaches. Each approach to learning is described in detail below.

The CE approach (i.e. ‘feeling’ mode) occurs when individuals engage in and experience and interact with others in a personal manner (Kolb, 1984). This approach relies on feelings above thinking and is more concerned with understanding the uniqueness of the situation than with considering how theories or generalizations could explain the scenario (Stirling et al., 2016). Those favouring CE tend to take an open-minded, artistic, and intuitive approach to problem solving rather than using systematic or scientific methods (Kolb, 1984). This type of learner commonly enjoys becoming completely involved in new situations and does so without being biased from previous experiences (Kolb, 1981b).

An orientation toward RO (i.e. ‘watching’) concentrates on understanding the meaning of ideas by carefully observing and describing them (Kolb, 1984). Through this approach, reflection is used for the purpose of making sense of a situation and to recognize various perspectives (Stirling et al., 2016). Following an experience, learners favouring RO will use their observations to build new ideas or to make generalizations from which future information
can be understood (Kolb, 1981b). These learners are skilled at viewing problems from multiple perspectives and are conscious of different points of view (Kolb, 1984).

Like RO, the AC (i.e. thinking) approach emphasizes thinking rather than feeling (Kolb, 1984). AC focuses on integrating learned or observed concepts into problem solving scenarios (Kolb, 1981b). Those favouring AC are skilled at meticulous design, rigorously analyze concepts and ideas (Stirling et al., 2016), value precision and create concise conceptual systems (Kolb, 1984).

Finally, the AE (‘doing’) mode of learning focuses on using previous experience or experimentation to influence people and change situations (Kolb, 1984). Through this mode, practical application is emphasized over reflective understanding and attention is concentrated on creating practical and effective solutions to problems (Stirling et al., 2016). Individuals favouring AE are skilled at utilizing theories and previous knowledge to make quick decisions and to problem solve through difficult issues and situations (Kolb, 1981b). This type of learner is often comfortable taking risks to achieve their goals and in doing so aim to influence their environment (Kolb, 1984).

**Learning styles.** Kolb (1984) also identifies four basic learning styles, each of which emphasizes specific abilities or preferences for learning over others. These learning styles include converging, diverging, assimilating, and accommodating (Kolb, 1984). Those with a converging learning style tend to favour AE and AC, prefer technical tasks over interpersonal or social settings, and have strengths in problem solving, decision making, and practical application (Evans et al., 2010). Individuals with a diverging learning style show increased appreciation for CE and RO (Kolb, 1984), and have a creative imagination and an appreciation for feelings (Stirling et al., 2016). Divergers are largely aware of the meaning and the value of an experience, and have strengths in generating and analyzing alternative ideas (Evans et al., 2010). Individuals who associate with the assimilating learning style prefer AC and RO and have strengths in inductive reasoning and creating theoretical models (Kolb, 1984). Assimilators are more focused on the development of sound and precise concepts and ideas than on people and practical relevance (Evans et al., 2010). Finally, the accommodative learning style is associated with CE and AE (Kolb, 1984). Those with this learning style typically engage in activities,
implementing designs, take risks, and adapt well to new environments (Stirling et al., 2016). Accommodators are action-oriented, comfortable with others, and utilize trial and error strategies while problem solving (Evans et al., 2010). Figure 2.3 provides a summary of Kolb’s (1984) learning styles.

Figure 2.2. Modes of Learning - Adapted from Kolb, 1984; Stirling et al., 2016

**Developmental phases of experiential learning theory.** According to ELT, the way learning shapes personal development can be marked by the level of complexity used in each of the four learning modes (Kolb, 1984). In the early stages of development an individual may enhance her or his use of one of the four modes of learning, however, this advancement occurs in isolation. On the other hand, when an individual reaches higher stages of development, he or she is able to integrate and express all four of the learning modes (Stirling et al., 2016). According
to Kolb (1984), the human development process is divided into three broad phases of maturation: acquisition, specialization, and integration. Interestingly, according to Zull (2002) the stages of development labeled by ELT are also related to the process of brain function and are often marked by noted changes in the structure of the brain that occur with growth.

<table>
<thead>
<tr>
<th>CONCRETE EXPERIENCE (feeling)</th>
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<tbody>
<tr>
<td><strong>Accommodator</strong></td>
</tr>
<tr>
<td>• Action and people oriented</td>
</tr>
<tr>
<td>• Willing to take risks and implement new strategies</td>
</tr>
<tr>
<td>• Strengths in executing plans, being open to new experiences, and adapting to change</td>
</tr>
<tr>
<td><strong>Diverger</strong></td>
</tr>
<tr>
<td>• People and feeling oriented</td>
</tr>
<tr>
<td>• Imaginative and mindful of meaning and values</td>
</tr>
<tr>
<td>• Strengths in generating and evaluating alternatives</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACTIVE EXPERIMENTATION (doing)</th>
<th>REFLECTIVE OBSERVATION (watching)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Converger</strong></td>
<td><strong>Assimilator</strong></td>
</tr>
<tr>
<td>• Emphasizes technical tasks over social/interpersonal settings</td>
<td></td>
</tr>
<tr>
<td>• Good problem solvers and decision makers</td>
<td></td>
</tr>
<tr>
<td>• Strengths in reasoning and applying ideas to practical situations</td>
<td></td>
</tr>
<tr>
<td><strong>Diverger</strong></td>
<td></td>
</tr>
<tr>
<td>• Preference for ideas rather than people</td>
<td></td>
</tr>
<tr>
<td>• Values logical soundness of ideas over practical value</td>
<td></td>
</tr>
<tr>
<td>• Strengths in inductive reasoning, creating theoretical models, and integrating observations</td>
<td></td>
</tr>
</tbody>
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| ABSTRACT CONCEPTUALIZATION (thinking) |

Figure 2.3. Learning Styles Adapted from Evans et al. (2010); Kolb (1984); Stirling et al. (2016). Each approach to learning is listed in the grey boxes. The learning styles, listed in the white boxes are connected to the two approaches to learning that are favoured by each style. For example, the *assimilator* learning style is connected to reflective observation above and abstract conceptualization below.

The phase of acquisition typically takes place from birth through adolescence and marks the development of basic learning abilities and cognitive structures (Kolb, 1984). The second phase, specialization, extends through formal education and/or career training and the early
experiences of adulthood in work and personal life (Kolb, 1984). During this developmental phase, particular learning styles are shaped and developed through social, education, and organizational socialization forces (Stirling et al., 2016). Finally, the third phase of development, integration, occurs in mid-career and later life (Passarelli & Kolb, 2012) when a learner focuses on expressing his or her non-dominant learning modes in both work and personal contexts (Stirling et al., 2016). Expression of all four approaches to learning is viewed as an indicator of high levels of personal growth (Kolb, 1984), considered important for personal fulfillment and cultural development (Evans et al., 2010), and is essential in achieving success in learning.

The Use of Experiential Learning Theory in Kinesiology Programs

As previously mentioned, the study of teaching and learning in kinesiology or exercise science programs is currently in its infancy given the rapid expansion of such programs that has occurred in the past twenty years (Jenkins & Haiback, 2016). Despite the novelty of such research, there is one study from the University of Regina that investigated experiential learning in kinesiology and health studies at their institution (Kelsey & Cummings-Vickaryous, 2008). In this study, the researchers aimed to understand the faculty and student perspective of experiential learning. The authors concluded that despite lacking agreement regarding concepts and terms related to experiential learning, most faculty and students perceive experiential learning as learning that occurs through participating in or observing an activity. Further, despite the identification of reflection as one of the main approaches to learning in ELT (Kolb, 1984), very few faculty members discussed reflection as a practice of experiential learning (Kelsey & Chamberlin, 2009). These findings provided additional motivation for the completion of this thesis. The use of experiential learning in kinesiology programs may be misunderstood (Kelsey & Chamberlin, 2009) and thus, it may be used in ways that are not of benefit to undergraduate students.

Although the above investigation does provide insight into students’ and faculty’s’ perception of the use and meaning of experiential learning in a kinesiology undergraduate program, it does not provide information related to their experiences in such learning environments. Furthermore, this study investigated the use of experiential learning in the entire
faculty of kinesiology and health education as opposed to its use in courses specifically designed to align with ELT. Thus, an understanding of the kinesiology students’ participation in experiential learning is largely missing from current educational research.

The Learning Space

As described above, many of the tenets of ELT draw attention to the connection and relationship between the learner and the environment. Lewin (1951), stated that developing an understanding of the learning process calls for consideration of both the person and the environment, as the two are interdependent variables in any individual’s experience. In the case of learning in a practice-based classroom, the learner, as well as the learning space must be taken into consideration. Exploring the space of a learning environment allows for an individual’s subjective experience in the learning environment to be taken into consideration (Marrow, 1977). The learning space may be experienced very differently for each student depending on how he or she perceives, feels, and behaves when in the environment (Kolb & Kolb, 2005). According to Lefebvre, a French philosopher and sociologist, space is not just simply an area in which actions take place, but rather, space is constantly being created, produced, and reproduced (van Ingen, 2003). Therefore, in order to develop a complete understanding of the learning environment, it may be essential to consider the spatiology of the learning environment (Lefebvre, 1991).

Lefebvre’s (1991) spatiology or spatial triad asks researchers to consider three processes that occur within any environment to influence the social construction of space. These aspects are described as perceived space, conceived space, and lived space (van Ingen, 2003). First, perceived space can be described as the concrete materiality of spatial forms that can be mapped and seen, and also includes actions that occur within the space. According to Soja (1996) this aspect of space is what constructs and influences behaviour and experiences. In terms of education, this would include the physical objects within the classroom and the actions (e.g. studying, discussing) that occur within the environment. The notion of perceived space aligns closely with the fifth tenet of ELT and reflects how a learner interacts with his or her environment in order to learn.

Conceived space describes the construction of spaces through thoughts, memories, ideas, plans, and codes (van Ingen, 2003). This could include the symbolic importance of the learning
environment (e.g. representations of success, identity, failure, or confusion). The conceived space of the classroom would be largely influenced by reasons for pursuing a degree in kinesiology and future ambitions, both of which would be influenced by students’ previous experience and their views of the course material. As such, the conceived space of the learning environment relates to both the first and second tenet of ELT. As learning is a process, students are required to draw on thoughts about previous experiences and their current understanding of the course material in order to reconstruct what they know and apply it to new experiences. Students’ conceived space in practice-based courses will be largely determined by their thoughts and beliefs, which are continuously being modified and refined as a result of experience within the course (Kolb & Kolb, 2005).

The lived space, which combines all aspects of the space to create what Stewart (1995) describes as local forms of knowing that result from specific practices that are generated from historical and geographical processes. Lived space is the site of social struggle, counter-discourses, and resistance (van Ingen, 2003). Such cites of oppression allow for the creation of counterspaces (Soja, 1996), which can be dynamic and enabling (van Ingen, 2003). The lived space of the student learning experience is largely described by the fourth tenet of ELT – learning is a result of the “integrated functioning of the total person – thinking, feeling, perceiving, and behaving” (p. 194). For example, a student may feel judged or inferior within the learning environment due to perceived beliefs regarding society’s lack of acceptance of their culture (Bullen, 2007) or gender (Thomas, Malina, Maslin-Prothero, 1998). In turn, this may shape the lived space of the learning environment for this individual and consequently have an oppressing or enabling influence on the student’s learning experience. Without consideration for the lived space of the environment, it will be difficult for educators as well as researchers to develop a full understanding of the student experience and to address the feelings, perceptions, thoughts, and actual behaviours of student throughout practice-based learning instruction (Stirling et al., 2016).

Although this thesis will be grounded in the six core tenets of ELT (Kolb, 1984), several authors have acknowledged the need to examine the learning space to best understand students’ learning experience (e.g. Holloway, Hubbard, Jöns, & Pimlott-Wilson, 2010; Thiem, 2009). Therefore, Lefebvre’s spatial triad will also be integrated into this thesis.
Summary of literature

Given the practical nature of many kinesiology-related careers and occupations, kinesiology educators rely on courses that align with the tenets of experiential learning to develop a number of practical and hands-on skills such as communication, teamwork, movement observation, movement demonstration, and movement analysis, that will allow students to be successful in the workforce following the completion of their degree (e.g. Burns, 2016; Kelsey & Cummings-Vickaryous, 2008; "Learning through experience," 2016; "Physical & health education," 2016). The use of experiential learning has been documented and supported in a number of undergraduate programs it is often cited as a means by which to enhance the student learning experience in higher education (Kolb & Kolb, 2005). ELT includes description of six central tenets to learning, four different approaches to learning, four unique learning styles, and a developmental process (Kolb, 1984). ELT has been utilized to structure many courses in kinesiology programs across the country (e.g. Burns, 2016; "Future graduate students," 2016; "Learning through experience," 2016; "Physical & health education," 2016). Yet, despite the focus on developing practical skills in kinesiology programs, the value of an experiential learning environment has yet to be examined in these settings. There is a need and desire to improve the learning environment for undergraduate students; however, before this can occur within the practice-based courses, a thorough understanding of the student experience is warranted.

Statement of Purpose

The purpose of this study was to develop an understanding of first-year kinesiology students’ learning experience in a practice-based course. Through the framework of the six core tenets of ELT, the goal of this study was to describe students’ perception their learning experience in a practice-based kinesiology course at a university in southeastern Ontario.
Chapter 3: Methodology and methods

Methodological Approach

This was a qualitative study conducted through use of semi-structured interviews. Although surveys were employed in participant recruitment, the information collected was only used to describe the participants and thus not utilized in the analyses of the interview data. For this reason, despite using multiple methods of data collection, it was not appropriate to describe the study as a mixed-methods investigation. Qualitative research is used to understand and develop meaning from individuals’ beliefs, experiences, attitudes, behaviour, and interactions (Gelling, 2014; Pathak, Bijayini, & Sanjay, 2013). When conducted through use of interviews, as was the case in this thesis, the qualitative approach can provide researchers with in-depth information regarding individual’s experiences (Turner III, 2010). Given my desire to better understand the student learning experience, a qualitative approach utilizing semi-structured interviews was most appropriate for my investigation.

Within the qualitative method the way researchers approach their work will vary based on the theories, paradigms, and assumptions chosen to guide the research process (Creswell, 2012). These assumptions are a set of basic beliefs that guide a researcher’s actions and approach to inquiry (Guba, 1990). The beliefs chosen to guide this thesis were that of social constructivism (Palincsar, 1998). The social constructivist approach suggests that knowledge and meaning is co-constructed between individuals (Kiraly, 2014). Through this position, the researcher’s job is not simply to describe, but rather to understand the participants’ experiences (Guba & Lincoln, 1994). By acknowledging that the students’ perspective of their learning experience in the practice-based course may depend on varying beliefs, goals, and past experiences, the goal of this thesis was to consider the multiple realities of learners and to identify common themes in the experiences of all students (Creswell, 2012). Given this approach, a member check was used following each interview to allow each participant to review a summary of his or her interview transcript. This was be done to ensure that participants’ perception of their learning experience had been accurately represented (Krefting, 1991).
Theoretical Grounding

This study was grounded theoretically in Kolb’s (1984) ELT. As discussed previously, ELT includes a learning cycle, phases of development, learning styles, as well as six core tenets of learning. Unlike the majority of previous research in this area, this thesis used the six core tenets of experiential learning to structure the semi-structured interviews and data analyses. As discussed in detail above, the six core tenets of experiential learning characterize the unique perspective on learning and development outlined in ELT (Kolb, 1984).

Briefly, the first tenet describes learning as a process rather than in terms of outcomes (Kolb & Kolb, 2005). The second tenet suggests that all learning is grounded in experience, which implies that individuals’ rely on previous knowledge and experience to construct meaning from new scenarios (Kolb, 1984). Tenet three describes the necessity of mastering all four modes of learning (i.e. thinking, experiencing, reflecting, and doing) in order for learning to occur (Kolb, 1984). The fourth tenet describes learning as a holistic process of adaptation to the world, which requires consideration for all aspects of the self – feelings, perceptions, thoughts, and behaviour (Kolb & Kolb, 2005). According to the fifth tenet, learning is a result of the interactions between the learner and all aspects of the environment (Kolb, 1984). Finally, the sixth tenet states that knowledge is created through learning (Kolb, 1984). These six tenets were used to structure the interview guide and preliminary data analyses.

Methods

Course description. The first-year, practice-based, kinesiology course from which students were recruited is called Fundamental Principles of Fitness and Exercise. In order to enroll in this course, students are required to have completed the first-term practice-based course, Introduction to Movement Observation and Evaluation and must be concurrently enrolled in the lecture-based course, Fitness: Principles and Practice. The practice-based course is integrated with the lecture-based course. The purpose of the practice-based course is for students to build on the knowledge that they have developed in their lecture-based courses to apply their understanding of biomechanics, motor learning, psychology, and exercise science in the development and implementation of exercise sessions. Students are provided the opportunity to build exercise sessions targeting muscular strength and endurance, speed and power,
hypertrophy, agility, and energy system development, while becoming more aware of their own fitness and movement patterns (2016/2017 Undergraduate program calendar, 2016).

Participants. For this investigation I recruited kinesiology students enrolled in a first-year, second term practice-based course at a large university in southeastern Ontario. This course must be completed during students’ first year of study, as it is a pre-requisite course for the practice-base course in second year. First-year students were chosen for two main reasons. First, as discussed above, Kolb (1984) outlines three stages of development, which describe one’s integrated use of the four learning modes. Students in first-year university have likely just entered the second stage of development, specialization. During this phase the alignment of personal characteristics and environmental demands increases; however learners are still reliant on a preferred method to learning and are hesitant to make changes to their learning style (Kolb, 1984).

While in first-year university, students are going through a transitional period, in which many must move away from parents, change residency, and integrate themselves into a very different university environment marked by higher academic demands, greater freedom, and less adult supervision (Lefkowitz, 2005). These added stressors make students at this stage of development even less likely to modify their learning approach to achieve success and as a result, first-year students are more likely to develop negative feelings towards their learning and have difficulty being successful in the class if the teaching style in the class does not align with their preferred approach to learning (Matthews, 1991). What’s more, research has suggested that without further study into the learning experiences of first-year students and appropriate instructional modifications, many students will lack academic success and be less likely to complete their degree (e.g. Ganyaupfu, 2013; Hudson-Ross & McWhorter, 1995; Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008; Nelson-Smith, 2008). Students in this phase of development are more likely to be experiencing difficulty adapting their learning approach in the practice-based course and with a better understanding of their learning experience, recommendations could be made to enhance the student experience and potentially increased student retention.

My second reason for choosing first year students was driven by changes being made to the practice-based curriculum at the university. In the past, the faculty’s practice-based courses
have not been granted equivalent credit towards students’ GPA. The year this study was conducted marked the first year that the practice-based course influenced students’ overall GPA. This trend will continue as students progress through the program (i.e. second, third, and fourth year practice-based courses will also be worth academic credit; 2016/2017 Undergraduate program calendar, 2016). Therefore, students’ success in the practice-based course has an influence on their overall success at university.

Furthermore, it is believed that courses of this nature are unique to this university. To my knowledge, no other university offers academic courses that are held entirely in a practical setting (e.g. gymnasium) and the importance of the development of practical skills for students striving to enter into kinesiology careers following graduation cannot be stressed enough. Understanding how students experience the practice-based courses could assist in the enhancement of student learning as well as in the promotion of practice-based learning at other institutions. The first year of higher education is an important milestone in students’ lives (Feldman, 2005) and it is during this time that they develop their initial beliefs about the benefit of education and the relevancy of their learning to future careers that will shape their approach to study for their entire undergraduate experience (Kuh, 2016). Therefore, in order for the practice-based curriculum to achieve its intended learning outcomes throughout the duration of a student’s graduate degree, the first-year practice-based experience must be a positive one. Thus, an understanding of the first-year student learning experience was necessary.

Overall, the first-year students recruited for this study are entering the specialization stage of development and are the first group of students to experience a practice-based course as a granted academic course. During the first year of university, students develop their initial perceptions of their learning that will go on to influence their behaviour and decisions throughout their education. This population was viewed as the group that could provide the most compelling and needed perspective regarding the student learning experience.

**Inclusion criteria.** Students meeting the following criteria were deemed eligible to participate in this study:

1. Enrolled in the first-year kinesiology practice-based course during the Winter Semester of 2016,
2. Enrolled as a full-time student,

3. In their first year of study at university,

4. Completed the pre-requisite course in the previous semester (Fall 2015),

5. Completed the online learning style and demographic questionnaire, and

6. Provided informed consent to participant.

**Exclusion criteria.** Students meeting one or more of the following criteria were not eligible to participate in this study:

1. Not a first-year student,

2. Had transferred from another faculty or another university,

3. Did not complete the online learning style and demographic questionnaire, and/or

4. Did not provide informed consent.

**Sample size.** Unlike quantitative research, which requires statistical calculation to determine an appropriate sample size to accurately draw conclusions about certain phenomenon, sample size estimations in qualitative research are typically not predetermined. Instead, they are largely dependent on the number needed to fully understand the important elements of the phenomenon being studied (Sargeant, 2012). This number becomes evident as the study progresses and as new ideas, themes, or explanations stop emerging from the data (i.e. data saturation; Marshall, 1996). As I was not able to determine an exact sample size, I estimated that a range of ten to twelve interviews would be sufficient to develop a thorough understanding of the student learning experience. Twelve interviews were conducted, the first of which was used as a pilot to practice my interviewing techniques and to ensure question clarity and appropriate interview duration. Eleven interviews were analyzed in detail.

**Recruitment strategies.** In order to recruit for this study, I attended each of the ten first-year practice-based course classes on the final day of the semester (i.e. the course is separated into ten unique sections, each comprising twenty-five to thirty-two students). During this visit I
explained the study’s objectives and invited any student interested to complete an online survey that included questionnaires related to learning style preferences and demographic information. The online survey could be accessed through a link that was emailed to the students following the conclusion of the semester. It was made clear that all information collected would be depersonalized and have no influence on their marks in the course or on their instructors’ perceptions as I was the only one aware of their involvement. It was also expressed that this was an opportunity for students to have their feedback heard and considered in the development of future practice-based courses for themselves and other kinesiology students. Students were required to give online consent prior to completion of the online questionnaires (see Appendix A).

It was my intention to use responses from the online survey to select students to participate in the interview portion of the study. This was an example of purposeful sampling, in which participants are chosen on the belief that they will be best able to inform the research question and provide an understanding of the experience under investigation (Creswell, 2013; Kuper, Lingard, & Levinson, 2008). As students’ demographic background and learning style has been shown to influence their learning experience (e.g. Aronson, Fried, & Good, 2002; Bullen, 2007; Claxton & Murrell, 1987; Kinzie et al., 2007; Walpole, 2003), it was thought that purposeful sampling from the online survey would be necessary in order to ensure that students from various backgrounds and with varying learning styles were included in the study. In total, twenty-six students responded to the online survey, from which twelve expressed interest in being interviewed. These twelve students represented a wide range of learning styles, personal characteristics, and demographics, and consequently, every student who wanted to complete an interview had the opportunity to do so. Responses from the online survey were also used to create a PDF document for each volunteer participant which described his or her learning style and provided suggested studying techniques to enhance learning (sample provided in Appendix B). Information about the participants collected from the online surveys was not consulted during the data analyses of the study.

**Online questionnaires.** The online survey consisted of two previously established questionnaires (see Appendix C). The first was the Kolb Learning Style Inventory Version 3.1 (KLSI 3.1; Kolb, 2005) and was chosen because it was designed based on ELT with the aim of
assisting individuals in identifying the way in which they learn best. The KLSI 3.1 consists of twelve statements, each of which has four different possible endings. The four endings represent abstract conceptualization, concrete experience, active experimentation, and reflective observation learning orientations, and are ranked by the user according to their learning preference. For example, one statement reads, *When I am learning*, and students were asked to rank the following endings based on their preferences: *I am a logical person; I am an active person; I am an intuitive person;* and *I am an observing person*. The sum of ranking positions for each of the four learning modes - Concrete Experience (e.g., experiencing), Reflective Observation (reflecting), Abstract Conceptualization (thinking), and Active Experimentation (doing) – was used to identify each student’s overall preferred approach to learning. The KLSI 3.1 has been shown to be reliable and valid across a number of different populations (i.e. business undergraduate and graduate students, psychology undergraduates, liberal arts college students; Kolb, 2005).

The second questionnaire was a section of the National Survey of Student Engagement (NSSE; Kuh, 2001). The NSSE is a multi-faceted student questionnaire that was designed to document different dimensions in the quality of undergraduate education. It provides information to colleges, universities, and other organizations that could help to improve student learning (*Fostering student engagement campus-wide: Annual results 2011*, 2011). For use in this study, only the final page of the questionnaire, which contains questions regarding personal characteristics (e.g. age, gender, race), parental education, campus involvement, past grades, and current student living arrangements, was used. Each of these factors has been shown to influence the student learning experience (e.g. Blackwell, Trzesniewski, & Dweck, 2007; Maher & Tetreault, 2001; Walpole, 2003; Weingarten, Cortese, & Johnson, 2011).

**Procedures.** Because the necessary sample size of this study was determined during the data collection process, as new categories, themes, and ideas emerged from the data (Marshall, 1996), data collection and data analyses had to occur simultaneously. Green et al. (2007) stated that in order to ensure the collection of in-depth, thorough data in interview-based qualitative research, “data analysis must occur concurrently with data collection” (p. 545). For this reason, although the data collection and data analyses are described separately, they were actually completed at the same time.
Interviews. Twelve semi-structured interviews were conducted. The first interview was used as a pilot interview and thus, the information collected was not included in the data analyses. This interview was used solely to improve my skills as a novice interviewer and to ensure that the questions in the interview guide were understandable and that the interview length was appropriate. The six tenets of ELT as originally described by Kolb (1984), in addition to the recent interpretation provided by Stirling et al. (2016) were used as a framework to structure the development of the interview questions (see Appendix D for full interview guide). Given the semi-structured nature of the interviews, most questions were followed up with probes when I felt further questions would allow me to develop a better understanding of the student’s experience (Bernard & Gravlee, 2014). Some of these probes included “could you provide an example of that?” or “how did that influence your learning in the classroom?”.

Building rapport with interview participants is essential in encouraging them to share detailed and personal stories about their learning experience (Whiting, 2008), and is consequently a necessary step in collecting honest and thorough data (Rubin & Rubin, 2011). To assist in building rapport, interviews were held in a quiet, private room (Grove & Burns, 2005) in the same building as the practice-based course. Interviews were held individually and ranged in length from approximately thirty-five to fifty-five minutes. Upon receiving a student’s consent, the interview was digitally recorded on a laptop computer. Each interview began with the general question, “Tell me about your experience in Fundamental Principles of Fitness and Exercise”. This question was used as a way to help make the student comfortable talking about his or her experience.

Journal. Following each interview I wrote down any of the thoughts that I had or observations that I made before, during, and after the interview. These notes were used to supplement the actual transcript during analyses (Cohen & Crabtree, 2006). These notes included any pauses, silences, and non-verbal actions that occur within the interview, and assisted in further understanding the students’ experience (Clarke, 2006). Because I approached data analyses from the social constructivist perspective, in which meaning is co-constructed between the participant and the researcher (Guba & Lincoln, 2005), taking note of my thoughts throughout the interview process allowed me to consider how my perspective may have influenced the analysis process.
Coding systems. Immediately following each interview, the recording was transcribed verbatim. Following transcription, a summary (see Appendix E for sample) was emailed to the interview participant to ensure that my perception of their experience was correct. In accordance with the outline provided in Using Semi-Structured Interviews in Small-Scale Research: A Teacher’s Guide (Drever, 1995) as well as the McCracken (1988) five-step analysis process, my first stage of data analyses involved reviewing the transcripts twice making notations in the margin on any of my initial thoughts and categorizations. The second step involved identifying meaning units and sorting them into preliminary categories. As the six tenets of ELT were used as the framework to create the interview questions, these tenets also served as a framework for the initial inductive data categorization. At this stage, the data classification was done through use of six coloured highlighters on the first copy of the interview transcripts. Stage one and two of data analysis occurred simultaneously with subsequent interview recordings. Concurrent analysis allowed me to see which aspects of the student experience I may need further explained and helped me see where I may need to ask further questions in subsequent interviews.

Following the completion of all interviews, I continued to analyze the data by further identifying clusters of similar ideas within each preliminary category. This was done deductively, as these categories were not predetermined and emerged from the data. As a visual person, this stage was completed by cutting out each meaning unit and pasting it to one of six pieces of Bristol board on top of similar ideas. This led to what Drever (1995) describes as the identification of group views. Following this stage, the emergent themes were reclassified through use of an Excel spreadsheet. Piercy (2004) and McCracken (1988) both suggest that the predominant themes are identified in the final step of analysis, however, I found that these themes were fairly evident in the initial phases and were continuously clarified throughout the analysis process.

Member checking. Following transcription of each interview, the participant was sent a summary of my representation of his or her experience as discerned from the interview. The purpose of the member check was two-fold. First, I wanted to ensure that I had not misinterpreted the description of their learning experience, and second, the member check was used to improve accuracy, credibility, and validity of what was recorded in each interview (Barbour, 2001; Doyle, 2007; Lincoln & Guba, 1985).
**Ethical considerations.** This study was investigating what most would consider a non-sensitive subject or experience and thus, I did not experience major ethical dilemmas throughout the research process. However, there were a number of considerations that needed to be made before, during, and after the interview to ensure ethical treatment of study participants and their experiences (Ritchie, Lewis, Nicholls, & Ormston, 2013). Ethical considerations taken at each time point in the study are addressed below.

*Ethics regarding study participation.* All students enrolled in the first-year practice-based course were invited to participate in this study. It was made clear that participation in the study was voluntary and that students would be free to withdraw at any time should they change their mind after deciding to participate. It was also made clear that participation would be anonymous and known only to me. Consequently, involvement in this study could not influence students’ success in the course or their instructor’s perception. Furthermore, it was explained that all data collected in the online questionnaires and during the interview would be stored under pseudonym names. Any identifying information was stored on a password-protected computer to guarantee confidentiality.

*Ethical considerations during the interview.* Prior to each interview, participants were told the study’s objectives and that he or she could withdraw at any time during or after the interview. Each student was given an information sheet that explained the purpose of the study and the measures being taken to ensure confidentiality and anonymity. This was reiterated in the consent form that each participate was asked to sign prior to the commencement of the interview (see Appendix A). With permission of the participant, each interview was digitally recorded.

During the interview, each participant was encouraged to share his or her learning experience and to take as much time as was needed to provide answers. The goal was to allow students to feel valued, respected, and comfortable providing thorough descriptions even if their statements might be perceived as critiques of the course. Based on the students’ responses, I believe I was successful in creating an open interview space. For example, in one interview, when asked about the alignment of the material in the lecture-based courses and the material presented in the practice-based course, one student expressed his perception of a misalignment between the two classes. When I moved to the next question regarding his studying techniques,
he responded with “wait, wait, can I just continue on that”, which suggested he felt comfortable providing constructive criticism of the course and also allowed me to develop a deeper understanding of his experience.

**Ethical considerations following data collection.** All data was stored under pseudonym names and on a password-protected computer. In addition, each student was provided with a summary of my perspective of the interview within two days of the interview and asked to make any changes or remove any points that either he or she felt were not accurate or that he or she did not want included in the study. Five of the summaries were returned unchanged, two students added to the summary, two preferred to have some ideas relating to the role of the instructor and the benefit of experiencing course material removed from analyses, and two were not returned.

As detailed in the information letter and the consent form, as well as through our conversation prior to the interview, all information provided during the interviews was kept confidential. Each interview was transcribed without use of participant names and all data were stored on a password-protected computer, to which only I have access. Some quotations have been used in the write-up of this thesis, however students’ identities remained anonymous through use of pseudonym names and the removal of any potentially identifying information (e.g. if student-athlete, sport was altered).

**Summary of Methods**

This was a qualitative study conducted through use of semi-structured interviews and from the social constructivist perspective. The six tenets of ELT were used to theoretically frame the interview questions as well as the initial stage of data analyses. Data analyses utilized a combination of inductive and deductive techniques and ethical consideration occurred at all stages of the research process.
Chapter 4: Results

This chapter includes two main sections. The first section will be used to describe the demographics and learning styles of the student participants as identified from the online survey, while, the second section will describe the major findings that emerged from the interviews.

Description of Student Participants

Eleven students – six females and five males, participated in this study. All students were either eighteen or nineteen at the time of data collection (born in 1997). Of these students, three identified with being Asian, Asian American, or Pacific Islander; five identified with being white; two identified with being multiracial; and one selected ‘Other’. Four participants played on varsity teams at the university or considered themselves student-athletes, and no student was a member of a fraternity or sorority. In terms of average university marks, two students reported being A- students, one B+ student, four B students, one B- student, one C+ student, and one student preferred not to answer that question. The sample included five students receiving government funding to finance their education, and one student reported being registered at Accessibility Services and utilizing accommodations for this class. The paternal education of this group included three fathers who had graduated from high school, five who had completed a bachelor’s degree, one who had completed a master’s degree, and two students described this question as not applicable. The maternal education included one mother who did not finish high school, one who graduated from high school, two who attended college or university but did not complete a degree, three who completed a bachelor’s degree, two who completed a master’s degree, one who completed a doctoral degree, and one student described this question as not applicable.

Participants’ learning styles varied amongst all categories. The most represented learning style was that of the accommodating style with four students scoring highest in this approach to learning. These students prefer doing things, being involved, and interacting with others (Kolb, 1984). Three students reported having the assimilating learning style with which they thrive in situations in which they are called upon to create theoretical models and think about ideas and abstract concepts (Kolb, 1981). There were two students who reported to prefer the converging learning style, which suggests that have strengths in problem solving, decision-making, and the
practical application of ideas (Kolb, 1984). Finally, two students identified with the diverging style with which they enjoy using their imagination, being aware of meaning and values, coming up with alternative ideas (Kolb, 1981).

**Findings from the Interviews**

Eleven interviews were conducted with first-year kinesiology students, each ranging in length from approximately thirty-five to fifty-five minutes, and producing one hundred seventy-five single-spaced pages of interview transcriptions. Each interview was first deductively coded using the six core tenets of ELT as the preliminary categories. As the analysis advanced, the preliminary categories were further broken down into emergent themes and ideas (McCracken, 1988). Analysis continued until the point of data saturation, at which point it was felt that no additional interviews were needed to add to my understanding of the practice-based student learning experience (Sargeant, 2012).

Seven hundred forty-one meaning units were derived from the interview transcripts, each grouped into the six core tenets of ELT, and further categorized based on the emergent themes. Given the integrative nature of ELT, some of the ideas presented by students aligned with two or more tenets. When this was encountered, the idea was categorized under the tenet from which the initial interview question was derived. Throughout the following section, when an idea aligned with two or more tenets, the intersection of tenets is highlighted.

In addition to the six core tenets, course evaluation is also presented as one of the preliminary categories. Because assessment emerged as a major theme across all of the tenets, I believed it would be easier to fully understand the students’ perception of the influence of course evaluation on their learning experience if all ideas related to assessment were explained together. The tenet related each evaluation theme is identified.

**Tenet one – Learning is a process.** According to the first tenet of experiential learning, learning should be considered as a process, not as an outcome, and therefore, ideas and concepts are not fixed or constant but rather are continuously created and modified through experience (Kolb, 1984). Data from the interviews revealed three central themes related to this tenet. First, nearly all students felt that having prior knowledge of the course material helped them learn. Second, some students felt that the way that they viewed and the extent to which they understood
this material changed throughout the course of the semester, while other participants did not. Third, students had varying views on how their learning and development would continue following the course.

**Prior knowledge.** Participants described having a wide range of previous knowledge related to exercise and fitness. The majority of the students discussed their previous experience in community or competitive sport. In addition, many participants discussed high school courses such as exercise science or physical education classes and noted that although both classes may have been related to physical activity, no high school course was as specific or as theoretical as the practice-based course in university. All students agreed that having previous knowledge was an important contributor to success in the course. Participants’ perception of their previous knowledge and its role in their learning is discussed in detail below.

**Type of prior knowledge.** All students reported having some prior knowledge of fitness and exercise. For most, this experience came from participation in sport, although the extent to which participants viewed sport participation as previous knowledge for this course varied. Noah described:

> Ever since I was young, sport has been a part of my life as it has for most people in this program… so before that (the course) it felt like I was pretty educated about the whole fitness and health principles of life.

Noah has made the assumption that most people in the kinesiology program have a sports-background. Interestingly, Isaiah, who also has a sports background noted, “That is… I think a misconception, I mean, not everyone in kinesiology is an athlete”. Results from my interviews suggest that although most students did have previous athletic experience, some students did not. Lara for example shared, “I am not the most knowledgeable person in exercise and fitness… I have never been on a serious sports team.”

Students also expressed the role of previous high school courses as experience relating to this course, although the extent to which this knowledge related to the course differed between students. Usually students suggested that it was the combination of previous schooling and sport participation that provided the previous knowledge. Diego, for example, stated:
I had a fairly good background in it, I didn’t have any specific training [in] weight training … but I took exercise science back in high school [and] I coach high school basketball so I have a lot of background knowledge in terms of that.

Likewise, Tessa commented:

I took gym throughout high school so I guess that might of helped a bit because I took a course where we trained for a triathlon and we did a lot of weight training so that kind of applied because that is when I got more into doing weight training so it made me more comfortable in the gym and that carried through into university. I [also] took exercise science, which wasn’t too much the same. We didn’t do too many courses on program design.

*Influence of prior knowledge.* Although every student did not describe having the same amount of previous knowledge, all students did highlight the influence of having some prior understanding on their experience in the course. Prior knowledge was cited as a necessity and benefit to do well in the course, and a factor that influenced students’ comfort in and enjoyment of the class. Diego noted:

There were some times where we would be told to do a certain exercise [and] without prior knowledge … or for some of the questions for the assessments, if you didn’t have prior knowledge you would not know how to understand them or how to interpret them.

Lara, who shared that she didn’t have as much previous knowledge as others, agreed:

I think [there] were [people] who were more knowledgeable or those people that maybe participated or were varsity athletes, they understood some of the stuff a lot better simply because they have already gone through some of the experiences and exercises.

Likewise, Tonya stated:

A lot of the terms that they (the instructors) use, I know for a fact that I would not have known if I had not of been an athlete too because I know regular people (non-athletes) would sit in the class and kind of nudge me [and ask] “what does that mean” and I would … think that is common knowledge.
Thus, students with and without prior knowledge felt that having athletic experience before the course began improved their understanding of the course material.

Students with previous experience also discussed the influence of their previous knowledge on their enjoyment of the class. Noah shared, “I think I probably enjoyed doing some of the stuff more than some of the people who don’t have as much physical activity experience. They might not have felt as comfortable doing some of the exercises.” Tonya, a fellow athlete, shared the same view, “We had a lot more fun because we are comfortable doing this … we’ve been an athlete so we are comfortable doing these exercises and other people might be a little more shy of doing the exercises.” Tonya also expressed that in her class those with more experience would “help the people around [them] that weren’t as comfortable.” This also provides an example of the students’ perception of the importance of interactions within the classroom, which will be discussed in further detail in the description of the fifth tenet of experiential learning. Thus, it appears that given the applied nature of the practice-based course, students believe that some prior experience is a large benefit to learning in and enjoyment of this type of course.

Although it appeared that most students viewed previous knowledge as a large benefit to their learning within the course, Diego felt that his previous knowledge took away from the amount of learning that occurred within the classroom. He described:

I felt that [for] the exercises that we did, I had a lot of background knowledge to begin with so there wasn’t a lot of learning going on there… I felt that there wasn’t as much building on previous knowledge as there could have been because a lot of the stuff that was introduced was very basic… I felt like it contradicted some of the things that I have learned before unfortunately, which led to the question of… what is right because you are being told one thing by one person and one thing by another person and both are equally credible so which one is actually correct?

This statement not only highlights the perceived impact that previous knowledge had on his learning, but it also draws attention to two other themes that emerged from the data. First, Diego states that there could have been more building on previous knowledge, which could highlight a discrepancy between his expectations of the course and his experience in the course
(discussed further in tenet two). Additionally, Diego felt that some of what was being presented in the course contradicted his previous knowledge or the education he was receiving from others. This contradiction too emerged as a theme within the data and will be further discussed in tenet five.

**Change of view of exercise and fitness as a result of the course.** While discussing their process of learning within the practice-based course, participants had differing views on how their understanding had changed throughout the semester as well as on the specific aspects of the class that could be attributed to this change. Students’ change in perception and the factors cited as influencing this change are discussed below.

**How view has changed.** Students’ perception of how this course influenced their view on fitness and exercise varied from providing a broader perspective on the meaning of exercise and what it means to be ‘fit’ to not changing at all. When asked if her view on fitness and exercise had changed, Ella responded, “Definitely, there’s a lot more aspects to being fit and there’s a lot more helpful information like how to properly plan a fitness plan and how it effects an individual that I kind of wish I knew [before]”. Likewise, Lara shared:

There’s a lot more to exercise than just going to the gym and lifting weights and everyone experiences exercise differently… some people are very fit while other are not as fit and I think for me it is just, it changes the outlook that being physically active for everyone is very different.

Other students didn’t necessarily think that their view had changed but they did feel they had developed a greater appreciation and had become less judgmental of other people. Isaiah said:

I don’t know if it has changed that much… I guess it is just maybe more important to me than it was before… when you are looking at it… how complex it is, you kind of have more of an appreciation for … trainers and people that do that for their living.

Similarly, Thomas shared:
I don’t judge people as harshly… for what they are doing even though it may look unusual because I am assuming that they understand that that (the exercise) is eliciting a certain change and that they want to elicit that change.

Tonya also stated, “I wouldn’t say it has changed, more like it just got better.”

Some students felt that it wasn’t this course that changed their view, but rather the combination of this course along with the other lecture-based courses that they were taking.

I think pairing those two courses (the practice-based course and the lecture-based co-requisite) together was really good just because… the course-based (lecture-based) was [going] really in-depth [into] the systems that go on… and the [practice-based course] was applying it to real-life. (Tessa)

Likewise, Hector stated, “It (the change) was more from other courses, [the practice-based course] helps us apply the knowledge.” On the other hand, Noah stated, “I wouldn’t say it changed anything, I kind of knew what I was getting myself into.”

Thus, in general, participants viewed the practice-based course as an opportunity to apply the theoretical concepts that they were learning within the class as well as in other kinesiology courses. With the added insight developed when learning the practical value of the theoretical knowledge, students became more aware and appreciative of the practices of current professional in the field of kinesiology.

Factors influencing change. For a number of participants, watching other students, listening to the instructor’s explanation, and reflecting on their experience was most beneficial in furthering their understanding of the course material. Lara stated, “Just observing the students in the course and he (the instructor) would explain it to us” when explaining how her view had changed. Likewise, Isaiah shared, “I guess probably the reflections were helpful because when you are with your friends doing the exercise, you are kind of just doing them, you don’t really… apply it until your instructor… takes you through them (the questions).”

Other students found that the assessments and the workshop summary sheets were most informative. Thomas reported, “[The] workshop sheets were pretty informative and… they gave
you pretty concrete outlines and then being able to bounce ideas off of the prof.” Sheryl on the other hand suggested, “I think the individual assessment really helped because it kind of summarizes… each topic that we learned.” Thomas and Sheryl expressed a desire to see the material summarized and written down. Overall, the format of the practice-based course reportedly provided students with multiple avenues of knowledge acquisition and practical kinesiology skill development.

**Progression from course.** When discussing how students thought their knowledge and development would progress from this course, participant perception, once again, varied and could be categorized into three distinct perceptions. For the first group of students, although the material in the course might have been interesting to them, it was not something that they perceived to be useful or applicable for their future goals or career aspirations. The second group was less certain about how or when their learning may or may not progress from this course. The final group of students felt that regardless of where they ended up working or studying in the future that the learning they experienced in this course would lead to future opportunities. Each view is discussed below.

**Lack of connection to future learning.** Based on the perspectives of the participants, the main learning objectives of the course were related to exercise program design and fitness coaching and so a number of students perceived this course as preparation to become a personal trainer. For students not interested in following this career path, the perceived misalignment to future goals and aspirations resulted in the belief that their learning would not progress from this course. Isaiah expressed, “I felt like I was just being trained to be a personal trainer and a coach, and I guess it is good to have that knowledge, but it is not really something that I am interested in.” He continued:

I am really interested in going into something health related, medicine, physio, something like that. And so learning how to get people stronger I guess it is helpful… but it is not something I want, to start my own personal training business.

Thomas shared similar views:
I don’t know what else to learn next with this specific information… I mean… like I was saying before, we received pretty redundant information with the charts and stuff so I didn’t really see that much of development of the information throughout the course and now that it is continuing, I am confused about the next thing to learn in this class would be… I don’t think it aligns (with my goals for the future).

*Uncertainty regarding progression.* In first-year it is likely that most students are unsure about their future career aspirations and where their knowledge will progress following university. Some students shared their uncertainty about their progression from this course but agreed that the content might be useful in the future. Tessa shared:

I feel like I’ll know when I can draw from the knowledge of this course so I know … if someone asks me for advice in the future or if I even want to make myself a little program I can go into my material… so it will be useful.

Like in the previous section, Tessa believes that what she learned from the course relates primarily to the development of the training and fitness programs, which as will be discussed in the next section, differs slightly from other students’ perception of the benefit of the course. Like Tessa, Hector agreed that it might depend on what happens in the future. He stated:

I’m really not sure. I guess it depends what kind of things come my way in the future. I feel like regardless of what that is, it kind of prepares me, even if it is not specific, if it is just how to interact with people, stuff like that.

Diego had a less positive view on his knowledge progression from this course. When asked if he saw his knowledge progressing from this course, he shared, “Not really because it was mostly building on prior knowledge… I was here… now I’m here… I can do the things I was doing before but now I have more knowledge with regards to this.” When asked if he saw this course aligning with his future goals, he stated, “I don’t even know if it has anything to do with what I want to do.”

*Clear connection to future learning.* The final group of students saw a direct connection between the course and future learning. Some of these students perceived this connection because they believed the course content aligned with their future aspirations and others believed
that the lessons that they learned within this class would be of benefit to them regardless of where they ended up. Heidi shared that she was writing the test for her personal training certification the weekend following the interview and explained, “I want to get into personal training so … I am going to review those workshops (course material) before I do the certification.” Heidi also noted:

If I want to go into physiotherapy after undergrad or into, I don’t know, athletic therapy or med school, [I] feel like this is all within healthcare, [where you would be] working with other people … so that would be beneficial… this course teaches you … [and] improves your leadership skills.

Tonya agreed by saying, “I see it connecting with everything… I thought this whole thing was a great thing to be honest… [the] course is definitely something applicable to a job.”

Likewise, Sheryl stated:

I am planning to either go into physiotherapy or in medicine, so [the] skills that I learned … helped me to [to learn how to] deal with patients… you need to design programs, you need interaction with your clients… all the skills can apply to health professionals.

Here it can be seen that a number of students felt that regardless of the career they end up pursing, there were skills developed within the practice-based course outside of exercise program design that would assist them in being successful in the future. Ella even stated:

Getting to interact with others is definitely helpful because we are going to be working with a team of people even if we are not in this faculty … [you could] be in business but you still have a group of people that you are working with in business so that is really helpful.

One student viewed her progression throughout the course and beyond in relation to her development as a person and as a kinesiology student.

I don’t know how to put this into words but I’ve grown from the student that I was at the beginning of the year. And I think this course has a lot to do with it… it has made me a more open person, again, getting to experience everything, it definitely helps you
progress and I think, I know next year we have this I believe again and I think it is just going to help me grow as a kinesiology student. (Lara)

Thus, many students believed that the structure of the practice-based course allowed them to develop critical interpersonal and intrapersonal skills that would be of benefit to them should they enter any career that required them to work with others.

**Tenet two – Learning is grounded in experience.** Tenet number two states that learning is a continuous process grounded in experience (Kolb, 1984). This course was specifically designed to give students an opportunity to experience the concepts about which they were learning and for this reason, a number of themes relating to students’ opportunity to experience, emerged from the data. Students spoke about the pace and progression of the course, continuity of past experiences, the importance of feedback, the difference between their expectations of the course and their experience in it, as well as a number of experiences that were beneficial or detrimental to their learning in the course. Of these themes, students perception of the progression of the course as well as the interplay of expectation and experience emerged as the most influential on the student learning experience. When discussing the progression of the course, participants’ perceptions were made regarding the structure of the curriculum, not on their understanding of the course material as was discussed previously. These ideas will be discussed in detail below. Statements relating to the other themes are listed in Appendix F.

**Advancement and progression of learning experience.** While discussing their experience, participants made reference to the speed at which course content was covered, the depth of reflection that occurred within the class, and the difficulty of the course material. As was observed in the emergent themes of the prior section, the perceptions of students varied. Each of the themes is discussed below.

**Progression of course content.** Students’ perception of the progression in course content or theoretical material presented varied greatly. Thomas, for example, felt that the course advanced slowly.

Slow. I thought it was a slow progression and that is because we received… a chart identifying strength-based training – here it is, this is what you do, reps/sets, this is what
you do, this is the scheme, hypertrophy, endurance. You know? We got it in the first three weeks and then I received five more. By the end of the course I received five more of these same charts from my assignments. I already have that information; I don’t need five more charts… really reiterating a lot of the information.

Isaiah agreed, “It didn’t feel like we were doing the amount of course work as other courses even though we had the same amount of class work (e.g. assignments).” Diego, on the other hand, stated:

I think it was good. I think it got slower towards the end because a lot of stuff overlapped and it could have been condensed down and emphasized over the course of a week instead of over the course of three weeks.

Hector shared a similar view, “For the first half of the course, I found it pretty well-paced, but in the last half that is when… it felt like the things we were doing were the same everyday.”

This view of the course contradicts the perception of other participants. Heidi for example, commented, “I think it was pretty well spaced out, there were a couple times when some of the workshops were heavier towards the end (of the semester).” Likewise, Tonya said, “There was progression, it got a little difficult in the end. It was like we were tying everything together.”

Other students noted that although they did not think the course content progressed, the ideas presented in each class did build on those of the previous class. Lara stated, “The pace overall I thought was it was good. They (each class) kind of interacted with one another and we would use the things we learned in the previous workshop for the new ones (classes).”

Students’ perception of the course progression also appeared to influence feelings and behaviours in the class, which marks an intersection of this tenet, tenet two – learning is grounded in experience, and tenet four – learning is a holistic process. When explaining the influence of the pace of the course on her learning, Tessa shared, “We were just there to be there… we were just kind of waiting around… I feel like our attention spans kind of started to go a bit for a couple of those (classes).” Diego expressed the same view when he commented, “Because there was so much repetition of the same principles and theories being hammered in
that it sort of… makes you want to draw away because it isn’t interesting anymore.” Data suggests that when students perceived the course progression to be moving slowly, their experience in the course suffered, which consequently influenced behaviour (e.g. “drawing away”, “attention spans going”) and in turn impeded the learning process.

Advancement in class difficulty. In general, most students did not feel that there was a progression in the difficulty of the course, but as much of the previous explanation, this varied between students. Isaiah stated, “We learned a lot of different concepts, but they were all kind of like learning [on] the same level. It wasn’t so much that you were progressing towards you were just… going from one topic to another.” On the other hand, Lara shared, “We started with more basic stuff and then worked our way up.” This is in direct contradiction to Diego’s comment, “No I felt it got easier.” Noah highlighted the variability in student perception when he shared, “Personally, no I didn’t at all (think it progressed in difficulty). I did see other people start to struggle… but for me it didn’t feel that difficult.”

Progression in depth of reflection occurring in class. As will be described during the discussion of tenet four – the necessity of integrating all approaches to learning (Kolb, 1984) – students perceived reflection to be a large contributor to learning within the practice-based course. When considering the depth of reflection occurring within the class discussion, Noah recalled, “They (the reflection questions) started getting a lot more specific… so the answers you needed to provide were more specific and tailored to whatever situation that was at hand.” Hector, on the other hand, commented that “they (the reflection questions) were pretty consistent” and Ella shared, “It (the reflection) wasn’t really difficult. I felt there was some that didn’t have to do with the things we did in class but that kind of helped me apply it to outside of [class].”

Expectation versus experience. There is a well-known phrase written by German philosopher, Georg Wilhelm Friedrich Hegel that states, “any experience that does not violate expectation is not worthy of the name experience”. Kolb (1984) argues that it is amongst this interplay of expectation and experience that learning occurs. Based on the ideas emerging from the data collected, the truth of this argument largely depends on whether or not the experience exceeds or falls short of the students’ expectations.
Experience surpassing expectation. Given the novelty of this type of class, many students expressed their excitement and curiosity about learning in this new environment. Heidi, however, stated, “To be honest, I wasn’t interested (in the course before taking it) because the whole practical stuff doesn’t come very easy to me so I was kind of dreading it a little bit.” After experiencing the first semester of the practice-based curriculum, her opinion changed. During the interview she recalled, “But after figuring it out, after first semester [when] I had Raoul as my instructor and he was really good, ... I kind of liked it more [and] I was more interested in it.” Later in the interview she went on to say, “I liked it (the second semester course) from the beginning” and she noted that liking the material had a positive influence on her learning. Heidi’s comment also draws attention to how her experience in the course was influenced by her feelings, thoughts and perceptions of the course (tenet four) and how her interactions with the instructor (tenet five) played a large role in shaping her learning experience.

Experience falling short of expectation. As indicated previously, the majority of the students interviewed were looking forward to this new method of instruction. When the experience of the course did not live up to what they were envisioning participants reported a decrease in enjoyment, interest, and learning. Diego commented, “That is the thing, you go in all excited but by the end after you are just doing the same thing over and over again, it gets boring and I’m glad to be done this.” Thomas shared the same view when he stated, “So once I started understanding how the daily set up would go, I was unexcited for the class and I was frustrated that it wasn’t fun so I [was] less invested in learning.” Tessa shared similar views on how the set up of the class changed her view of the course:

As the course went on it became a bit more obvious about some of the things that I didn’t enjoy too much (the set up of how things were marked and the attitude of the instructor towards the students). So as the course went on it kind of got hard to stay motivated.

Again, these students’ comments highlight the interrelated nature of experiences in the class, feelings, thoughts, and perceptions of the student (tenet three) and interaction occurring within the class (tenet five).
Tenet three – Learning requires the use of all four approaches. According to Kolb (1984), learning is a process that occurs through the resolution of a conflict among the four modes of learning. For this reason, in order to be effective, learners need to be skilled in each of the four approaches to learning – concrete experience, reflective observation, abstract conceptualization, and active experimentation (Kolb, 1984). Accordingly, learning environments structured to align with the tenets of ELT must provide students with the opportunity to practice and refine each of these skills (Stirling et al., 2016). When discussing their learning within the practice-based course, participants reflected on opportunities they had to experience, think about, reflect on, and apply the course material. In addition, students discussed the alignment of the class structure with what they perceived to be their learning style. Each idea is explored in detail.

Opportunity to experience, think about, apply, and reflect. When talking about their learning experiences, the participants discussed the learning opportunities that were most memorable and beneficial. Once again, perceptions varied. This was likely the result of differing learning preferences, as was suggested by a number of participants, and the varying teaching styles used by instructors. Student opportunities to experience, think about, apply, and reflect are described below.

To experience – Concrete experience. Given the nature of the course, it is not surprising that nearly all participants discussed opportunities they had within in the class to experience the learning material. The perceived benefit of experiencing the material differed amongst students in the study and in regards to learning topic. Sheryl explained how experiencing the material was beneficial because this was the only opportunity she had to feel what she was learning:

I think the activities helped me more because … in [other] classes and tutorials you kind of discuss with friends anyways and the activities… among all the courses, this course is the only opportunity for us to actually do what we learn. So yeah, I think we should put more time into that.

Likewise, Ella found the opportunity to experience beneficial, she explained how having experienced the activity assisted with her memory of the content:
You can kind of reflect back on it. So during the exam, I would sit there and act out the activity and I would be like *oh this is like this activity that we did*, so I would know what it was.

Heidi explained that hands-on or experiential learning is not her preferred method of acquiring knowledge, yet she still viewed opportunities in the course to experience as beneficial, she shared, “I guess overall I just think that even if it is challenging for me, which it was, I still see it as beneficial.” Heidi also noted that due to injury she was sometimes unable to complete the experiential activities in class and that missing out on this component did in fact have an influence on her learning experience.

Second semester I thought it was not worth it to do it (the activities) and I think sometimes that did take away [from my learning]. Like I said before, I like being able to see the results and the difference so not being able to do it… did take away from [my learning]. (Heidi)

Other participants believed that although the ‘hands-on’ aspect of the course was fun and beneficial, it might not be necessary for their learning. Noah, for example, shared:

Well, the hands-on really helps. I personally don’t need it as much as other people would… If I listen to it (the lesson) and I understand it that way I am usually fine, if I don’t understand then maybe one demonstration is all I need and then I’ll be okay.

Similarly, Hector explained, “I would say sometimes it (experiencing) was but sometimes it wasn’t. For example, the program design part, you can teach how to design a program without having to go through the program itself.”

Thomas’ perception of the benefit of experiencing the material provides an example of how this tenet – *the importance and necessity of all approaches to learning* – is influenced by tenet four – *the holistic nature of learning*. He stated, “Definitely I think the doing would have been more beneficial if it had of been fun but because of that (not being fun), discussion was definitely better.” Thomas’ perception of and feelings towards the experiential activities (tenet four) influenced his approach to learning (tenet three) and possibly the extent to which he learned given the necessity of utilizing all four approaches within the ELT framework.
To think about – Abstract conceptualization. Participants were much less likely to discuss opportunities within the class to think about or integrate their observations into new ideas. Noah shared:

I guess it was the having the printouts. Yeah that actually really helped because … I have a long commute from where I live so often I would open it while I was on the train or something so I was able to go through that before I got to class so by the time I got to class, I already knew what I was getting into.

Noah is suggesting that by giving himself the opportunity to think about concepts on his own time prior to the class he was better able to learn in the class. Sheryl shared a similar approach when she described:

Before every lecture I try to go through the notes … and ask myself questions, like what would the instructor ask? to prepare for this lecture, to prepare me to answer his questions and that really … helps because sometimes I did [think] about his questions and I [could] answer it and that actually felt good.

Sheryl described how she would think about the course content and prepare for class, however; again, this was a self-initiated action that occurred outside the classroom. Although students discussed opportunities within the class to reflect on and think about the material, this occurred in their reflection of the course material (discussed below) and no students described opportunities to generate new ideas.

Application – Active experimentation. When talking about opportunities to apply concepts within the course, participants discussed the application questions on their assignments or in their class work. Ella described:

The individual assignments were more like let’s review what we did in classes and apply it to other things, where the group assignments were, we did this activity in class and in a group, now take your groups and answer questions about how this applies to what … you did and to other people. So we would have this person, [for example], a surfer, how does this activity apply to them?
She went on to explain, “Yeah, that was really good because … as I said before, not everyone does the same activity, not everyone has the same background so being able to apply it to a different idea really helped.”

Heidi, on the other hand, perceived the application as more difficult and she explains how this course allowed her to develop her active experimentation skills. She explained:

I am a very memory theory person, I like writing things down… so the practical stuff actually comes harder for me. So even though I found this course challenging first semester, I kind of… figured it out second semester. So I like the challenge of it… actually being able to apply what you are learning.

When asked about having the opportunity to apply his knowledge within the course, Diego answered, “No because of time constraints.” He continued,

So we would get to a certain point because [of the way] it was structured, you would have the instruction with your instructor then you would do the practical stuff and … the very end was left for program design and actually applying it to other students in the class. Because of time constraints and things taking longer than I think [the course developer] expected them to take, it was often times that we were not doing the program design [or applying it to other peers], but at the same time, it wasn’t a bad thing because after four weeks of program design, whether intentionally or not, it is not something you want to be doing again and again.

Diego’s description of his opportunity to apply the knowledge learned in class provides another example of the integrative nature of experiential learning. His opportunity to apply course material was influenced by the structure of the class and the instructor’s ability to manage time, which is an example of the themes to be discussed with tenet five – learning occurs through interactions with the environment. In addition, his belief that missing out on this opportunity may not have been such a bad thing relates to his feelings and perceptions of the course, which aligns with tenet four – learning as a holistic process.
Importance of reflection – Reflective observation. Participants discussed the opportunity to reflect on the course material each class and it appears that this was integrated into the end of every class in the form of reflection questions. Ella explained:

We had reflections at the end so there would be reflection questions and we would do them after we would do all the exercises and I think those were helpful because it cleared up any questions I had relating to the stuff we did.

Isaiah stressed the benefit of reflection when he shared:

I think just … doing the reflection at the end, even though they were kind of a pain, you just wanted to go (leave class) but you had to write it out, you had to actually think about it and write it out, that really helped because it is kind of like every day you are reviewing what you did which helps you remember over the long term.

Tessa’s comment on her opportunity to reflect on the learning material in the class highlighted the intersection of this tenet with tenet five – learning occurs through interactions with the environment. She shared:

Well I guess it depends on each of the classes, but for our class we would … break down each section of the workshop. So we would [do] part A and then we would come back and discuss, and then do part B and then discuss, and then we would have one big discussion at the end.

Tessa has acknowledged that each of the classes may have been set up and administered differently due to the preferences of the instructor.

Likewise, Diego shared:

Personally, my class didn’t end up doing any reflections throughout the year at all. It was more kind of go look at this on your own time and because you are not provided with the answers to those questions, it was hard to come up with a clear-cut answer unless you proactively went and asked for those answers.
Not only has Diego shared that he did not have the opportunity to reflect within the class, he also suggests that it was difficult to fully understand the material unless students took the initiative to talk to the instructor outside of class. The idea of what Diego terms ‘clear cut answers’ will be discussed in further detail when discussing the role of the instructor in tenet five.

**Alignment of learning style with course.** Based on the data collected from participants, it would appear that this course was largely structured around providing students with the opportunity to experience the course content. When discussing their learning in the course, some students believed that this method of instruction helped to facilitate their learning, some failed to see the value for their learning preferences, and others had mixed views. Each view is discussed below.

**Clear alignment.** The majority of students interviewed felt strongly about the alignment of the course with their learning style. Lara shared:

> For me, I absolutely love that (experiencing the material in activities), I thrived off of it because it puts you through the experience and again, everyone is different, but I loved learning about it and then putting it to work… I am a person who likes to do stuff.

Tessa agreed, she said, “I think it was aligned because just being able to do the actions puts it in my brain … it helps me remember.”

**No alignment.** Some students did not feel like this course structure helped them learn. Thomas shared, “I don’t think it aligns very well because … I would rather understand the concept so that I could apply it in my own specific way to a scenario instead of … [there being very specific answers].” Isaiah had a similar experience. He commented, “It was definitely an interesting experience and it is a good way of learning for some people but I think [for] my learning style particularly, I could sit in a lecture for a long time.”

Heidi also shared that she did not believe that the course aligned with her preferred approach to learning, however, she shared:
I decided to change my way of studying… I [knew] from first semester that just memorizing wasn’t going to cut it because I didn’t do very well, which is why for the second semester I thought I would change it up.”

Although Heidi did not believe that the course aligned with her preferred approach to learning, she modified her approach in order to achieve success in the course.

*Some alignment.* When Sheryl was describing her approach to learning she shared:

I think it is more about the order. They kind of [gave] me the order of how my learning method should be. So first you have your notes…, and then you talk about it …, and then we actually do it. So it kind of plans out for me.”

Sheryl is suggesting that she uses the layout of the class to modify her approach to learning.

**Tenet four – Learning is a holistic process.** According to ELT, learning is not just the result of thinking, but rather is a holistic process that is influenced by a learner’s thoughts, feelings, perceptions, and behaviour as he or she experiences and adapts to the world (Kolb & Kolb, 2005). As such, when reflecting on their experience in the course, students discussed how their thoughts, feelings, and behaviours influenced their learning within the course. Motivation and engagement also emerged as significant influences on learning within the practice-based course. Each of these ideas and the themes that emerged are discussed.

**Feelings.** A number of feelings were discussed throughout the interviews. Students’ description of their feelings within the classroom ranged from being excited and involved to feeling judged, bored, or frustrated. Participants also discussed how their feelings in and about the course influenced their learning. Students’ positive and negative feelings and the impact of these feelings on their learning are discussed below.

**Positive feelings.** A number of participants had very positive feelings towards the course and expressed how these feelings had a favourable influence on their learning. Tonya commented, “It is just that I was very positive about the course, so it made me want to learn more.” Hector’s explanation of his feelings towards the course gave some explanation as to why he enjoyed it. “I … had a bunch of … friends in my class,” he remarked, “So I kind of looked
forward to it because of that, but the content and the instructor and things like that I was just neutral about.” Hector’s comment highlights the relationship between this tenet and tenet five – *learning occurs through interactions within the environment*. Just as Hector looked forward to the class because he enjoyed being with his friends, Heidi explained, “I like it all... I have friends in there (in the class) and I was one of the people answering questions... so I was comfortable [and] confident.” Heidi’s statement exemplifies the interaction between tenet four – *learning is a holistic process* and five – *learning occurs through interactions in the environment*, and it also highlights the holistic nature of the learning experience, Heidi’s feelings of the course (e.g. “liking it”) influenced her behaviour in the course (e.g. answering the questions).

**Negative feelings.** Although participants shared a number of positive feelings towards and about the course, there were also a number of negative feelings expressed. Some of the negative feelings discussed were experienced in the Fall practice-based, prerequisite course. This course was structured in a similar manner and many students were in the same learning areas and with the same instructors in both the first and second semester courses. Although these feelings were not experienced in the course being investigated in this thesis, the feelings described influenced students’ perceptions and expectations of the second semester course. In addition, the insight provided is invaluable to understanding the unique aspects of a practice-based course and as such, these findings are presented.

Both Ella and Noah discussed feeling self-conscious at the beginning of the year when they didn’t know the other students as well.

At the beginning, I was really self-conscious. I felt like during the first semester I was more worried about what other people would think … rather than focusing on what we were learning… then when we all got really friendly with each other it was like *oh I can focus on what I actually need to focus on.* (Ella)

Noah expressed similar views when he shared,

I feel like… if you didn’t have anyone you knew in the class you were kind of at a disadvantage at first because it was a lot of partner and group work, and of course at first everyone is scared to talk to each other so the first few classes… you were more worried
about who you partnered with than actually learning the material and I felt that was a problem at first. But… once everyone got to know each other it is perfectly fine. Learning gets easy.

Both statements again draw attention to the influence of interactions within the practice-based learning environment on student feelings and consequently student learning. This will be further discussed in the next section. The practice-based learning environment requires students to interact with each other in small and large groups on a daily basis and students believed that being comfortable with each other was very important to their learning.

Thomas’ explanation of his feeling of boredom within the class provides an example of how students’ feelings in the class influenced their behaviour and again provides evidence for the holistic nature of the learning process. He stated the following about the influence of boredom on his learning:

So detrimental. Boring, I’m not thinking about [the learning material]. I’m like I want to leave… makes me learn less because either I didn’t understand the information very well because I wasn’t listening very well and then I have a hard time adapting it to whatever the drill was.

Thomas’ feelings experienced during the class (e.g. boredom) resulted in a change in his behaviour (e.g. not listening very well) and had a negative influence on his learning.

**Behaviour in the classroom.** In each interview, participants were asked how they perceived themselves as a student in the class. From these discussion, a number of themes emerged. First, the descriptions provided varied among participants. Second, despite describing different behaviours everyone felt that they were acting in a way that would best facilitate their own learning and the learning of others. These ideas are described in detail below.

**Behaviour.** Most participants described themselves as active and involved in the class activities, although some noted that it was sometimes hard to be active so early in the morning. “I feel like I was very involved,” described Isaiah. Sheryl noted, “I tried to participate… but sometimes [I was] just really tired because it is nine in the morning.” Noah described how his behaviour was influenced by the structure of the class. “Well I don’t like getting in trouble,” he
said, “So I was quiet when I was supposed to be quiet and I was active when I needed to be active. I just… went along with the guidelines.” Tonya shared, “When I think of me in [the practice-based course]… I am very excited and enthusiastic to do everything.”

Enhancing the learning environment for self and others. The participants described the way in which they viewed themselves in the classroom, and how their behaviour and attitude assisted their own learning and the learning of others. Below are some examples of how students perceived their behaviour to be beneficial in the classroom.

Noah described himself as “laid back” and “patient” and explained:

If I was [working] with someone who didn’t really understand, I would be able to get it through to them, even if they weren’t getting it, I would still be able to at least try, if not I could get the instructor to [explain] it. Just being patient I wouldn’t have to worry about rushing or anything like that or if I was concerned about not understanding something, I would be patient enough to wait until after class to talk to the instructor about it or to go home and do more research or read more about it.

Diego explained that he viewed himself as a leader in the class and described situations in which he would try to help other students learn and become involved. “I think I have great leadership skills [and] I think because of that it (learning) is a lot easier,” he commented. He continued:

But it also put you in a situation where you are trying to get something from the people in the class, but they weren’t necessarily responding in the same way or with the same level of commitment and it’s like you see someone on their own and it’s like come join our group.

Diego described using his leadership skills to include other students that may not have felt as welcome or involved in the class.

Similarly, Tessa described herself as “encouraging”. She described how this benefited herself and other in the environment:
I like to encourage my classmates… when we are doing the activities. [When I did this], students were also the same way so you… help build each other’s confidence… when you are doing the activities. It made it more easygoing just because if you mess up on something or if you can’t do a movement it didn’t really feel too pressured to actually be able to do the activities because people were pretty understanding.

The statements from these participants emphasize the potential relationship between students’ behaviour in the class (tenet four) and the perceived interactions that occurred between students in the learning environment (tenet five), and the importance of this relationship in practice-based learning. The importance of such interactions will be discussed in the subsequent section.

**Perceptions.** Students shared a wide variety of perceptions that they held about the learning environment and other students that influenced their experience in the course. Some students loved the course and were hesitant to provide critical feedback, where as others were more willing to provide criticism and to describe areas that could be improved. However, no matter how they viewed the course, every student perceived themselves as active and involved, and a positive contributor to the classroom environment. Participants also acknowledged that the entire class did not share their behaviours in or feelings towards the course. These ideas are discussed below.

**View of course and influence on learning.** Participants’ general impressions of the course varied. Heidi, for example, commented:

I thought that this (the course) is great because you know how they always say university, it is always theoretical-based [and] you are just going to sit in a lecture? But then for something like [the practice-based class] it is like this is great!

Lara also shared that she thoroughly enjoyed the class and explained that because of this, it made her want to go to class. She also provided some perspective on the influence of not liking or enjoying a course. “Simply not liking a class,” she explained:
It discourages you, first of all, from going to class and from participating in it, and I think having a thorough enjoyment and enjoying the people who are in the class motivates you to do better. Motivates you to go that extra mile.

Lara has not only discussed how her interest and enjoyment influenced her perception of the course, she has also highlighted the connection between feelings, perceptions, and the importance of motivation, which also emerged as a central theme for this tenet. Isaiah, on the other hand, stated, “Overall, it wasn’t a great experience compared to my other courses.”

**Involved and active when others may not be.** As indicated in the examples above, participants described themselves as active and involved in the class. They also shared that others in the class may not have behaved in a similar way. Heidi explained, “I... answer questions a lot. There was a row of us in the front, we would be the ones [to answer questions, and] there was a row in the back they wouldn’t talk as much.” Similarly, Tonya described herself as active and excited in the class and also noted, “There was a lot of people that I feel didn’t want to be there... to be honest I felt like a lot of people didn’t like it.”

In addition, Lara, who described herself as loud, spontaneous, and a ball of energy within the class, shared, “They (other students) weren’t as energetic. Sometimes the instructor would be discussing something and they wouldn’t necessarily be paying attention or they wouldn’t be interested in what you had to say.” She described body language as a good indicator of other student’s commitment and interest in the class when she explained:

Slouching as opposed to being upright or looking off into the distance instead of being fully aware of being fully there. Also just people’s tardiness just being on time and punctual… I mean… obviously sometimes you can’t help it, sometimes you are just late but when it becomes a constant habit I feel like it plays a role in your interests and how much you care about the class.

Sheryl’s perception was also that other students in the class thought less of the class than she did. She explained, “I noticed some students [were] not actually into [the] activities, they [thought] it [was] useless… they just can’t foresee what we learn here can actually apply to what [we] will do.” Similarly, Tonya shared, “This is… a great thing [and] I feel like they (other
students) wouldn’t realize what they have until… no one knows what we are getting now so I [think we] should appreciate it and be engaged and learn it now.”

**Importance of motivation and engagement.** The influential nature of being motivated to learn and being engaged in the material was widely expressed by the participants. The data suggested that students believe that motivation and engagement are essential to learning. Students also discussed the relationship between motivation, engagement, liking the course, and learning. Each theme is discussed below.

**Motivation.** Participants were very clear on the necessity of being motivated to learn. Whether they enjoyed the class or not, all students expressed the need to be motivated if they wanted to learn and be successful. Isaiah, who described the class as “not a great experience”, was very straightforward when he explained, “Well, I think that because I am motivated I was able to learn more than someone who wasn’t really engaged or paying attention.” He continued, “Basically you have to be motivated if you are going to learn anything, that’s it.” Sheryl, who enjoyed the class, also commented, “If none of us are motivated to do it then we won’t learn anything.”

Participants explained that being motivated positively influenced their behaviour in the class. Sheryl shared, “I think it (being motivated) actually encourages me to answer more questions and think about it.” Similarly, Diego explained the detriment of not being motivated, “I think personally for me, it (motivation) is really important. If I’m kind of zoned out I don’t really want to be part of the group. I just want to sit there.”

**Engagement.** Just as motivation emerged as an important contributor to learning and the student experience, participants also discussed the importance of being engaged and participating in the class. Students also discussed the relationship between engagement, liking the course material and learning. When discussing engagement, Diego shared, “I think it is very pivotal. If you are not engaged and enjoying the material that you are learning you are less likely to take a whole lot from it.” Likewise Lara explained, “Simply not liking a class, it discourages you first of all from going to class and from participating in it.”
On the other hand, Noah explained that liking the material and having too much fun could be detrimental to student engagement. He described:

I feel like you take more from the class because you are interested… but also… I guess I kind of noticed that other people, once they got comfortable, they kind of slacked off a little just because it was kind of a fun class.

As explained by the participants, the practice-based course is an opportunity for them to experience the learning material and as a result, their engagement in the activities was crucial to their learning.

**Intersection of motivation, engagement, interest, and learning.** When discussing the role of motivation and engagement, participants described the cyclical nature of interest, motivation, engagement, and learning. Students explained that liking the material motivated them to become engaged and in turn they learned more from the course than if they had not been motivated, engaged, and/or interested. Hector observed, “I think it had a pretty good influence because if I am engaged then I have more of a motivation to learn and more of a motivation to get involved and ask questions (i.e. be engaged).” Similarly, Ella explained that when she likes a course she feels more motivated and enjoys studying (being engaged). She also suggested that perceiving a connection between the material and her goals was beneficial. She explained:

I guess it seemed to me that it was a lot more personal training-based and I like that… and I wanted to understand it more because it could help me later on and stuff so that made me enjoy it more.

Heidi and Tonya also shared similar views. Participants explained that motivation lead to engagement and that an individual’s engagement in the material increased motivation and subsequently encouraged more engagement and interest in learning the material.

**Tenet five – Learning occurs through interactions with the environment.** The fifth tenet of ELT suggests that learning occurs through interactions between an individual and his or her environment. Although Kolb (1984) is not explicit in specific aspects of the environment with which an individual will interact during the process of learning, the three most influential components that emerged from my data include the instructor, other students, and the space or
atmosphere of the class. Additional themes relating to the set up of an individual class, interactions with other courses, and specific activities were also evident but less relevant to the overall student experience. For this reason, these ideas are not discussed below, but provided in Appendix F.

**Role of instructor.** Every participant discussed the important role of the instructor in creating a positive learning experience. It is important to note that participants came from one of ten classes each led by a different instructor. This, along with each student’s unique background and preference for learning, resulted in differing perceptions of the influence of the instructor on student learning. Students described specific characteristics that influenced their learning and provided specific examples of positive or negative interactions involving themselves and their instructor.

**Important role of the instructor.** Data revealed that participants perceived the instructor to play a very large role in their learning experience and gave a description of specific characteristics that were beneficial or detrimental to their learning. “I think your instructor definitely has a huge influence on how you feel about the course,” said Isaiah. Lara provided a thorough description of why she felt she had a good instructor:

The instructor, he was really great. He made the class enjoyable I think because there was one time when we went to a different instructor because he (my instructor) was away and I didn’t enjoy it as much as [I did] with my instructor… he (my instructor) knew what he was talking about, first and foremost… he showed it and he was also very enthusiastic all the time. He was always full of energy and this transfers, it is like a domino effect. If someone is very energetic, especially him with the position as leader… he really sparked it onto everyone else and it made the class more enjoyable.

Participants also provided specific actions or characteristics of the instructor that they found to be beneficial. Hector, for example, explained, “Our instructor was pretty welcoming and nice.” Noah provided an example of how his instructor made the environment feel safe for learning. He shared:
[My instructor] wasn’t afraid to say when [he] didn’t know [something] 100% and [he] would actually go and ask other instructors… I guess it was like a subtle way of telling us that if you need help, just ask for it. It was a good influence instead of having to figure things out on your own and doing something wrong.

In addition, participants found the attitude of the instructor to play a large role in their learning experience. “When she (my instructor) was friendlier,” Ella commented, “I kind of wanted to be there more… if she was friendly I was like oh I am excited to go rather than be like oh I don’t want to be yelled at or be really awkward and shy because I feel like she is judging me.” This highlights the relationship between students’ interactions in the classroom (tenet five) and their feelings and behaviour in the class (tenet four).

Examples of interactions. Students gave specific examples of positive and negative experiences that influenced their learning experience and feelings in and towards the class.

Positive. Students described one-on-one instructor-student interactions, group interactions, and the collection of student feedback as positive interactions with their instructor in the learning environment. Lara explained, “I think the… one on one instructor with student… helped the most. Sometimes I wasn’t very knowledgeable about regular fitness and exercise stuff and he (my instructor) helped a lot.”

Similarly, Tonya explained how her instructor assisted her learning in the group setting:

I think that what really helped was that my instructor would repeat every single time. Even if you did or did not hear it, she would just repeat every time because we are in such a big place and there are fans.

She also described:

She explained things thoroughly and she also would write down answers on the board and she would actually tell us, if you want to take a picture I will leave this up here… that would help because sometimes we can’t catch everything.

Tonya also described how her instructor would sometimes ask students to provide their written feedback about the course and explained:
That was… great. We would have a say. It is not just like we are following this one thing and we have no say about it… it definitely helped because any problem… was addressed… and it felt that we could all talk about it and [that]… our experience actually mattered in the course.

This example also highlights the importance of student autonomy, an idea that also emerged in relation to tenet six – *knowledge is created through learning*. Interactions that occurred between students and the instructor had the potential to evoke feelings of autonomy in the classroom, which again highlights the interrelated nature of ELT as well as the intersection of tenet five and six.

*Negative.* Along with the positive experiences that were shared, a number of negative experiences were also discussed. The most prominent ideas expressed related to favouritism in the class and lack of feedback as was described as the absence of ‘clear cut answers’ in tenet three. Tessa and Ella described their experience of favouritism in the practice-based course and went on to explain the resulting feelings and the impact that perceived preferential treatment had on their learning in the classroom. Tessa shared,

I wasn’t a favourite, but I did see it in the class… Just things like you guys need to be more like these people… these people did it awesome today, you guys need to be more like them, which is encouraging to them… but when it is every single class it gets kind of like, I am not adding up to them… it made me just care less about it I guess, it made me feel like… I can’t be like that, it is just not my personality, so it is hard because… I just can’t be like them. I feel like I would try to be more involved but some days it would just feel like… what is the point of trying to be something I am not… so some days I wasn’t paying attention as much and then some days I kind of forced myself to pay attention.

Tessa also explained how instructor favouritism played a role in the marks that students received in the class. “The participation,” she explained:

That part varied between students, a lot of them (other students) found that… the instructor, if they didn’t like them, they didn’t have to give them the marks if they didn’t want to and it is hard to question those marks after they have been recorded.
Ella described experiencing favouritism, “She (my instructor) had a lot of favouritism towards a few people and for the rest of us it seemed like she didn’t really care what we did.” Favouritism in the class not only made students withdraw from the learning material (tenet four), it also caused students to feel unwelcome and unappreciated in the class.

Along with favouritism, participants described the absence of feedback as a lack of interaction with the instructor in the classroom and a negative influence on their learning. Thomas gave a clear description when he shared, “When I presented it (my workout scheme), it was not ideal, I would not receive praise for it I guess and then that deterred me to speak up again.” Thomas’ interaction (or lack of interaction) with the instructor influenced his motivation and behaviour in the class (tenet four). He continued, “No, I didn’t (receive feedback)! I presented mine and then the rest of the group presented theirs and we would not break down what was wrong with mine.” Once again, it is clear that interactions with the instructor had a large influence on the students’ feelings and behaviour in the class, thus highlighting the intersection of tenet four – learning is a holistic process and tenet five – learning occurs through interactions with the environment.

Tessa also shared:

My instructor would… just ask for everyone’s input then say you’re not wrong but if we could think of it this way and [that] gave a very vague understanding… it was a little confusing to try to piece together different answers that could be right.

Tessa compared this to another instructor, “We had a substitute teacher [and]… he would ask us for our input and then… combine our answers and give us… the correct answers so it was kind of more useful.” She also shared, “We found ourselves studying from other people’s notes (from other classes) because their notes were clear and concise.” Some students felt that the inability of their instructor to give clear explanations had a negative influence on their experience because they would be required to either contact other students to develop an understanding of the material or to figure it out on their own.

**Working with others.** Participants discussed the opportunity to work with others on a daily basis as being a unique characteristic of the practice-based course. Students commented on
both the influence of connecting with others, and also noted some of the drawbacks associated with always working in groups. These ideas are discussed below.

**Connection with others.** The class size of the practical-based course is much smaller than that of most lecture-based courses, with each class having approximately twenty-five students. Due to the smaller class size, participants reported that they were able to get to know other students and that this made the class more comfortable and open for learning. Isaiah shared, “Because it is a small group you get to know each other pretty well.”

As a result of getting to know each other, students developed a sense of connection with their peers, which made them feel like they were a part of something greater than themselves and, as a result, students were motivated to work harder. This provides an example of the intersection of this tenet – *learning occurs through interactions in the environment* and tenet four – *learning is a holistic process*, because, as a result of positive interactions with other students in the environment, individuals were consequently more motivated to work hard (behaviour). Ella discussed the influence that connection with others had on her feelings in the course, she commented,

> It was a lot more friendly because when you are all in a classroom (lecture) you are… individualized, like *I am just going to take notes for myself*, but when you are forced to be in a group with a bunch of people, you are going to be friendly because you all have to help each other… It was really beneficial because it was a happier environment rather than we are all individual beings; we were all a group when we are working together.

Sheryl expanded on this idea when she explained the sense of belonging she felt when she felt connected to others in the classroom. She explained,

> We have some [classes] where the instructor would assign [our] groups… and that actually helps me to talk to students I don’t know well and... [getting] to know more students helps me to feel more included into the group and it helps me to actually learn. I guess it is more like a sense of belonging. I feel like I should be here (in the class), so I do my best here (in the class). But if I feel like I don’t belong to this group then why bother?
In addition, Diego explained how the sense of connection enhanced his learning and group work within the class when he shared:

I think that when you are with a group that… [was] a cohesive unit, I think it was very beneficial… [because when] you are comfortable working with them (other people)… you can ping off other people and get their opinions… and everyone [can] participate equally.

Likewise, Thomas shared:

When people did say hi to me before class, I definitely felt that the class was going to be a better one. So people’s openness definitely influenced my learning because when I felt like it was going to be a better class or I felt more open [and] then I often worked harder to present better ideas.

On the other hand, Lara explained that when she didn’t feel connected with others in the class it made the learning experience less enjoyable. She shared, “Sometimes we would have to work with people that didn’t necessarily like it (the activity)… they just weren’t interested and so that kind of made the class a little bit suckier… it is just a negative.” When asked how that influenced her learning, she continued:

Not my learning necessarily, but my mood and I think having a good mood in class effects how you are going to react when you are learning… I think I did feel a little more out of it and wanted to just leave as opposed to staying in the class.

*Potential limitation of working with others.* Although every participant discussed the benefit of having the opportunity to work with others, they also explained that sometimes, especially when they were forced to work with people they did not know well, working with others could be detrimental to their learning and their feelings within the classroom. While discussing the benefit of working with students he did not know well, Thomas shared:

At some points I think it fostered my learning but at other points [it] definitely deterred it because when two people were in a group together and they know each other quite well, they often seem less productive, and they often exclude the third person.
Likewise, Tonya described:

They (other students) knew to be polite to you obviously because you were a peer, but then… they would just go in their own little circle and talk about their own thing while I kind of just stood on the side and when they talked about their own thing, it would be completely off [topic] just their outside life or something.

Participants perceived that working in groups where students knew each other very well or were friends outside of the classroom, could lead to the exclusion of other students and impede learning within the classroom. Despite the potential detriment of students working with their friends, participants also explained their dislike of being assigned groups and having to work with students they did not know as well. Many shared that less discussion and, as a result, less learning occurred when students did not feel comfortable with the other students in their groups. Hector explained the impact of working with people he didn’t know well. “Sometimes it would be a bit awkward,” he shared, “We would just lightly brush over the stuff we needed to do… but with people that we do know and that we were friends with, we would be more inclined to discuss with each other.”

Thomas shared his perception on how this influenced his learning:

Having to meet new people every class, it… slowed the learning. If I knew people a little better I would be able to develop ideas a little bit more and I would have had better learning because [with] different people every class, you have that introductory period and you never got as much done.

Participants suggested that groups were often assigned for course assignments and expressed their belief in the detriment of working with people they did not know in situations in which they were being evaluated. Diego explained:

When we are working towards whatever grade [we] want to get, I think it’s kind of unfair that [we] are forced to work with people that you are not necessarily going to gel with, especially when it is going towards a mark.
Participants also remarked on the disadvantage of working in a group when one or more of the group members did not contribute equally to the workload. Heidi said, “If someone didn’t pull their weight, it is not individually based, you either go down as a group or you do well.” Heidi, Diego, and Sheryl expressed displeasure when they shared incidences when they were a part of a group that had members not contributing and, as a result, they were required them to complete the majority of the assignment.

*Space of the classroom.* In addition to interaction with the instructor and other students in the classroom, the atmosphere and space of the classroom was described as an influential aspect of the student learning experience. The atmosphere or ‘feeling’ of the class and the physical layout of the class are described below.

*Atmosphere of the class.* Participants’ view varied about the atmosphere of the classroom and its influence on learning. In general, most participants described feeling welcomed and accepted. Diego explained:

> I think it was good… it was accepting and open. We didn’t have any issues in our class personally and from what I saw, because I was up in the field house (where majority of the classes were held)... I didn’t see any issues with other classes.

Isaiah also explained how in this environment he participated more than in his other classes. He shared, “I would never put my hand up and talk in a lecture hall but when it is a small group, it is a lot easier. You are not as intimidated to talk.” Tessa added, “It made me more open. It helped me open up more and I know it helped a lot of other people open up. Just being comfortable is what it takes to… talk more.”

On the contrary, participants also expressed feeling a sense of pressure and stress in the class because they believed that answering questions was required to receive a good mark. Sheryl explained in detail:

> To be honest, [I was] kind of stressed out, not very stressed, but kind of because there were a few competitive students in my class and you would feel like they [would] try to answer all the questions in order to get that high leadership mark and the instructor would give them a high mark because they [participated] a lot in answering questions and they
are pretty good instructors themselves or coaches… many students weren’t happy about it because they thought she (one student answering a lot of questions) was being [bossy].  
(Sheryl)

When asked how this influenced her learning, Sheryl described, “It kind of [distracts] me because I’m always telling myself, *okay raise your hand and answer this question*, but you kind of forget what you want to say so the quality of your answer might be worse.” Tessa also explained, “It felt [like]… the marks gave a… different pressure and… I feel if things had been more open, like not everything was based on marks then people [and the environment]… wouldn’t feel as pressured.” The influence of marks and assessment in the course emerged more than any other idea within the data and will be discussed in detail following the sixth tenet of learning.

*Physical environment.* All practice-based classes were held in a gymnasium or sports area in the athletic center of the university. Participants described the uniqueness of an academic class being held in a physical activity setting. “It was definitely different than learning in a lecture style,” Isaiah noted, “I can’t even really put words to how it was a difference experience, but it definitely wasn’t the same as sitting in a lecture hall writing down notes.”

Participants shared that although the large and open areas could be loud and distracting, the large area allowed them to be louder and more active than in other classes. In the practice-based course, classes were held in a variety of different spaces in the athletic center. Some were held in isolated rooms, whereas some were held in a large, open three-court field house. Students found the large open space of the field house to be open and loud. Others enjoyed being able to see the other classes while they were learning, while some found this distracting especially if their class was required to share the area with another group.

“Being in a big open space [was] pretty nice,” shared Thomas. Likewise, Sheryl explained:

I think the space was pretty good because we had the whole court to ourselves. I know some students only had half courts which is less fortunate… because [with a full court]
you have more space to do stuff and people are more spread out so we don’t get
distracted by other students.

Heidi agreed, “Sometimes we were tight on space… and we would all be really cramped… but I
don’t think it really took away from the learning, that is just me being picky.”

Ella, who shared that she was in a much smaller room for the first part of the semester,
explained:

[The room] was a lot more isolated so it was only… my class, but then once we got into
the field house it was kind of like everyone else is there so you can see other ways, how
other classes are doing things… if [my] instructor wasn’t explaining something I would
peer over and see what they (other classes) were doing.

She also commented on the benefit of being in the isolated room:

But I also like being isolated in the [other room] because there wasn’t all the distraction
and we had a mirror there so you could watch what you were doing… being able to see
oh that’s what it looks like when I’m doing it correctly… it helped me learn and
remember.

Students also reported that they found the fans in the larger area to be distracting. Sheryl
explained:

The fans in the field house [are] kind of loud. I know a couple of students complained
[about] that and it is really hard to actually listen to what the instructor is saying,
especially if you are sitting very far away…. That kind of implies that the discussion only
benefits those that are sitting close to the instructor.

Sheryl has provided an example of how the physical environment of the class may have reduced
the number of students that benefitted from the class instruction.

In addition, participants reported that they were required to sit on the floor when taking
notes and listening to discussion. Some reported this to be uncomfortable and distracting.
Thomas shared:
Totally uncomfortable sitting on the floor. I am not super flexible and sitting cross-legged is the most awkward thing for me. It just hurts my knees and my back so that sucked. So either I [was] sprawled out [and] not writing and following because my hands are supporting me or I am hunched over and uncomfortable, and then I don’t want to be there.

Isaiah also explained:

Sometimes when I went back to study them (the class worksheets)... I wasn’t really sure what I was saying because I don’t have very neat penmanship so writing on the floor... I wish I had of been more prepared and brought a notebook where I could have [written] it there and that would have helped.

Overall, students enjoyed the large area of the practice-based class and at times found the public, exercise area to be loud and somewhat distracting. Participants noted the influence of the physical environment had on their learning and negative feelings were expressed about being required to sit on the floor for class instruction.

Tenet six – Knowledge is created through learning. According to Kolb (1984) in order to understand learning, the process by which knowledge is created must also be understood. In relation to the creation and understanding of course knowledge, two central themes emerged which included: the influence of repetition in the learning experience and the opportunity for student autonomy. Each theme is discussed below.

Repetition. Six of the students remarked that the course became repetitive and that this influenced their feelings towards the class, their behaviour in the class, and their understanding of the material. Each influence is discussed.

Influence on feelings and behaviour. Participants that found the course material repetitive suggested that this created feelings of boredom and lack of purpose in the class. In some instances, students shared that these feelings could influence the amount of work that was completed within the class. Tessa shared:
There were a couple of things that were a bit repetitive that I feel we didn’t need to spend a whole class on… I feel some days, the energy was down and you can kind of sense it because everyone kind of feeds off each other so if most of the class is feeling tired that day then not too much will get done.

Diego also shared:

I just found it got very repetitive… especially when it came to the program design part when we were using our peers or stuff that they created… Everyone was doing the same thing because there wasn’t a lot of instruction on other methods of how to do things, which resulted in a lack of enthusiasm.

When asked how this influenced his learning, Diego answered, “I think as the year progressed it became more of a burden that it was a fun thing to do. It was a lot of just sitting around listening to the same thing being repeated over and over again.” He also commented that a lack of enthusiasm or motivation was detrimental to his learning in the course.

_Influence on knowledge acquisition._ For some participants, the perceived repetitive nature of the course appeared to be extremely agitating and frustrating. These feelings in turn influenced the amount of information they were able to learn and take from the course, as well as their perception of the value of the knowledge. As described in tenet two, Thomas felt the course progressed slowly. “Like I was saying before,” he shared, “We received pretty redundant information with the charts.” Thomas’ perception of the importance or necessity of the course information was also echoed by Diego and Hector who both referred to the information and activities, respectively as often being redundant in nature.

Isaiah, who also found the course to be repetitive, had a more positive outlook on the influence of the repetition. “I think when you repeatedly go over some of the same concepts, you are bound to get them by the end of the course,” he explained, “Studying wasn’t as challenging for this course because you had to study the different parts but you already knew the main fundamentals so you could apply them to everything which was good.”

_Autonomy in the class._ According to ELT, students should be given an opportunity to take responsibility for their own learning within the classroom (Stirling et al., 2016).
Participants’ perception of the amount of choice they had in their learning outcomes, activities, or assessment varied. Students also discussed their expectation (or lack of expectation) to have choice in the classroom, and the potential influence of having choice on their feelings and learning. These topics are discussed below.

Perception of choice in the class. Participants’ perceptions of the amount of choice they had within the class varied and were at times influenced by the actions of the instructors. Students shared that although they did not have an influence on the learning outcomes of the course or in the way that they were assessed, some students commented that they had choice in the activities that were completed in the class. In terms of learning outcomes, Tessa shared:

I feel like it was pretty set in stone for the most part, we were able to give feedback to the instructor about what we liked and didn’t like as the course went on… [but] as a class we didn’t have too many complaints.

Diego expressed a slightly different perspective, “I felt like it (the course) was very one-sided in terms of their learning outcomes… they did put in a part where… [they used] different learning style, but I felt like there wasn’t enough emphasis on that.” Hector explained this in further detail, “It wasn’t that open… this was a unique way of learning, but it wasn’t a very flexible way of learning… we could just learn this [one] way.”

On the other hand, some students perceived that they did have some choice when it came to the activities that they completed and this seemed to depend on the teaching style of the instructor. The following participant statements display the variability in perceptions as well as the potential differences between practice-based classes. Isaiah shared, “Sort of, most of it was already laid out on the worksheet but there were times where you could make your own programs and go around and do other people’s stuff so you had a little freedom that way.” Diego and Noah, on the other hand, commented, “It was you did everything,” and “No, no we didn’t,” respectively. And Lara explained:

Oh for sure, our instructor would sometimes ask us for our feedback or he would let two people to lead stretches… Sometimes we had games before the actual exercise and he
would let us chose. He definitely gave us some freedom, but we usually followed what [was on] the worksheet… He definitely gave us some choice.

**Expectation of having choice.** All participants were in their first-year of university and did not expect to have choice in the learning outcomes or activities completed in the lessons. Many believed that they did not have enough prior knowledge to know what they should be learning and expressed their opinion that they would prefer if the instructor made the decisions. When asked about having an opportunity to influence what she was learning in the class, Sheryl laughed and commented, “I don’t really have that expectation and if you don’t know anything about this course then it would be hard to actually come up with what you would want to learn.” Likewise, Tonya shared, “I don’t know what there is to learn.”

When talking about the activities, Hector shared:

Well I would rather have it where the exercises are chosen for me because as I said before, when I didn’t feel like I wanted to be as involved so [for] the program design, I would be like, this stuff again, I don’t want to do it… at that point, when I was thinking that way, I would rather have it where the exercises and stuff were set up for me.

He continued, “I want everything structured by the instructor.” Noah shared a similar view, “I think it is better if the people who know what they are doing… chose it for us and let us do it.”

**Influence of having choice.** Participants that perceived having choice in some activities described greater enjoyment, greater power over what they were learning, increased motivation to be better students, increased thought processes, and the feeling of being in a partnership for learning with the instructor. Participants who did not believe that they had autonomy in the class believed that if they had have had choice in the class they would feel a greater connection to the knowledge, greater motivation, and increased investment in learning. On the other hand, some students perceived having too much choice as having the potential to have a negative influence on learning due to the increased time it would take to consider everyone’s wishes and the potential of missing out on learning important things.

Isaiah explained, “I felt like I enjoyed the workshops where you made your own and could try other people’s and you got to see how they did theirs.” In addition, Lara commented,
“It made you feel like you kind of have power over what you are learning, like you [are] involved in the learning process. I think it encourages us to be better students.” Likewise, Tonya shared, “It makes it seem like it is not just the teacher [saying], do this, it was like we are going to learn together about this… [it was] definitely beneficial.”

Diego explained that if he had the opportunity to choose some of the activities it would have been beneficial for the class environment. He shared:

I think you would feel more connected to it… it [would] become like you have a sense of ownership towards it. Like this is something that I was interested in and this is something that other people are interested in. I am going to come and give my all because I want to learn about this, instead of [feeling like] I have to learn about this.

Tessa expressed a similar view when she shared:

I feel like it would have more of a motivation factor because you know you are doing something that you want to do and you know it is going to be useful to improve your skill set in something that you are interested in so it would help in terms of marks and just learning in general.

Alternatively, some participants perceived too much choice as potentially being negative to their learning. Diego explained, “I think it (having choice on activities) [would have been] detrimental because it would have been an issue with time because you would have had to agree with everyone else.” In addition, Ella commented, “I feel like if we got a really big opportunity to pick, we would have missed out on things we got to learn that maybe didn’t interest us so that would be negative.” Noah also shared, “If it were up to us it probably would have been detrimental because we probably would have wanted to learn all the fun stuff first and the harder stuff after and it wouldn’t have any kind of order to it.”

Assessment. In addition to categorizing the interview data based on the tenet of experiential learning and the associated emergent themes, the role of assessment came forth as a predominant idea in the data. Data revealed that the course assessment included daily participation or leadership marks, weekly assessments, and less frequent group assignments, along with a final examination.
Given the integrated nature of the tenets of experiential learning as well as my belief that it would be more difficult to fully understand the influence of assessment if the ideas related to assessment were separated and sorted into the six tenets, all ideas related to student assessment in the course are discussed together in this final section. Overall, the most prevalent themes emerging from the data relating to assessment include influence on feelings, behaviour, and learning (tenet four); lack of control (tenet six); and clarity of expectations (tenet two). Statements relating to any ideas outside of those discussed below are located in Appendix F.

**Influence on feelings and behaviour (Tenet four – Learning is a holistic process).** In general, students’ perception of the course evaluation was negative. In some instances, they believed that the course assessment was fair, however these statements were typically followed with, “but I think…” and the student would go on to describe an aspect of the evaluation that they found to be unfair or unclear. The two major themes that emerged in relation to the influence of assessment on students’ feelings and behaviour in the course were the feeling of frustration and the behaviour of transferring classes.

**Frustration.** The most common feeling raised in all interviews was the feeling of frustration. Participants expressed being frustrated about the all or nothing approach to marking, about feeling forced to have to answer questions for marks, and about the perceived unfairness of being deducted a large portion of their mark due to being late. For commuting students, being on time was sometimes very difficult due to delays in transit as explained by Tonya, “Sometimes the subway has delays.” Thomas, who is also a commuting student expressed his frustration, “It was ridiculous!... If you showed up after 9:20 then you’d lose half your marks because you are late.” Thomas shared that this “all or nothing” approach was also observed in the marking of his assessment. He explained, “On the assessments, either you get two marks or you get zero marks… totally ridiculous! You know I got three quarters of the question right and then you get zero out of two, it doesn’t make sense to me.”

Tonya, also a commuter, shared a similar story regarding an instance when she was late and lost a significant amount of marks. She shared frustration about not fully understanding how she was being marked. She explained:
They do explain the marks but not really. It is like they explain what [they] are marking us on but [they] are not telling [us] how it is inputted into the system. Sometimes we would be like *why is it that number?* For example, personally, again I come late sometimes and I remember that day I failed, I got twenty-seven (percent) or something and it is a little weird because to me, I might have come five minutes late but I still participated the whole day but it is just because of the fact that I was five minutes late, it made me fail that day…. It is just really frustrating… when you know coming five minutes late it is just going to make you fail the day… like, personally for me, I am going to think well maybe I can bump up my mark some way… but for some people, [they might think], *why am I here then if I can’t even bump it up as much as it should be?* … and I remember I was like *why is it that much?* and she (my instructor) was like, *oh, because you came late* and I was like *oh it dropped my mark that much,* and she just kept saying, *I don’t know, I just inputted it in the system, I give you your mark for that day and there is a little column that says you are late and it just deducts it.*

Participants also expressed frustration about the theme of lack of control and clarity of expectation, which are discussed below. The intersection of these tenets provides further evidence of the integrative nature of ELT and learning in general.

*Influence on behaviour.* The largest influence that course assessment had on participants’ behaviour came prior to the commencement of the course. Data revealed that students perceived there to be discrepancies between the marks in different classes due to the strictness or leniency of certain instructors. As a result, a number of students purposely switched classes following first semester in order to be in a class with an instructor that they perceived to be a more lenient marker. Participants were also hesitant to explain why they had decided to switch classes and typically stated one or two reasons in addition to wanting to avoid their previous instructor due to reasons relating to marks and assessment. Diego, for example, explained, “I specifically planned what section I was in to be with people I already knew.” He later continued, “One of my friends had had this instructor before and said that he was good at explaining things and that the marking was a little easier in comparison to others.” Likewise, Hector explained:
I wanted to move out of my class… well some of my friends were moving out of that class so I wanted to move as well and I didn’t want to deal with his (the first semester instructor’s) difficult marking again.

Heidi provided a perspective from a student who decided not to switch classes. She explained:

I feel like he (her instructor) was a really good instructor. He was a really hard marker. So what happened was after first semester a lot of people in our class were not happy with their marks to the point where… one kid even petitioned to have his mark reviewed and wanted us to… sign it in class… I didn’t, but a bunch of people did. Pretty much our whole class aside from me and four people… moved [practiced-based] classes because [our instructor] is a hard marker and other instructors were easier markers but I stayed because I liked his way of teaching… I just knew he knew what he was talking about and he didn’t complicate things.

Thus, students perceived a difference in the difficulty of marking occurring between the individual practice-based classes and this influenced a number of students to transfer into classes with instructor they had heard were more lenient. This highlights an example of how assessment influenced student behaviour and learning within practice-based learning environments.

**Lack of control (tenet six – Knowledge is created through learning).** When the topic of course evaluation came up during the interviews, all participants expressed a general feeling of lack of control over the way in which they were assessed. Specifically, participants discussed unfairness in course evaluation due to marking discrepancies between instructors, and a lack of alignment between what they understood from the course and the mark that they achieved.

**Discrepancies between classes.** Students in the first-year practice-based were divided into ten different classes each of which was taught by a different instructor. Each instructor was responsible for marking the assessments and group assignments of the students in his or her class. According to the participants, there was a large discrepancy in the marking between classes. This feeling was shared by all participants and emerged as the largest critique of the course. Isaiah commented:
I think the biggest thing was the discrepancies between instructors in different areas. I felt like the course might have the same averages, but I felt some instructors marked really hard on the individual assessments, others marked hard on the group assignments. The participation [mark] kind of depended on who you had and I don’t know, in my group, you can see all the marks when you check before you go into the exam and there was only one person who got an eighty on the dot and that was it… I found that frustrating because I take other courses that are more challenging in terms of conceptually but I can easily get higher marks than I had in this course which is really frustrating.

Many participants expressed frustration over the perceived discrepancies between instructors, which highlights the intersection of feeling a lack of control (tenet six) and feelings towards and about the course (tenet four). Diego explained in more detail,

I think when one section (class) could say this and then this section have it marked wrong; I think [that] was not useful because especially in terms of marking, I know they are obviously trying to keep it fairly consistent but at the same time, there are going to be instructors that give you 0.5 for this point and other instructors that don’t give you 0.5 for another point. It really depends on who you have.

Tessa explained how these discrepancies and feelings of frustration lead to students changing classes. She described:

The marks varied from class to class immensely. It was kind of obvious to the students because I know from first semester to second semester people were trying to switch out of classes that they knew would be bad for them… they did it just based on the marks….

So they said, even though they are a good instructor, they mark hard so I don’t want to be in their class.

Tessa is suggesting that students’ concern over marks in the practice-based course lead them to behave in a way that may have had a negative influence on their learning.

In general, students experienced feelings of frustration due to the perception of unfair marking between classes. In order to regain control over this aspect of their learning, many
students attempted to switch into a class that they believed would allow the attainment of better marks.

Alignment of mark with effort and understanding. Along with participants’ belief that there was some discrepancy and unfairness in the marking between classes, some participants also felt that the mark they received in the class did not reflect the knowledge they gained or the effort they put forth. Other students agreed that the mark they received on assessments and exams did reflect what they knew; however, due to the inclusion of the leadership or participation mark, their overall mark may not have reflected their knowledge. For example, when Tonya was asked if she believed her mark in the course reflected her knowledge of the course material, she replied,

No not at all actually… And there is some people in my class too that I know they know their stuff. And I know sometimes you have to deduct marks when they ramble too much or go off topic but it didn’t really capture what we understood. It just kind of felt like if it (our answer) wasn’t on… that answer sheet then we got zero… we did understand it, we just didn’t say it the way that [they wanted] us to say it.

Noah also shared,

I guess [to improve the course], structure the marking scheme a little more to clarify the way assessments [would be marked]… when you apply [what you know] to say an assessment and you do bad in it then you feel like everything you learn is completely wrong even though that might not be true, you just didn’t get it right for this case. I feel like that… [needs] to be fixed up a little because it could really put doubts in people’s heads and they could start being a little less willing to… learn because they feel like no matter what they think they learn or think they know, they will get it wrong on the assessments anyways.

Hector, on the other hand, felt a little differently about course assessment. He explained:

The marks that we get is a reflection of how much we know but just because we don’t want to participate in the class doesn’t mean that you don’t know anything, it just means that you don’t want to speak about it.
Hector is making reference to the inclusion of the participation or leadership mark in the students’ overall mark in the course. In his mind, your mark in the course should be a reflection of what you know and your behaviour in class should not influence this mark.

Certain aspects of course assessment also dispirited Isaiah. He explained, “It was frustrating and kind of discouraging. Even if we put together a project that I was really proud of, it was still really hard to do well on.” He continued, “I think your instructor definitely has a huge influence on how you feel about the course… especially if it is a course that you understand really well but you are still not doing very well then that is even more frustrating. I think that was a lot of people’s frustration [in this course].”

In all, participants felt a lack of control over their success in the course, which was evidenced by the perceived inconsistency in marking across classes as well as in their belief that their marks and the marks of others may not have been an accurate reflection of their understanding of the course. As a result, students experienced frustration with and disengagement from learning in the course, which also aligns with the ideas presented in the previous section about the influence of assessment on students’ feelings and behaviour (tenet three).

**Clarity of expectations (Tenet two – Learning is grounded in experience).** In addition to feeling a lack of control over their learning and assessment in the course, students also described the assessment as being unclear. It is possible that the perceived ambiguity of the evaluation lead to the feelings of lack of control. Ideas were categorized based on the predominant messages that were shared. The intersection of the different ideas provides another example of the integrated nature of experiential learning and the process of learning in general. Participants’ description of ambiguity (or lack of ambiguity) in the assessment is discussed below.

**Assessments.** A number of students expressed the view that although they felt that they understood the course material, they found the individual assessments and group assignments difficult due to the way in which questions were worded and the way in which assessments were marked. Tonya described:
Just sometimes the wording of the questions… they actually put down how many marks, like one mark for this and one mark for that and that is why it kind of got a little confusing because you try to explain something and it is a little longer than what is listed [and] you get one mark for this sentence and one mark for that sentence… It made me feel like, okay I have to change my words but now it doesn’t make sense anymore because I am trying to fit that one mark for this sentence, you know what I mean?... You have an idea and you explain it but because it is so structured you would get a zero… and our instructor was like, *no no no you were right but it is out of my control, there is a rubric and I have to follow this*, and it is like okay then that doesn’t really assess our understanding it is [just] can we match what you said on your paper.

Heidi also provided an explanation of the unclear nature of the assignments and assessments. She shared:

We had our individual assessments and sometimes the wording was a bit iffy… and one thing that I didn’t like was that we couldn’t ask any questions about it to our instructors… I think I tried and many of my friends tried too because we didn’t understand something and our questions weren’t really answered or the answers were really vague… I feel like the group assessments were kind of the same kind of idea. You could have interpreted [them] in different ways… I know one of my friends complained and said it is not fair because we interpreted it a different way… and I think he (the instructor) told her that he would talk to the head [instructor]… to see if we wouldn’t lose a mark… but I don’t really think it got anywhere.

Likewise, Sheryl commented, “I know a lot of students complained that the marking scheme was too tough… that they don’t know what the instructors are looking for.”

_Leadership mark_. When discussing their perception and feelings toward the leadership mark, participants described not knowing how they could improve their marks and many reflected that assessing someone based on how much they contributed to class may be unfair to students that do not feel as comfortable talking in front of others or that approach learning in ways different than discussing out loud.
When talking about the leadership mark, Tonya stated, “It was marked fairly,” and continued:

I know they (the instructors) kept saying if you want to get an 80 you need to go above and beyond, whatever that means, like does that mean raising your head every single time or? But I don’t know like my leadership marks were fair but only because I always say I don’t expect it to be high anyways so whatever I get I am like wow that is great... so I guess it wasn’t clear as to how you would achieve high leadership marks.

Tonya also noted that if ‘going above and beyond’ meant answering all the questions then this might take away from the opportunity for other students, which she didn’t think was fair.

This view was also shared by Isaiah when he shared, “I was trying to answer lots of questions and participate but you also don’t want to be answering every question, like taking away from other people’s learning experience.” Isaiah also expressed that he did not know what else he could have been doing to do better in the course, which again highlights the relationship between not understanding evaluation expectations and feelings of lack of control over success in the course.

Participants also believed that their perception of the requirements to do well on the leadership portion of the evaluation might be unfair to certain students due to their comfort in the class and their approach to learning. Diego shared, “I think the participation mark would have been difficult for individuals who… weren’t very extroverted and didn’t want to participate.” Tessa also shared:

I can imagine that… someone could dread it (coming to class) in the morning… I know some people are really good in small discussion like in partner work, [they] are good in that sense of leadership, but I know a lot of the instructors would take the word leadership… [and] even though it is discussed in the syllabus and everything, I know they take leadership in a different way… that is the whole thing about it being subjective… I can see how that can make it more of a negative experience than it needs to be.

She also described, “Some people just like discussing in groups and discussion could be carried out like that but some people just like to listen and that is how they absorb [information].”
Participants felt that it was often difficult to ascertain what was expected of them in the class such that they could be successful on both the leadership and written assessment portion of the course. Furthermore, many students expressed concern that the leadership mark disadvantaged students in the class who were more prone to displaying leadership and understanding in smaller, more private scenarios.
Chapter 5: Discussion

The purpose of this thesis was to develop an understanding of the first-year kinesiology student learning experience in a practiced-based course. As shown in previous research (e.g. Boyatzis & Kolb, 1991; Gutiérrez & Rogoff, 2003; Jonassen & Grabowski, 2012) the experiences of each participant was substantially different. Although, no two students described having the same feelings, behaviour, perceptions, or experiences within the course, I believe that four central themes emerged from the data: the role of connection, the importance of student individuality, the influence of the instructor, and the significance of the learning space in the student learning experience. Each theme is discussed below.

Connection

Social and meaningful connection is a basic human need (Cacioppo et al., 2006), thus it is not surprising that while discussing their learning experience in the practice-based course, participants made reference to the benefit (or detriment) of feeling connected (or disconnected) with other students and the learning material. Each of these ideas is discussed below.

Connection with others. Participants explained that the course instruction was structured around group activities and group discussion. Whether working in small (two to three) or large groups (entire class), each student felt that the group work helped them develop a sense of connection with others in the class, which in turn motivated them to contribute ideas and to become more actively engaged in the learning activities. Many students also shared that feeling connected with others helped to facilitate learning. Interestingly, students only cited a sense of being connected when they were working with others with whom they were familiar and many were opposed to having assigned groups. They believed working with people they didn’t know well made it more challenging to achieve depth in their conversations and made them more likely to worry about what others would think of them. On the contrary, students also commented that having too much connection with others in the class (i.e. being close friends outside of the class) could impede learning for the friends as well as any student working with them. For example, Thomas shared:
[Working with students I didn’t know well] definitely deterred [my learning] because when two people were in a group together and they know each other quite well, and they often seem less productive, and they often exclude the third person.

A number of participants noted that feeling excluded and experiencing a lack of connection with others was detrimental to their learning.

The importance of connection is well supported in educational literature. The findings that emerged in this study support the data that suggest perceived social isolation (lack of connection) will hinder overall cognitive performance (Cacioppo & Hawkley, 2009). In fact, just the threat of losing connection with others has caused individuals to become less engaged (e.g. attempt to answer less questions; Baumeister & DeWall, 2005) and brain studies have indicated decreased activation in areas of the brain related to the ‘executive control’ of attention in students who perceive themselves to be disconnected to others in the learning environment (Campbell et al., 2006). Likewise, students in this study reported decreased engagement and cognitive effort when lacking connection with others, which in turn decreased the amount of learning that they perceived took place. Interestingly, animal studies have shown that isolation causes changes in the area of the brain that stores memories of previously learned responses, such that when isolated, the animals were unable to utilize previously learned responses in current opportunities for learning (Heidbreder et al., 2000; Schrijver, Pallier, Brown, & Würbel, 2004). Although this likely occurs as a result of severe isolation, it provides insight into the severity of perceived isolation in learning environments. Given the importance of previous experience in practice-based and experiential learning described by both the participants in this study and Kolb (1984), lack of connection between students could pose a serious threat to learning. Thus, further research exploring the development of connection in such learning environments is warranted.

Furthermore, research suggests that individuals who feel disconnected tend to form more negative social impressions, be more critical of others (Cacioppo & Hawkley, 2005) and adopt behaviours that push others away; behaviour that is contrary to what it is he or she actually seeks to fulfill his or her social needs (Murray, Bellavia, Rose, & Griffin, 2003; Romero-Canyas & Downey, 2005). This suggests that when students perceive a lack of connection in the
classroom, they are more likely to form negative opinions about their peers and the course, which could cause them to disengage and become more isolated. Again, this behaviour was described by study participants and is something that should be considered for learning within courses that rely on group work and student interaction.

Based on the results of this study, students who felt more connected in the classroom expressed greater enjoyment, became more engaged with their peers, and as a result, connection likely resulted in the development of collaboration and group work skills, abilities that are essential for a career in kinesiology (Hoffman, 2009a; Lumague et al., 2006). Ella, for example, shared, “It was really beneficial because it was a happier environment rather than we are all individual beings; we were all a group when we are working together” and Diego commented:

I think that when you are with a group that… [was] a cohesive unit, I think it was very beneficial… [because when] you are comfortable working with them (other people)… you can ping off other people and get their opinions… and everyone [can] participate equally.

Thus, it appears that when students felt connected to their peers in the classroom, enjoyment, comfort, and learning increased. According to Geissler, Hammick, Koppel, Reeves, and Barr (2002), the development of interprofessional skills such as communication, personal reflection, collaboration, problem-solving, and teamwork, is not currently a major focus of university programs training future health care and kinesiology professionals. Thus, the practice-based learning environment may offer an opportunity for kinesiology students to develop necessary interpersonal skills that are not developed in other kinesiology courses. Based on the results of this study, it appears that connection between peers is essential in promoting such learning.

Unfortunately, always working with people you know and with whom you feel connected is not a reasonable expectation when entering kinesiology-related careers. Many kinesiology graduates will become healthcare professionals (e.g. physiotherapists, occupational therapists, kinesiologists) and will be required to work with individuals on a daily basis with whom they do not feel connected. Therefore, despite students’ desire to always work with familiar peers, this may not be advantageous to their learning or professional development, and it is likely that students were often assigned groups within the practice-based class to assist in the development
of skills that would assist them in working with a wide range of individuals including those with whom they are not connected. However, given the results of this study, requiring students to work with people they do not know well may not be enough to develop their collaboration and group work skills. As will be discussed in the Recommendations section, it may also be necessary to explain the rationale behind the assigned groups and to provide students with the opportunity to receive feedback about their group work skills.

**Connection with learning material.** When participants in this study discussed their learning within the classroom, it became evident that the perceived relevance and utility of the course material had a substantial influence on their enjoyment and motivation to learn. When students were interested in the material, they expressed greater enjoyment and were motivated to put forth their best effort. In contrast, when students did not see the link between the material being presented and their future goals, they expressed less appreciation for what they were learning. Each of these findings aligns with current educational literature.

Previous research has documented the relationship between students’ interest in a topic and their enjoyment of the learning process. Ainley and Ainley (2011) describe two models of interest development proposed by Krapp (2003) and Hidi and Renninger (2006), both of which identify personal value as a central contributor to the development of interest in a topic. In other words, when students believe that understanding the learning topic will be of benefit to them in the future, they are more likely to be interested in the topic. This was found in the current study and has been supported by other recent empirical research (e.g. Durik & Harackiewicz, 2007; Harackiewicz, Barron, Tauer, Carter, & Elliot, 2000). This idea also aligns with the control-value theory of achievement (Pekrun, 2006), which suggests that value is one of the key predictors of enjoyment. Aligned with this idea, Ella explained, when she discussed the relationship between her interests and the learning material, “It seemed to me that it was a lot more personal training based and I like that… and I wanted to understand it more because it could help me later on… that made me enjoy it more.” When students know that they are learning about something of interest and that will be of value to them they are more likely to be motivated and engaged.
Viewing learning as meaningful and interesting has also recently been cited as a factor that influences student persistence in college or university. Kuh (2016) describes goal realization as what occurs when students understand the relevance of what they are learning to their personal interests and their future goals. In this work, Kuh suggests that when students experience goal actualization, they are more likely to continue in and be satisfied with their experience in higher education. The current study adds to this literature by supporting the notion that students’ perception of course relevance and personal meaningfulness is an important contributor to enhancing the student learning experience. It also highlights the significance of goal realization, in promoting student engagement in, motivation in, and contribution to learning in practice-based learning environments, which could include courses such as was examined in this study, as well as traditional tutorial, placement, or student internship courses. When students understand the relevance and benefit of what they are learning, they are much more likely to be motivated and engaged, which will have a positive influence on learning, personal development, and academic achievement (e.g. Boiché, Sarrazin, Grouzet, Pelletier, & Chanal, 2008; Bruinsma, 2004; Heng, 2014; Kuh et al., 2008). Therefore, it is not surprising that relevancy of learning has also been determined to be closely linked to motivation (Hutchinson, 2003).

As a previous instructor of the practice-based courses, I understand the importance of student engagement in the learning activities. In kinesiology practice-based learning (and experiential learning) it is through engagement or experience that students are continuously developing their understanding of a topic and of the associated kinesiology-related skills. Thus, student engagement in practice-based courses is essential for learning. Participants also agreed with this idea, and noted that engagement was more likely to occur when the relevance and utility of the learning was understood. In order to develop this understanding in students, it is important for practice-based instructors to understand the students’ interests and future goals, and to align their teaching with these ideas. It is likely that students in any class, regardless of the size, will have differing interests and goals, and therefore this may be a difficult task for instructors. More specific recommendations pertaining to the enhancement of goal actualization in students’ learning in practice-based environments are provided in the Recommendations section.
Student Individuality

Participants’ perception of their learning experience was largely determined by their personal preferences and characteristics. This aligns with the principles of ELT in that learning is the human process of adaptation to the world and is governed by an individual’s thoughts, beliefs, behaviour and perceptions (Kolb, 1984). The experience of every student interviewed differed, and yet, amongst these differences, patterns emerged relating to individual learning styles and maturation. Each idea is discussed below.

Learning style. The course investigated in this study was designed to provide students with the opportunity to experience a range of topics and skills that would be relevant in a kinesiology setting. As described in the results section, students frequently discussed the opportunity to experience, reflect on, and apply the course material. Participants did not perceive any opportunities to think about or develop new ideas. Aligned with this perception, students preferring what Kolb (1984) termed concrete experience, reflective observation, and active experimentation, were more likely to enjoy the course and view it as beneficial because it aligned with their learning style.

Finding that learning style influences students’ perceptions of a course aligns with current literature. According to Felder and Spurlin (2005) when the learning style of a student does not align with the teaching style being utilized in the class, he or she is likely to become uncomfortable, bored, and inattentive. This was exemplified when Thomas, who frequently discussed being bored in the class described, “I don’t think it (the class) aligns very well because… I would rather understand the concepts so that I could apply it in my own specific way to a scenario.” Thomas’ description of what he would ‘rather do’ aligns with the abstract conceptualization approach to learning, in which students logically analyze their ideas and experiences and use this information to come up with new theories and approaches to problems (Kolb, 1984). None of the participants cited opportunities to explore this approach to learning within the course.

Students develop more positive attitudes toward school and acquire more knowledge and skills when they are taught through their primary preference for learning than when they are taught through a style or approach that is less well developed (Matthews, 1991). However, it is
not feasible or advantageous for any student to have courses modified to align exclusively with one style or approach to learning. As is suggested throughout the six tenets of experiential learning (Kolb, 1984), learning is a conflict-filled process that requires use of all four abilities—thinking (abstract conceptualization), reflecting (reflective observation), doing (concrete experience), and applying (active experimentation). Therefore, it is likely that students will experience some discomfort when being required to learn through their less preferred approaches. Beard and Wilson (2013) indicate that learning is often a difficult process and it is actually through the pain and discomfort of having to develop new approaches and skills that the most meaningful and permanent learning can occur. Heidi exemplified this when she said, “I guess overall, I just think that even if it is challenging for me, which it was, I still see it as a beneficial experience.” Despite the learning being difficult for her, Heidi understood how developing her less refined approaches to learning would be of benefit to her in the future.

As will be discussed below, Heidi displayed a high level of maturity when learning in the practice-based course. Not all students will share her level of sophistication upon entering a practice-based environment, and despite the attempts and intentions of the course instructors or course developer, many students will not be able to acknowledge the importance of improving their less developed approaches to learning. The next section provides recommendations for how instructors and practice-based course developers can encourage such insight among students.

**Developmental stage.** ELT includes a developmental model in which Kolb (1984) defines three general stages: acquisition, specialization, and integration. Generally, first-year students would be categorized into the specialization stage of development because at this point in their educational career they have chosen to enter into environments (or programs) that align with their interests and future career aspirations. This stage generally lasts from formal schooling through the early work and personal experiences of adulthood. Individuals in this stage, predominantly rely on a particular learning style that has been developed through previous social, educational, and organizational experiences (Kolb & Kolb, 2008). While in this phase of development individuals are hesitant to explore other methods of inquiry (Kolb, 1984).
Data from this thesis suggest that the developmental stage of the interview participants influenced their perceived benefit of the class. In general, students who believed the course aligned with their preferred learning style had a more positive experience. Interestingly, one student showed characteristics of entering the integration phase of development because her narrative suggested that she began to express her non-dominant modes of learning while in the practice-based course. She not only had an increased appreciation for the course, but she also believed it to be beneficial despite a large misalignment between her learning style and the structure of the course.

When asked if her learning style aligned with the course, Heidi said no and explained, “I decided to change my way of studying... I [knew] from first semester that just memorizing wasn’t going to cut it because I didn’t do very [well].” She recognized that her preferred approach to studying – memorizing and regurgitating knowledge – was not going to allow her to be successful in this class given the practical and applied nature of the course curriculum. She then used this insight to modify her approach to learning such that she was able to do better in the course. Heidi acknowledged that she had to make use of her less developed approaches to learning – being able to apply the material – in order to be successful in the course. Despite her initial “dread” of the course, she came to appreciate its value for her own personal development.

On the contrary, other students could clearly be classified in the specialization phase of development. These students entered the class with a preferred method of learning and were not yet willing or able to modify their approach to help with their own personal development or success in the course. It is possible that they did not understand the benefits of doing so, or did not believe it was necessary to do so in order to be successful in the course. Thomas, who shared that he wanted to become a coach following university graduation, did not think that the course aligned with his future goals. This is very interesting given the perception of most students that the course was aimed at developing coaches and personal trainers.

Students’ lack of insight into the importance of developing all approaches to learning is not only described as a characteristic of the specialization phase of the developmental aspect of ELT (Kolb, 1984), but also aligns with the dualistic stage of intellectual and cognitive development (Kuh, 2015). According to Kuh (2016), when students are in this phase,
information is viewed as either right or wrong, things that appear ambivalent or overly complex are ignored, and simple, straightforward ideas or activities that have clear application to practical problems are preferred. In other words, when students are in the specialization or dualistic stage of development, it can be difficult for them to see and appreciate the relevance of what they are learning. According to Kuh (2016), most students enrolled in higher education, especially those in first-year are working their way through this phase of development and as such may not fully comprehend the importance of the practice-based class until they have graduated and are facing the challenges of finding a job.

Two students, Sheryl and Tonya showed increased maturity when they explained their perception of other students’ impressions of the class and their perception of the benefit of the course. “They [thought] it (the class) [was] useless,” Sheryl explained, “They just can’t foresee what we learn here can actually apply to what they will do.” Similarly, Tonya shared:

This is… a great thing [and] I feel like they (other students) wouldn’t realize what they have until… no one knows what we are getting now so I [think we] should appreciate it and be engaged and learn it now.

As described by Tonya and Sheryl, it appears that many students in the practice-based courses had yet to develop an understanding of the relevance of the learning material despite its importance in their long-term development as kinesiology students and future professionals.

Heidi also showed advanced maturity when discussing the role of assessment in her learning experience. As indicated previously, she explained that she was one of only five students in her class who did not intentionally switch classes following the first semester in order to avoid the difficult marking of her instructor, “I stayed because I liked his way of teaching… I just knew he knew what he was talking about and he didn’t complicate things.” Despite likely being able to get a better mark in a different class, Heidi decided to remain in her assigned class because she believed that her learning would benefit, which again shows a level of maturation not evident in many first-year students.

Diego, on the other hand, explained how he decided to switch into a class with an instructor who was known as a more lenient marker. Diego explained that he had heard from
other students that this instructor was “good at explaining things and that the marking was a little easier in comparison to others”. Although Diego believed that he was moving into a class where he thought his learning would benefit, when reflecting on his experience, Diego shared that due to time restraints, his class did not have the opportunity to reflect within the class and thus, he sometimes had difficulty understanding the material. Given the value that other participants placed on the role of reflection, it appears that Diego’s concern for high marks influenced his decision to switch classes and as a result his learning suffered.

This also provides an example of the influence of students’ *implicit theories* on academic success and learning. According to Dweck, Chiu, and Hong (1995) students holding incremental beliefs think that personal attributes (e.g. intelligence) can be changed and developed whereas those holding entity beliefs view personal attributes are unalterable regardless of practice or effort. Students with entity beliefs evade academic challenges, such as difficult marking, and do whatever they can to stay avoid situations in which they may be perceived as lacking intelligence or skill (Yeager & Dweck, 2012). Students will show different mindsets in different situations (Robins & Pals, 1998), thus, despite likely believing that their effort will be fruitful in most academic situations, results from this study suggest that some students acted on their entity beliefs when they decided to transfer classes. Some students were found to shy away from being challenged in favour of achieving grades. This is unfortunate because as previously suggested, learning is a process filled with conflict (Kolb, 1984) and research suggests that challenging situations are often used to encourage deep and lasting learning (Irvine & Wilson, 1994; Mortlock, 2004; Priest & Gass, 2005).

My data suggest that students who are further along in their development are better able to understand the importance of all learning styles and may prioritize learning and development over achieving high marks. Because only one student appeared to consistently have this level of maturity and because development was not the major focus of this thesis, additional research is needed to investigate the relationship between personal development and learning, and to explore opportunities to structure experiential or practice-based learning environments to promote student development.
This study highlights the extent to which students’ learning style and phase of development can differ, and the potential influence they can have on the learning experience. The influence of learning style is frequently addressed in literature related to ELT (e.g. Castro & Peck, 2005; Mainemelis, Boyatzis, & Kolb, 2002; Manochehr, 2006; Nelson-Smith, 2008), however, the role of developmental phase is largely neglected. Therefore, this thesis adds a new dimension to literature related to ELT and provides insight into ways in which to enhance the student learning experience in higher education practice-based courses.

**Influence of Instructor**

Consistent with current research, results from this thesis indicate that the instructor has a substantial influence on the students’ experience in practice-based learning. Given the unique physical environment of the practice-based classroom and the opportunity for frequent teacher-student interactions in a class with fewer than thirty students, it is important to highlight how the role of the instructor may differ from the role of instructors or professors in lecture-based classrooms. In this study, participants discussed specific instructor characteristics and behaviours influenced their learning experience.

**Instructor characteristics and behaviours.** Participants in this study reported the following instructor characteristics or teaching behaviours as beneficial: gives clear feedback and instruction, shows enthusiasm, is knowledgeable, is friendly, and is not afraid to admit when he or she does not know an answer. Likewise, participants reported lack of feedback, disorganization, and favouritism as being detrimental to their learning in the practice-based course. As a previous instructor of the practice-based course, I can understand the importance of these characteristics in practice-based learning. First, as suggested by the students, the practice-based environment is open and can be loud and distracting, and as an instructor, I had to utilize a number of strategies in order to ensure that all students had heard and understood the lesson instructors and had the opportunity to ask questions. Second, because the practice-based environment is unique and new to all students, it was important that I, as the instructor, showed that I was knowledgeable and believed in the benefit of the course for the students’ development. As suggested above, when the students understood the relevance of the course to their goals, they were more likely to become engaged and interested in the course. In order for this to happen, I
needed to be able to draw a connection between the learning objectives of the course and their development as a future kinesiology professional.

Third, the answers to many of the questions posed in the practice-based environment, much like any experiential learning environment, could begin with ‘it depends’. Kinesiology or the study of human movement is complex and the causes of misalignment, injury, or pain that were examined in this course can be elaborate. For example, valgus alignment of the knee means that the knee is displaying excessive medial displacement (Bell, Padua, & Clark, 2008) or, in other words, the knee is collapsing in towards the midline of the body. Individuals displaying valgus knee alignment are at a significantly increased risk of injury to the anterior cruciate ligament (ACL; Ford, Myer, & Hewett, 2003) and medial cruciate ligament (MCL; Agranoff, 2013), knee pain, and decreased lower limb power output (Korff, Horne, Cullen, & Blazevich, 2009). In the practice-based course, students may be required to look at a picture of or observe someone doing a squat with valgus knees and be asked what is causing the misalignment. Often, valgus knee alignment is attributed to a weak gluteus medius muscle (Hollman et al., 2009); however, in reality this misalignment could be caused by a host of factors including lack of strength, lack of awareness, improper shoes, or improper clothing. Therefore, given the complex nature of many kinesiology-related topics, it is essential that practice-based course instructors are able to provide clear and concise explanations and instruction. Specific recommendations are provided in the Recommendations section.

Previous research on effective teaching in college supports these findings in its identification of knowledge, organization of instruction, clarity of expression, and quality of presentation as the top four most effective instructor characteristics (Clark, 1995). Likewise, Ralph (2003) outlined commitment to learners, desire to improve, knowledge of material, organization and management of environment, and collaboration with others as five attributes of effective instruction in higher education. This thesis reinforces these findings and adds to the current literature by highlighting the importance of effective and clear instruction in classes that are not held in a lecture hall. Many students commented on distractions being caused by the loud and sometimes chaotic learning environment of a public or open space and suggested that students sitting farthest away from the instructor may have trouble hearing. Therefore, there
appears to be a need for additional research looking into effective teaching strategies in physical instructional environments.

According to Delaney, Johnson, Johnson, and Treslan (2010), there is a lack of research investigating effective teaching across varying modes of instruction (e.g. practice-based learning) and as such, this study is, to my knowledge, the first to consider instructional strategies in kinesiology or physical education courses that are held in a physical activity setting. Based on students’ perception of the teaching strategies utilized by the practice-based instructors, many instructors had developed effective methods of instruction (e.g. repeating students’ answers for the entire class to hear; displaying information visually). Students also described less beneficial teaching strategies (e.g. suggesting students be more like other students; suggesting they didn’t know how the students were being assessed). Such results suggest, as will be discussed in detail in the Recommendations section, that practice-based instructors may benefit from additional education to instruct in the practice-based environment and/or opportunities for reflection on their teaching strategies employed. Although the process of learning to teach has been well studied amongst primary and secondary teachers (e.g. Ethell & McMeniman, 2000; Kagan, 1992; Wideen, Mayer-Smith, & Moon, 1998; Yost, Sentner, & Forlenza-Bailey, 2000), there is limited evidence describing the process to improve teaching practices for instructors in higher education, particularly in experiential or practice-based courses in applied faculties such as kinesiology and physical education. Therefore, not only would instructor teaching education benefit the instructors of experiential learning environments in higher education, further research relating to teaching and learning in the unique learning environments utilized in kinesiology programs is also warranted.

The Learning Space

The final theme that emerged from the interviews was the influence of the learning space on the students’ experience. Despite its perceived importance, spatial theory or geography has not received much attention in the teaching and learning literature. Thiem (2009), for example suggested that education has not been a focus of critical geographical research and Holloway et al. (2010) agreed that education deserves more attention from human geographers and suggested that by viewing students as the subjects rather than the objects of education consideration can be given to the environment in which learning takes place. This thesis is one of the first studies to
explore the role of the learning space in the student learning experience and may be the first to investigate the spatial discourse of practice-based courses in kinesiology and higher education.

The three aspects of space outlined by Lefebvre (1991) will be used to discuss the learning space of the practice-based course. These aspects include perceived space (i.e. physical environment as well as the actions that occur within the space), conceived space (i.e. feelings, thoughts, and emotions that occur within the space as a result of the interactions and activities completed within the area), and the lived spaced (i.e. all aspects of a space that create local form of knowing that result from oppression or empowerment) of an environment (van Ingen, 2003).

**Perceived space.** Results from this study indicated that students enjoyed the open and active aspect of the practice-based class. Some students also stated that they “loved” how loud the environment was because it gave them permission to be loud as well, while others suggested that at times the noise in the environment was distracting and made it difficult for students to hear instructions clearly. Students’ perceptions about the increased volume of the noise in the learning environment further highlight the importance of clear instruction and the use of effective teaching strategies by the instructor in the classroom.

Results also indicate that students believed the physical activity setting was beneficial for their learning but argued that when more than one class was assigned to an area, students were more likely to become distracted by the other class and did not have enough room to complete the activities. Students also shared that a small area made learning uncomfortable, which could lead to disengagement and lack of motivation. This findings suggests that either practice-based courses must be held in spaces of a minimum required area (as determined by number of students and activities completed), or the practice-based lesson plans must be created with the knowledge that students will not have adequate space to complete activities requiring a high degree of movement.

There is not, to my knowledge, any previous research examining the influence of the physical environment in classes situated in a physical activity setting, however, the findings of this study do align with previous research that suggests factors in the built environment can affect student attention, motivation, learning, and academic achievement (Scott-Webber et al., 2014). Most of the literature related to the physical environment and student learning has
explored the impact of different student seating arrangements and classroom layouts (e.g. Allen et al., 1996; Barrett, Zhang, Moffat, & Kobbacy, 2013; Scott-Webber et al., 2014; Weinstein, 1981). Therefore, due to the unique structure of this course, the results from this thesis add additional insight into the role of the physical environment on learning in higher education. For example, study participants indicated that they were required to sit on the floor for class instruction. Thomas, for example, shared:

Totally uncomfortable sitting on the floor… It just hurts my knees and my back so that sucked. So either I [was] sprawled out [and] not writing and following because my hands are supporting me or I am hunched over and uncomfortable, and then I don’t want to be there.

As described by Thomas, the resulting discomfort experienced by students led to distraction, lack of engagement, and decreased motivation in the class. In support of these findings, research has also determined that physical discomfort in the classroom is detrimental to student learning because it prompts students to disengage and makes it difficult for learners to pay attention (Hutchinson, 2003). The investigation of alternate ways of instruction in practice-based learning environments is needed in order to maximize the student experience in such spaces.

Conceived space. Three primary concepts emerged relating to the conceived space of the practice-based course: importance of belonging, the role of autonomy, and the pressure and frustration created by assessment. Each idea is discussed in turn below.

Belonging. While having a connection with others and the course material (as was described above) aligns with and contributes to students’ perception of experiencing a sense of belonging, based on the students’ narratives and the relevant literature, the two terms differ. Connection refers to students’ perception of a relationship between each other and with their learning material, whereas belonging referred to students’ perception that they had a rightful place in the environment and that they were accepted and supported in the classroom. Likewise, in her investigation of classroom belonging amongst middle school students, Goodenow (1993) described classroom belonging as students’ perspective of being liked, valued and respected by peers and the teacher. Students’ sense of belonging occurs within the classroom, whereas,
students’ perception of connection can be experienced outside of the classroom while interacting with their peers or studying course material.

Results also suggest that students’ perception of connection may be a prerequisite to classroom belonging. For example, one student described how connecting with other students and sharing an interest in the learning material made her feel like she belonged in the classroom, which motivated her to put forth maximal effort. Other students shared that when they felt welcomed and accepted in the class, they were motivated to work hard and enjoyed being in the classroom. Thomas, for example, shared, “So people’s openness definitely influenced my learning because when I felt like it was going to be a better class or I felt more open [and] then I often worked harder to present better ideas.”

The benefit of student belonging in the classroom supports previous research, which has determined an association between students’ sense of belonging and self efficacy, intrinsic motivation, task value, perception of instructors’ warmth and openness, student participation, and sense of social acceptance (Freeman, Anderman, & Jensen, 2007), all of which have been found to have a positive influence on the student learning experience and academic achievement (e.g. Astin, 1993; Carini, Kuh, & Klein, 2006; Chiu & Wang, 2008; Martens, Gulikers, & Bastiaens, 2004; Solomon, Battistich, Kim, & Watson, 1996; Zimmerman, Bandura, & Martinez-Pons, 1992). Given the increased emphasize on group work and class discussion in the curriculum of practice-based and experiential learning courses, students’ perception of belonging may be essential to learning in such an environment.

The creation of open, accepting, and safe learning spaces may be essential to facilitate student learning, particularly in practice-based or experiential learning environments that rely heavily on group work and student interaction to deliver the course material. Experiential learning research suggests that learning should be student-centered (Joplin, 1995, p. 20) and focus on both the social and academic needs of students. Unfortunately, there is evidence showing that in practice this may not actually occur – educators often assume authority for directing student learning (e.g. Bacon, 1983; M. Bell, 1993; Brown, 2002; Priest, 1996). Likewise, although it was likely the intention of the practice-based course to provide a student-centered environment for students, results from this study suggest that students did not believe
this to be the case. As such, although it is possible that student-centered approaches are being adopted within higher education to better align with the current literature, additional research is still needed to explore the use of student-centered learning and should consider the role and development of belonging.

**Autonomy.** When discussing their options for learning in the course, the general consensus from participants was that they were not provided with options to take control of their own learning or to make meaningful decisions while in the practice-based classroom. Although all participants noted that learning outcomes, activities, and approaches to assessment were generally “set in stone”, some students noted that they had some choice during classes in which they were asked to create their own workout programs and to coach other students. When students believed that choices were offered, they described feelings of control or power over their learning, involvement in the learning process, and encouragement to be better students. Those students that did not believe that they had choice noted that having the opportunity would have had a positive influence on their learning. Diego noted, “I think you would feel more connected to it… it [would] become like you have a sense of ownership towards it,” which provides an example of how connection to learning material, as discussed above, could be increased.

The benefit of student autonomy in the classroom is supported in past and current educational literature. Nearly thirty years ago, Deci and Ryan (1987) determined that autonomy promotes persistence on tasks and increases self-regulation in learning. More recent literature suggests that humans have a psychological need to be in control of their behaviour (Reeve, Deci, & Ryan, 2004) and that autonomy is related to greater perceived academic competence (Fazey & Fazey, 2001) and actual academic performance (Boggiano, Flink, Shields, Seelbach, & Barrett, 1993; DeCharms, 1976), increased preference for challenging activities (Shapira, 1976), and improved self-regulation and positive coping behaviours (Turner, Meyer, Midgley, & Patrick, 2003). All of which are beneficial for student development and student learning.

Despite the evidence for the benefit of choice or autonomy in the classroom, Stefanou, Perencevich, DiCintio, and Turner (2004) have suggested that when put into teaching practices, educators have perceived that the best way to support student autonomy is to simply offer
learners choice. Unfortunately, the choice that is often offered is not meaningful to students and options that could be academically significant are limited. Likewise, Assor, Kaplan, and Roth (2002) argue that although teachers intend to create environments that support student autonomy, many students do not feel that the learning environment contributes to feelings of autonomy because they do not perceive any connection between the schoolwork and their personal goals and interests.

As was evidenced in this study, when students did not perceive the course material or class activities to be associated with their goals or interests, they were less likely to be motivated or engaged, and consequently were less likely to learn. Likewise, if students in the practice-based learning environment were given the choice of which population they would like to cater their coaching to in a personal training setting, this choice will not be meaningful or stimulating if they are not at all interested in becoming a personal trainer, as was the case for a number of students in this study. On the other hand, an instructor could explain to students the importance of coaching proper movement mechanics as it relates to a wide variety of kinesiology careers (e.g. strength and conditioning coach, personal trainer, physiotherapist, biomechanics researcher, doctor, ergonomist, etc.…). The choice could then be offered to students to choose a situation that best aligns with their interests and goals. In this case, the autonomy is now meaningful because students have been given an opportunity to choose from options that are relatable to their interests. If the learning objective of the lesson is to instill proper coaching strategies, it does not matter the population or situation to which the student is coaching and if students see the activity as meaningful, research suggests that learning will benefit (Kuh, 2016).

**Assessment.** All participants cited feelings of pressure and frustration due to the course assessment. Despite the class offering a unique learning experience, it was not perceived as a very flexible way to learn or to be assessed. As a result, the course’s method of assessment had a large influence on the student learning experience, which supports the notion that student assessment can shape their views of higher education and influence the extent to which learning occurs (Boud & Falchikov, 2007). Boud and Falchikov (2007) suggested that assessment practices in higher education often focus on students displaying their knowledge, providing this information on tests and assignments for grading, and not getting adequate feedback. These authors also suggest that student assessment frames students’ belief in what they can and cannot
be successful in within the classroom. For some, assessment builds confidence, for others it makes them feel inadequate and undermines confidence. While explaining how the structure of the assessment could put unwarranted doubts in students’ minds about their ability to succeed in the course, Noah echoed these ideas when he shared that the assessment in the course “could really put doubts in people’s heads… because they [may] feel like no matter what they think they learn or think they know they [could] get it wrong on the assessment anyways.”

This study also highlights the potential influence of assessment on emotions and subsequent behaviour of students. Students experienced frustration and stress due to their perception of assessment ambiguity and unfairness in the practice-based, which may have influenced their feelings toward, and behaviour in, the course. Because learning is a holistic process (Kolb, 1984), the feelings and perceptions of students must be considered when designing and implementing protocols. Further research is required to develop a better understanding of how assessment influences the emotions, behaviour, and learning of students. Understanding these relationships would be of benefit to teaching and learning not only in practice-based learning environments, but also in all methods of instruction throughout the university.

In the practice-based learning course, students were assessed through weekly individual assessments, intended to encourage reflection on course material; monthly group assignments that incorporated observations of measurements collected in class; a leadership mark, intended to assess students’ behaviour and attitude in the class; and a final examination that was comprised of multiple choice questions and individual case studies. Unfortunately, based on the results of this study as well as on my previous experience as an instructor of the course, the assessments may not be having the intended impact on student learning due to students’ perception of the way they were graded. All students, despite their enjoyment of the course, felt that the course grading largely depended on their instructor. Furthermore, despite the relevance of ‘leadership’ to any kinesiology-related career (Hoffman, 2009b), assessing students’ leadership skills fairly is extremely difficult given the multiple types of leadership (Winston & Patterson, 2006) and the subjective nature of instructor observation despite having a marking rubric. It is possible that the instructors did view the leadership criteria in a similar manner and that the marking was fair; however, that was not the perspective of the students. Tessa, for example, commented, “I know
they (the instructors) take leadership in a different way… that is the whole thing about it being subjective… I can see how that can make it more of a negative experience than it needs to be.” Recommendations to reduce such perceptions are shared in the Recommendations section.

Research specifically pertaining to assessment in the practice-based learning environment is also required. Based on the students’ narratives, the course assessment was unfair because assignment questions lacked clarity, the leadership marked appeared to disadvantage students in different classes or those that were less extroverted, and despite being told that their answer was correct, students believed they were not given full marks unless their answer matched the answer that was written on the answer sheet. These results highlight the potential difficulty in creating and marking assessments in practice-based learning, which has also been suggested in current research (Quinn, Shurville, Quinn, & Shurville, 2009). The nature of such learning environments requires students to learn through experience and the purpose of assessment in practice-based learning environments, if it is designed to align with experiential learning, is to promote student reflection (Guidelines for assessment of experiential learning, 2014). In experiential learning, the outcomes of student learning are varied and often unpredictable (Wurdinger, 2005) and in order to allow students to take control of their own learning as suggested in ELT (Kolb, 1984), learners should also be held responsible for assessing their own learning (Wurdinger, 2005). Thus, it may not be suitable to utilize traditional classroom assessment approaches to evaluate practice-based learning (Chan, 2012), which may have been occurring in the assessment of this course through the use of multiple choice examination questions.

Leadership skills are clearly an important ability in any kinesiology-related discipline and, given the applied nature of the practice-based learning environment, this course presents an optimal opportunity to develop and assess these skills. Leaders within the class can be defined as students who behave in a way that assists fellow students in the attainment of educational goals (Ender & Kay, 2001). Based in this definition, student leadership may be best measured and assessed by the students’ peers within the classroom. Furthermore, in assessing their peers within the classroom it is likely that students will reflect on their own behaviour and begin to develop self-reflection skills; an ability that is extremely important in professional careers (Walker, Cooke, Henderson, & Creedy, 2013). Therefore, it is possible that the assessment of
interpersonal skills such as leadership or communication are better evaluated through use of self and peer assessment if students are provided with appropriate marking criteria. Furthermore, if students are being instructed in a matter consistent with ELT, it is important that assessment is linked to this teaching methodology (Mitchell & Delaney, 2004). It is possible that asking questions regarding students’ theoretical knowledge may not be the most appropriate form of assessment in a practice-based environment. Perhaps it may be more appropriate to require students to reflect on the process of their learning and development within the class as opposed to requiring them to answer specific questions regarding the theoretical aspects of the course material, which based on the students’ responses, was their perception of the course assessment.

Tonya provided an example of how the assessment may have disrupted her natural reflection processes when she reflected:

Just sometimes the wording of the questions… they actually put down how many marks, like one mark for this and one mark for that and that is why it kind of got a little confusing because you try to explain something and it is a little longer than what is listed [and] you get one mark for this sentence and one mark for that sentence… It made me feel like, okay I have to change my words but now it doesn’t make sense anymore because I am trying to fit that one mark for this sentence, you know what I mean?... You have an idea and you explain it but because it is so structured you would get a zero… and our instructor was like, no no no you were right but it is out of my control, there is a rubric and I have to follow this, and it is like okay then that doesn’t really assess our understanding it is [just] can we match what you said on your paper.

This example suggests that the students were required to be explicit in their responses to the reflection assessment questions. The way in which a student approaches a problem and the knowledge that is taken away from an experience in experiential learning will likely differ between students (Schwartz, 2013), thus any question requiring students to provide explicit answers likely does not align with experiential learning theory. Recommendations on how to better structure practice-based assessments so they align with ELT are provided in the Recommendations section.
**Lived space.** Learning in a practice-based classroom involves increased interactions between the student and instructor due to the small class sizes and the focus on discussion and reflection. Results indicated that students’ perception of the behaviour of and interaction with the instructor lead to feelings of being motivated or excited about the class, and also to feelings of self-consciousness and of being treated unfairly, which subsequently influenced learning in positive and negative ways, respectively.

Lara explained how the passion of her instructor evoked similar energy in herself and how given the leadership role held by the instructor, his behaviour could influence the whole class. She commented:

He was always full of energy and this transfers, it is like a domino effect. If someone is very energetic, especially him with the position as leader… he really sparked it onto everyone else and it made the class more enjoyable.

Lara also shared that she was not always as knowledgeable as other students due to her lack of previous sport experience and that the one-on-one interaction she had with the instructor improved her learning in the classroom. Lara felt that her experience in the practice-based class, not only benefited her development as a kinesiology student, but also as a person. This finding is supported by current research that describes passionate teachers as educators that are committed to the achievement of their students and suggests that these teachers play a crucial role in the development of students (Mart, 2013).

As was indicated in the results of this thesis, the instructor plays a large role in the students’ perception of their experience. Research suggests that a passionate or great teacher will display respect for his or her students (Mart, 2013) and that the environment created by a successful instructor will evoke feelings of safety and comfort amongst students. As a previous instructor, I can attest to the importance of respecting the students, their goals, and their interests, as well as developing an environment in which they feel they have control over their learning and can give input to their learning experience. Tonya who shared that her instructor would collect feedback from the students on a regular basis reflected the importance of this when she explained:
That was… great. We would have a say. It is not just like we are following this one thing and we have no say about it… it definitely helped because any problem… was addressed… and it felt that we could all talk about it and [that]… our experience actually mattered in the course.

By permitting students to provide feedback, students develop the impression that the teacher cares about their learning needs. When students are provided the opportunity to become collaborators in the development of their own learning experience and when they are provided with an environment in which they feel they can provide their honest opinion and suggestions about the course, students can enhance all aspects of the course (Weimer, 2010). As described by Tonya, the collection of student feedback allows students to take ownership over their own learning, which is one of the central objectives of experiential learning (Kolb, 1984). Furthermore, according to Weimer (2010), through the process of providing feedback, students must reflect on their learning, which will allow them to develop insight into themselves as learners as well as on the learning material. Therefore, the regular collection of feedback from students is highly recommended in practice-based learning environments.

Along with feelings of empowerment and collaboration, some students also described feeling judged and unfairly treated in the practice-based learning environment. Although such feelings are likely experienced in all teaching and learning environments, the intimacy of the practice-based environment intensifies the influence of such feelings on student learning. Results indicate that students perceived teacher favouritism to be occurring in at least one-quarter of the practice-based learning environments. This finding is extremely problematic because study results suggest that this resulted in students withdrawing from the learning environment, enjoying the class less, and feeling like they were not living up to the instructors expectations. In practice-based learning, there is often no textbook, which students can consult if they were absent or if they did not develop a thorough understanding during the class. Learning in a practice-based course occurs through experience, interaction, and discussion within the classroom. Therefore, if a student withdraws from the class, his or her learning will likely be impaired, which was highlight by Tessa when she shared the influence of her instructor encouraging her to be more like other students in the class, “What is the point of trying to be something I am not… so some days I wasn’t paying attention as much.”
Ella, who also perceived favouritism within her classroom, shared that she sometimes felt that the instructor was judging her and that the instructor was not concerned about the learning of students outside those that were favoured. As a result, Ella suggested that when she felt this way, did not want to be in the classroom. This is the exact opposite of the feelings shared by the students who felt supported and encouraged to achieve in the classroom as described above. Thus, although favouritism may not be unique to the practice-based learning setting, it did have a substantial influence on the student experience and requires consideration.

This study is the first to identify the presence of favouritism in a kinesiology program in higher education although it is likely not the first time students have had such perceptions. According to Aydogan (2008), favouritism in education is a popular topic of discussion amongst institutions of varying levels, however, there are few study studies investigating the issue. Of those that do exist, researchers have examined factors that lead to favouritism (e.g. Al-Houli, 1999; Jussim, Smith, Madon, & Palumbo, 1998; Turula, 2002) and it has been suggested to have a negative influence on student learning in higher education (e.g. Roy & Roy, 2004), however, the impact of favouritism on student feelings, behaviour, and learning appears to have been neglected in the literature and thus, the study of favouritism in kinesiology and experiential learning environments is needed.

**Applied Recommendations**

Building on the results of this study and the associated literature, I would like to provide a number of recommendations for instructors and course curriculum developers of practice-based and experiential learning courses that emphasize group interaction and hands-on experience. These recommendations will be grouped using the emergent overarching themes described in the discussion.

**Connection.** Students’ connection with others and the learning material was a defining factor in their learning experience. Although a number of students believed that becoming comfortable with others was a gradual process that occurred over time, I believe that the class can be structured in ways to improve student interactions and speed up the process of feeling connected. First, as suggested by Diego, the first class could be used to create a comfortable
learning environment by allowing students to get to know each other better. This could be done through the completion of icebreaker or teamwork development activities. The time could also be used to provide instructors with the opportunity to get to know their students better. As will be discussed below, it may be important for instructors to develop an understanding of the learning styles, interests, and goals of students so that instruction can be modified to best suit the needs of all learners.

In practice, this may involve the instructor handing out an information form (see Appendix G for sample) for students to fill out when they first enter the classroom on the first class of the semester. This form will have questions related to learning style preferences, personal interests, variables that may influence students’ success in the classroom (e.g. being a commuter student or being a member of a varsity sports team), learning goals, and long term career goals. Students could then be asked to get into groups of three or four with other individuals in the class sharing a similar characteristic (e.g. learning style or favourite subject). While in the groups, students will be given a kinesiology scenario to discuss and solve (see Appendix G for sample). For example, students could be provided with a sample ‘client’ with a certain alignment issue and asked to identify the problem, name its source, and propose a way of correcting the misalignment. As first-year students, the learners likely will not be able to correctly answer the problem but the problem will give students an opportunity to discuss and collaborate with their peers and will give instructors an opportunity to understand the current level of understanding held by the students. The activity or scenario should provide students a glimpse into the learning objectives of the course. Instructors should collect the student information sheet following the class so that they are aware of student interests and learning styles.

Second, for the first six to eight weeks (at the discretion of the instructor), the instructor should assign groups for daily class activities such that all students work with a different group each day. Every other week, or more often if time permits, students should be given the opportunity to discuss the successes and challenges experienced within their groups. In these discussions, students should also be provided with the opportunity to reflect on their approach to learning and how their learning preferences influenced their learning within the class. For the first week, it is suggested that the instructor leads this discussion to provide students with an
example of effective discussion facilitation strategies. When used appropriately, purposeful reflection and discussion can act as a powerful platform for personal and professional development (Helyer, 2015) and can assist in the development of skills that will make students more employable following graduation. Critical reflection and collaboration with others are extremely important in kinesiology-related careers because, like all health-related disciplines, it is a dynamic and rapidly expanding discipline (Hoffman, 2009b) that requires team work and problem solving.

The practice-based learning environment is designed to develop the employable, practical skills that are often lacking in lecture-based kinesiology courses, therefore, it may be appropriate to require students to lead one discussion a semester as a part of their assessment. Students could be provided with resources outlining the importance of skills such as teamwork, collaboration, communication, or other kinesiology-related skills, and be asked to lead a discussion with their peers about the use of a particular skill in the class and in the kinesiology profession. By developing their ability to reflect on their actions and on the actions of others, students will be able to assess their experience in the classroom, which may enable them to continuously improve using the knowledge they are gaining from their experience (Helyer, 2015). Furthermore, requiring students to lead discussion provides them with the opportunity to take control of their learning and to address any issues that they may perceive in the learning environment. Critical reflection and discussion can cause feelings of vulnerability and discomfort amongst students (Urdang, 2010; Walker et al., 2013); however, it is a skill that can be improved with practice and is necessary to be successful in any kinesiology-related career (Hoffman, 2009b). Thus, providing students with the opportunity to begin developing these skills within the practice-based class will decrease their discomfort in the class and may prepare them for life after their undergraduate education.

Although it is recommended that groups be assigned for in-class activities, it is not recommended that groups be appointed for class assignments. Once in professional careers, students will likely be required to work with individuals they do not know well or that they do not like, and assigning groups for assignments could be viewed as a way to enhance these skills; however, based on the results of this study, students were often assigned to groups in which all participants did not contribute equally. When some students do not contribute equally (or do not
contribute at all) it defeats the purpose of assigning groups and encouraging people to work together. It also undermines students’ sense of control over their learning and success in the course. According to ELT, students need to be provided with opportunities to take control of their own learning (Kolb, 1984). Although at this point in their development, they are likely not yet prepared to understand what and how they should be learning (as was indicated by students in the study and by Kuh (2016)), they should be provided the opportunity to make decisions, such as with who they work, that influence their success or lack of success in the course.

Students need to understand why they are being assigned groups and how it is an opportunity for them to develop interpersonal skills that can be used in any future interaction, regardless of the career they decide to pursue. It should be explained to students that the ability to work with others is an increasingly important skill for success in the professional world (e.g. Caruso & Woolley, 2008; Mannix & Neale, 2005) and that the purpose of the course is not only to instill a certain amount of knowledge, but to develop transferrable skills that will afford opportunities following their degree in higher education. Results suggest that students may not see the importance of interpersonal skills such as leadership and as a result may not agree with it being a part of the course assessment. Therefore, it is important that the syllabus and course outline clearly state the break down of the course assessment and the purpose of assessing any interpersonal skills. Increased focus on the relevance of learning and importance of developing less refined approaches to learning will also assist in the maturation and development of students, as discussed below.

In order to encourage student connection with the learning material, it is important for instructors to understand the interests and aspirations of the students. This information can be found on the information sheets that students completed on the first day of class. As was noted in this study, some students saw the course relevant to any career in which personal interaction was involved, while others saw the course only useful for those interested in going into coaching or personal training, and one student even shared that he wanted to go into coaching but didn’t think the course aligned with his goals. By using the interests and goals recorded by the students, an instructor can cater the lesson plan to such interests. This could be done in a number of ways. First, if the instructor notices that most of the students are interested in pursuing health-related professions such as physiotherapy, chiropractic, or athletic therapy, the instructor could
introduce the topic using examples of its relevance to these careers. The instructor could also ask how the topic applies to those careers, which would encourage critical thinking skills and problem solving. Second, if the class is comprised of students interested in a wide variety of topics and careers, the instructor could provide the general explanation of the topic when the class is discussing together and then approach each group to discuss with students how the lesson applies to their goals. This was often my strategy when I was an instructor in the practice-based classes. By speaking with students individually or when they were working in small groups, I was able to inquire about their interests and aspirations. I could then evoke discussion about how the learning material might relate to these ideas. I found that when I did this, students were more likely to become engaged in the material and stay focused on the activity. Likewise, some students in the study shared that they found the one-on-one interaction with the instructor most beneficial to their learning. Fried (2001) supports this idea in his suggestion that when students see their teacher getting involved in the learning material and with the students, it sets a high standard for them and they are more likely to take their studies more seriously.

**Individuality of the learner.** It is recommended that students be provided with additional resources that target varying approaches to learning. Students’ learning style and phase of development emerged as predictors of their perception and experience in the course. Research suggests that students learn better when they are taught through their preferred learning style especially when adjusting to new experiences such as the commencement of higher education (Matthews, 1991). The practice-based learning environment will likely be better suited for students preferring the concrete experience or active experimentation approach to learning. While it is important for all students to develop these skills, by providing students with additional resources that target other approaches to learning, students will have the opportunities to access material in multiple formats, which encourage a deeper understanding of the material and increased enjoyment of the course. For example, as described by Sheryl and Noah, some students would prefer to see the material in written format and may not need to experience the activity in order to derive knowledge about the topic. Instructors or the course facilitator could also provide students with reading material, such as current academic articles, to supplement their learning in the class. These additional resources would not be included on examinations, but would provide students with an opportunity to see the material in different formats.
Likewise, video clips could also be posted for students that further support the topics discussed in class.

According to Fox and Ronkowski (1997) when instructors vary their teaching styles, students are provided with more opportunity to interact with the information. Furthermore, these authors noted that aligning instruction and learning styles can increase students’ sense of belonging, but noted that the notion of matching styles has been criticized for being too simplistic and may not be realistic because learning styles preferences are not necessarily static (Hyman & Rosoff, 1984). I also believe that aligning instruction style with students’ learning preference would be extremely complicated and difficult to apply in the practice-based setting. Therefore, along with providing supplementary material that aligns with different learning styles, it is recommended that instructors support their students in developing new approaches to learning.

Students will likely not enjoy being required to learn through less developed approaches; however, as suggested by Kolb (1984), such development is necessary to enhance learning. Snell (1992) noted that difficulty in the learning process is inevitable in work situations, and it is through these challenges that morality and character is built. Therefore, student discomfort is necessary throughout the learning experience, however, learning pains are only beneficial if as Snell (1992) explains, learners view their struggle as a learning opportunity. In order to support students in this process, instructors can acknowledge the students’ difficulty and explain to the learners why they have to struggle and how it will benefit them in the long run. For example, if I was instructing a class and I knew that the learning preference of one or a number of students did not align with the structure of the course, I would have a private conversation with each student. I would acknowledge the difficulty they might be having in the course and I would provide suggestions on how they might be able to modify their approach to better understand the material. I would also explain that if the student needed additional support they should contact me and I would work with them one-on-one after class or provide them with additional resources.

**Instructor and teaching strategies.** My first recommendation related to teaching and instruction for practice-based or experiential learning courses is the development of educational
workshops for all course instructors. Although some instructors may have an education degree or teaching background, such training is not necessary to obtain a position as an instructor or professor in a university setting (University professors, 2015). Additionally, given the novelty of the practice-based environment, instructors likely have not had experience teaching this type of course. Therefore, many instructors may not be versed in ways to motivate students, work with student groups of varying abilities, communicate effectively, employ multiple learning approaches, etc. It is recommended that such teaching workshops for instructors be instructor-led and be structured in a similar manner as the reflective discussions recommended above for students. These discussions can be used to provide instructors with the opportunity engage in reflective practice (Loughran, 2000). Although reflective practice carries multiple meanings (Finlay, 2008), used in this manner, it describes a critical dialogue with other professionals.

During these meetings, instructors will have the opportunity to discuss amongst each other specific strategies used or techniques employed to enhance learning in their classrooms. It is recommended that all instructors be provided with training on teaching in practice-based environments and that they are provided the opportunity to engage in reflective practice with other instructors throughout the semester.

In practice, this may look as follows: At the beginning of the year a schedule is created for the monthly reflective practice. It is possible that not all practice-based instructors will be teaching the same course, or that the practice-based curriculum only involve one instructor. In the case of the latter, it is recommended that the reflective practice seasons occur with the course developer or another colleague with whom the instructor is comfortable. Throughout the month prior to the meeting, instructors are encouraged to make note of any successes or challenges that they experienced within their classroom. Instructors will meet without anyone else present and critically reflect on the teaching and learning that occurred throughout the month. If any instructor has a success or challenge to share, the Gibbs (1988) Model for Reflection, which was built from ELT (See Figure 5.1), could be used to assist in the instructors’ critical evaluation of the situation. Reflective practice has become a key element in the field of continuing professional development (Eby, 2000) and could be used to enhance instructors’ competence and confidence in the classroom.
Based on the students’ perceptions of their instructors’ behaviour, some instructors utilized extremely effective teaching strategies. Tonya, for example, shared, “I think that what really helped was that my instructor would repeat (our answers) every single time.” By repeating the student answers, Tonya’s instructor was able to mitigate the problem of other students not being able to hear the answer due to the noise created by the fans or the public exercise area. Tonya also shared that her instructor utilized a number of other strategies to encourage the development of an open and accepting learning environment. During a reflective practice meeting, these behaviours could be shared and discussed such that other instructors could also make use of them in their classes.

In the other hand, Tonya also shared that when she inquired about why her mark had dropped so significantly as a result of her being late, her instructor replied, “I don’t know, I just inputted it in the system.” To me, this response is unacceptable and suggests that the instructors may not be aware of the purpose of student assessment. Although this is likely untrue, it is important that instructors understand the importance of the assessment and the learning material. When instructors understand the relevancy of the course and its assessment to the development of the students, they will likely be more able to explain the connection between learning and students’ interests to the students, which as was determined in this study and is supported by Kuh (2016) is essential in encouraging student motivation, engagement, and learning.

Learning Space. The learning space includes the perceived space, the conceived space, and the lived space of the classroom (Lefebvre, 1991). Recommendations for all aspects are discussed below.

Perceived space. In order to establish a beneficial physical environment in the practice-based classroom, instructors must be aware of the potential influence of noise and lack of space on student learning. These issues can be discussed in the above-recommended teacher reflection discussions and techniques to enhance student motivation, engagement, and time on task could be discussed (e.g. having instructors repeat student answers so that all students can hear). In addition, opportunities to sit on chairs or benches during group discussion should be provided to students. When students are comfortable in their learning, they are more likely to stay on task, become engaged, and be motivated to learn.
Figure 5.1  Gibbs (1988) Model for Reflection

Conceived space. Providing students with options may help establish a positive learning environment. However, instructors should also make a concerted effort to highlight the reason and potential benefits as to why options are being given. For example, if students are required to complete four group assignments throughout the year, they could be given four or five options through which to present their knowledge (e.g. visual presentation, written report, case study, video diary, photo collage, etc….) Given the developmental benefit of strengthening less refined approaches to learning, students could be required to use all of the presentation options over the course of the year, but they are able to choose when they utilize each approach. If this strategy is used, it is likely important that students are aware of each assignment at the beginning of the year so that they can plan accordingly. Using this approach, students are able to utilize their preferred method of learning earlier in the semester when they are still in the process of getting comfortable in the learning environment. Being able to utilize their preferred approach to learning early in the semester may help increase their feelings of belonging in the class and increase the likelihood that they will be content with the assessment format.
In order for assessment to be carried out in this fashion, some adjustments may be required to the assessment format utilized in the practice-based course explored in this thesis. As a previous instructor of the course, I know that the intention of the course assessment was to align with the tenets of experiential learning and the strategies listed below. Unfortunately, based on the narratives of the participants in this study, the assessment of the course may not have had the desired impact on student learning or success in the classroom. Wurdinger (2005) and Moon (2004) have proposed the following strategies to assess experiential learning. Under each strategy, I have included an example of how it could be incorporated into the assessment of the practice-based course:

- Students create criteria by which their work will be assessed,
  - This suggestion may be most appropriate for the ‘leadership’ aspect of the assessment. On the first day of class, following the ‘get to you each other’ activity, it is suggested that each class has a discussion about what interpersonal skills are necessary in being successful in a kinesiology-related career. Instructors could make a list of the skills suggested by the students (e.g. communication, collaboration, respect for others, etc...) and the class could decide how they think they should be assessed in the classroom. Given the role of interaction with others in nearly all kinesiology-related skills, it may even be appropriate for a component of this mark to be self- or peer-assessed. This strategy could benefit student learning for a number of reasons. First, through discussion about the skills needed in kinesiology-related careers, students will become more aware of why they are being assessed on their interpersonal skills. Second, being involved in the process of creating the marking rubric will make students feel like collaborators in the creation of their learning (e.g. autonomy, belonging, connection) and could increase motivation, engagement, and interest in the course. Third, in allowing students to assess themselves and others in the course, learners will begin to develop critical thinking and reflection skills that will benefit them in the future, and will also draw
their attention to specific aspects of the learning environment and their influence in the class.

• Through use of a reflective journal or portfolio,
  
  o A reflective journal or portfolio could be used as one of the options for assessment presentation. Students could collect images from newspapers or magazines, or take pictures of people exercising (with permission) or doing everyday activities, and be required to write a reflection on how the photo relates to the learning material in the class. By requiring students to apply their learning to real life scenarios, learners will develop an understanding of its relevance and will likely become more interested in the material.

• Reflection on critical events that take place during the experience,
  
  o Students described having the opportunity to discuss a number of reflection questions following the activities completed in the course, thus the practice-based course was utilizing this strategy. Results indicate that students found the reflection one of the most beneficial aspects on the class to their learning.

• Final assessment of essay, report, or presentation on what has been learned,
  
  o In the practice-based classroom, this could be completed in the form of a large case study or kinesiology-related scenario, for which the students are required to create a solution utilizing the knowledge gained through their experience during the semester.

• Inclusion of self-awareness tools and exercises such as questionnaires about learning patterns,
  
  o The information form completed on the first day of class could be used to provide students about information on their learning style as well as on
learning strategies that best align with their approach to learning. The student reflection discussion on the success of the group work occurring in the class will also serve this purpose. Allowing students to become more aware of their behaviour, and its influence on others and on their learning will instill deep reflection and critical thinking skills that will benefit students in careers following graduation as well as in their personal lives (Finlay, 2008).

- Short answers to questions of a ‘why’ or ‘explain’ nature (rather than the regurgitation of knowledge),
  
  - Based on my experience in the course and through discussion with the course developer (Frost, 2016b), I know that at present, majority of the assessment in the practice-based course aligns with this recommendation. Weekly assessments are comprised of questions that require students to explain and provide rationale. In addition, the group assignments require students to collect data during class and to analyze and explain the data in a report, and the final examination is nearly entirely short-answer questions divided into a number of case studies. Students are required to utilize the information that they are given about an individual or situation and answer questions based on this knowledge.

- Opportunity for one-on-one oral assessments with the instructor,
  
  - In the practice-based course, this could be utilized in the form of a reflection discussion, in which the student presents a portfolio of how the course material aligns with their future goals. Students could also reflect on how the course aligned with their preference for learning and could provide feedback on what worked well and what didn’t work well for them in the class. Unfortunately, given time restrictions, it is likely that it would not be possible to hold these discussion during class time and therefore, they would have to be schedule outside of the classroom times. These discussions could also be an opportunity for instructors to develop
more insight into the students’ perception of the learning environment, which in turn could be used to enhance their teaching style and increase student enjoyment in the class (Weimer, 2010). Furthermore, requiring students to provide feedback and reflection on how they learned in the class will help students develop the ability to provide feedback, which is an important skill in the professional world (e.g. Lambert et al., 2002; Niemeijer, Smits-Engelsman, Reynders, & Schoemaker, 2003).

- Projects designed to develop ideas further, and
  
  o This might be something that is incorporated into upper year practice-based courses. The first-year curriculum could be used to develop a general understanding of kinesiology-related skills and in subsequent years students could be required to develop an intervention or program that could be applied to a certain group of individuals in the population (e.g. the elderly, professional athletes, youth).

- Self- and/or group-evaluation of a task or skill performed.
  
  o As discussed above, it would likely be best to incorporate self- and peer-assessment into the assessment of interpersonal skills within the classroom.

**Lived space.** Results indicate that course instructors have a large influence on the lived space of the student learning experience in the practice-based course. Based on a number of students’ description, it is recommended that instructors provide one-on-one instruction to students that may be having difficulty developing an understanding of the concepts being discussed. Unfortunately, as indicated by Lara, she did not have as much previous knowledge as other students and this sometimes made the course more difficult to understand. One-on-one instruction will provide students with the necessary knowledge to make sense of the classroom experiences. Furthermore, showing concern for the students’ wellbeing and learning may increase students’ sense of belonging and safety in the classroom (Mart, 2013).
It is also recommended that instructors collect feedback from students regarding their experience in the classroom. This is a strategy that I have employed in the past and I found that when I did this, students felt more connected to me as their instructor as well as to their learning. It is important that feedback collected be acknowledged and addressed in the classroom. Student feedback can be used to make meaningful changes in the classroom (Weimer, 2010), however not all student suggestions for change will be reasonable, realistic, or feasible. When students have the opportunity to provide feedback, even when it is not appropriate, and it is discussed openly in the classroom, students will feel that their opinions matter and will develop an understanding of why some suggestions may be appropriate and some may not. As suggested by Tonya, when her instructor collected feedback, it made her feel like her experience in the course mattered.

If instructors focus on the above recommendations relating to connection and belonging in the classroom, it is likely that this will reduce the students’ perception of preferential treatment in the classroom. Roy and Roy (2004) also provide recommendations that may be helpful. First, as was suggested in the section regarding assessment, it is suggested that well-defined rules for classroom behaviour and assignments be created. As suggested above, this may involve students assisting in the development of the marking rubric. Second, instructors should be encouraged to explain that positive feedback does not equate to preferential treatment in marking. Feedback can be a powerful tool to promote student learning within the classroom (Hattie & Timperley, 2007) and instructors are encouraged to provide positive and constructive feedback to students. However, it may be appropriate for instructors to have a discussion with students at the beginning of the semester explaining their approach to instruction and the purpose of their feedback for student learning in the classroom (e.g. “Feedback will be used as a means of guiding your learning within the classroom. The feedback provided can be used for you to make changes that result in greater success in the course, but any positive feedback that is provided should not be viewed as preferential treatment in course assessment”). Finally, comparisons of students should not be made in the classroom. As indicated by Tessa, when her instructor told her that she should ‘be more like these students’, Tessa felt unappreciated and discouraged in the classroom. Although sometimes, such comments encouraged Tessa to become engaged, for the most part, it made her not want to be in the class (lack of belonging).
Overall, the main theme that I would like to highlight through all my recommendations is the power and importance of **why**. The importance of relevance, meaningfulness, and relatability cannot be overstated (e.g. Assor et al., 2002; Hutchinson, 2003; Kuh, 2016). As author, speaker, and consultant, Sinek (2011) wrote, “WHY is the thing that inspires us and inspires those around us” (p. 247). For this reason, highlighting the relevance, meaning, and purpose (i.e. the “why”) of course curriculum and course assessment is the first step in creating a beneficial learning experience for students and instructors.

**Considerations**

Because all participants in the study volunteered to participate, it is possible that highly engaged, outgoing, and studious personalities were overrepresented. Although most enjoyed the class and were highly motivated to succeed, they did not believe that all students shared these feelings. Participants’ pleasure in the course may have influenced the type or depth of feedback provided.

While the volunteer nature of this study is something that must be considered when interpreting the results, it is not necessarily a limitation when viewed through a social constructivist lens. Study participants shared many novel insights when reflecting on the course and when explaining the differing views of other students. Therefore, I am confident that the results of this study have accurately captured students’ perception of the practice-based learning environment in this kinesiology program.

It is also important to understand that the students’ perception of the learning experience may not align with the intentions of course facilitators or course instructors. For example, in general, students provided negative feedback on the course assessment and held a strong belief that marks varied between classes when in fact the marks were consistent between course sections (Frost, 2016b). In addition, many students believed that their leadership evaluation was dependent on how much they answered questions in class, when again, this was not the intention (Frost, 2016b).
The students’ perceptions provide an indication of the actual impact the course is having on student learning. Despite the positive intentions of the course instruction and curriculum, in my opinion, it is the impact that is more important. Understanding the students’ perception is the first step in determining the success of any learning environment and in the case of a misalignment between the course intentions and the student perceptions, students’ perceptions could be used to promote meaningful change within a learning environment (Weimer, 2010).
Chapter 6: Conclusions

Most experiential learning research has focused on experiential learning styles or the experiential learning cycle (e.g. Brock & Cameron, 1999; Castro & Peck, 2005; Claxton & Murrell, 1987; Sharp, 2000; Sutliff & Baldwin, 2001). To my knowledge, this is the first study to explore the student experience through the perspective of the six central tenets of ELT. Furthermore, there is limited research on teaching and learning in undergraduate kinesiology courses that require students to develop practical skills relating to the observation, assessment, and demonstration of human movement (Jenkins & Haiback, 2016). It is becoming more popular to make use of non-traditional, practice-based learning environments, which utilize the tenets of ELT to develop curriculum and teaching strategies, yet there is still a general misunderstanding amongst kinesiology faculty members on how to use experiential learning to enhance student learning (Kelsey & Chamberlin, 2009). This thesis was designed to improve our understanding of the student learning experience in kinesiology courses that are structured through use of ELT (e.g. practice-based learning).

This was a qualitative study that was theoretically grounded in the six tenets of ELT and conducted from the viewpoint of social constructivism. Semi-structured interviews were used to gather information regarding students’ experience. Eleven (six female and five male) full-time, first-year kinesiology students, representing a variety of cultural backgrounds, parental educations, living situations, and financial backgrounds participated in this study.

Although the student experience was shown to vary between participants due to previous knowledge, personal preferences, and learning style, four primary themes emerged within all participant narratives: 1) the role of connection; 2) the importance of student individuality; 3) the influence of the instructor; and 4) the significance of the learning space. Based on the ideas presented by the participants, a number of recommendations aimed at enhancing the student learning experience in practice-based courses were suggested. The recommendations provided highlight the importance of explaining to students and instructors why the material is being taught, which includes explanation of the relevance to current interests and future aspirations and the purpose of the assessments and course objectives for student learning and development.
A number of avenues for future research were suggested including the role and development of belonging and connection within practice-based learning environments, the role of personal development in practice-based learning, effective teaching strategies for physical activity learning environments, the experience of less motivated and less interested students, the influence of assessment on student emotions and behaviour, and how to best assess practice-based learning environments.

Overall, the findings of this thesis have highlighted several factors that influence students’ perception of learning in a practice-based environment. Results suggest that students enjoyed the hands-on, experiential nature of the course and several key strategies utilized by instructors; however their perception of the assessment and certain instructor behaviour reportedly had a negative influence on their learning. Although many aspects of the course currently align with ELT, it may be appropriate to make some modifications that increase student autonomy and connection to their learning (e.g. self- and peer- evaluation and involvement of students in rubric creation). Opportunities for instructors to engage in reflective practice may also allow the sharing of strategies that have worked in their classes, while providing a supportive network where teachers can openly discuss any successes or challenges that might be occurring. Adopting this type of team teaching approach may provide an opportunity for instructors to become more confident and competent in creating safe and inclusive learning spaces so all students have the opportunity to thrive.
References


Bullen, P. E. (2007). *Facing tolerance: Toronto Black university students speak on race, racism, and inequity*. (Ph. D), University of Toronto, Toronto, ON.


Columbia, SC: National Resource Center for the First-Year Experience & Students in Transition, University of South Carolina.


*Fostering student engagement campus-wide: Annual results 2011.* (2011). Retrieved from Bloomington, IN:


Frost, D. M. (2016b) *Practice-based learning amongst first-year students/Interviewer: S. Bronson*. Faculty of Kinesiology and Physical Education, University of Toronto, Toronto, ON.

Future graduate students. (2016).


Jenkins, J., & Haiback, P. (2016). Kinesiology on the move: One of the fastest (but often misunderstood) majors in academia. Retrieved from


Hippel (Eds.), *The social outcast: Ostracism, social exclusion, rejection, and bullying* (pp. 131-154). New York, NY: Psychology Press.


van Ingen, C. (2003). Geographies of gender, sexuality and race reframing the focus on space in sport sociology. *International Review for the Sociology of Sport, 38*(2), 201-216.


Appendix A: Letter of Information and Consent Forms

Letter of Information

Study Title

Exploring the first-year student learning experience in an experiential learning course.

Background and Study Purpose

The student learning experience is influenced by several factors. Developing an understanding of the student experience may help teachers and course instructors maximize the benefit of experiential-based learning environments for kinesiology students. Therefore, the purpose of this study is to explore the first-year students’ experience in KPE 181 – Fundamental Principles of Fitness and Exercise. We anticipate that the findings will help to structure and deliver practice-based kinesiology courses to accommodate a variety of learning styles.

Study Outline

As a potential participant in this study, you will be asked to complete two online questionnaires (one containing questions related to your personal background and experiences in learning and the other containing questions relating to your preferred learning style). The website link is listed below. Your responses to the questionnaires will be kept confidential and have no impact on your grades in the classroom. Results will be used as a means of selecting participants for the interview portion of the study. The information collected in the interviews will be strictly used as feedback to better structure the learning environment in future course offerings. The interviews will take place following the course examination (April/May). Within one week of the interview, you will be sent a summary of the interview to review and return. The purpose of this is to ensure that the researcher’s representation of your experience is accurate.

Risks and Benefits

The questions asked in this study will be related to your experience in KPE 181. As a result, it is natural to worry that a response will be passed to your instructor or influence your marks in some way. Please be assured that your responses will be kept confidential and in no way be used to influence your status in the course. The results from this study will be used to yield insight into the process of learning so that future course instruction may be enhanced to better meet your needs as a student. Essentially, you are being asked to collaborate in the process of enhancing the student learning experience.

Confidentiality and Privacy of Information

If you agree to participate in the questionnaires, a unique identification code will be assigned to you. Your data will be linked with this code. Only the graduate student conducting this research study will have access to the names of participants and will keep this information in a password protected file on a password protected computer for a minimum of 5 years. Following the interview, the digital recording will be transcribed and a pseudonym name will be used in the study publication.

If you are in any way uncomfortable with the fact that your data may be used please know that you have the right to refuse to participate or to withdraw at any time (see below).

Participation
You are eligible to participate if you are currently enrolled in KPE 181 – *Fundamental Principles of Fitness and Exercise*, in your first year in the program, and completed KPE 180 - *Introduction to Movement Observation and Evaluation* in the Fall 2015 semester. As a participant in this study, you have the right to refuse to participate and to withdraw your consent at any time without penalty. To do so, you can send an email to the investigators (see below) saying: “I no longer wish to participate in the study titled: “Exploring the student learning experience in an experiential learning course”. Your participation is voluntary and there will be no impact on your grades.

**Inquiries**

If you have any further questions or would like to receive more information about this study, please contact the student investigator (Stefanie Bronson). If you have questions about your right as a research participant, please contact the *Office of Research Ethics*.

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Office of Research Ethics University of Toronto McMurrich Building, 2nd Floor 12 Queen’s Park Crescent West Toronto, ON M5S 1S8  
Phone: 416-946-3273 E-mail: ethics.review@utoronto.ca
Online Survey Consent

Thank you for considering to participate in a study entitled "Exploring the first-year student learning experience in KPE 181". This work is being conducted by master’s graduate student, Stefanie Bronson, MSc (In Progress). Stefanie is supervised by Dr. D. Frost, Ph. D. Please read through the details of the study carefully. If you have any further questions or would like to receive more information, please contact Stefanie by email (stefanie.bronson@utoronto.ca). If you have any questions about your rights as a research participant, please contact the Office of Research Ethics (ethics.review@utoronto.ca or 416-946-3273).

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The student learning experience is influenced by several factors. Developing an understanding of the student experience may help teachers and course instructors maximize the benefit of experiential-based learning environments for kinesiology students. Therefore, the purpose of this study is to explore the first-year students’ experience in KPE 181 – Fundamental Principles of Fitness and Exercise. We anticipate that the findings will help to structure and deliver practice-based kinesiology courses to accommodate a variety of learning styles.

Study Outline
As a participant in this study, you will be asked to complete two online questionnaires (one containing questions related to your personal background and the other containing questions relating to your preferred learning style). Your responses to the questionnaires and any information collected in the interview will be kept confidential, have no impact on your grades in the classroom, and be used strictly as feedback to better structure the learning environment in the future. Following questionnaire completion, twelve to fifteen students will be invited to participate in an in-person interview. During the interview, you will be asked to answer questions related to your experience in the course and your feedback for the course instruction and administration. The interviews will take place following the course examination (April 11), ideally between mid-April and early June. Each interview will be an hour to an hour and a half in length and will be held in a conference room in the Athletic Centre. Within one week of the interview, you will be sent a summary of the interview to review and return. The purpose of this is to ensure that the researcher’s representation of your experience is accurate.

Risks and Benefits
The questions asked in this study will be related to your personal characteristics and background, as well as your preferences for different learning styles. As a result, it is natural to worry that a response will be passed to your instructor or influence your marks in some way. Please be assured that your responses will be kept confidential and in no way be used to influence your status in the course. The results from the questionnaire will be used to select a diverse sample for the interview portion of the study and for descriptive purposes in the final publication.

Confidentiality and Privacy of Information
If you agree to participate in the questionnaires, a unique identification code will be assigned to you. Your data will be linked with this code. Only the graduate student conducting this research study will have access to the names of participants and will keep this information in a password protected file on a password protected computer for a minimum of 5 years. Following the
interview, the digital recording will be transcribed and a pseudonym name will be used in the study publication.

If you are in any way uncomfortable with the fact that your data may be used please know that you have the right to refuse to participate or to withdraw at any time (see below).

Participation
You are eligible to participate if you are currently enrolled in KPE 181 – Fundamental Principles of Fitness and Exercise, in your first year in the program, and completed KPE 180 - Introduction to Movement Observation and Evaluation in the Fall 2015 semester. As a participant in this study, you have the right to refuse to participate and to withdraw your consent at any time without penalty. To do so, you can send an email to the investigators (see below) saying: “I no longer wish to participate in the study titled: “Exploring the student learning experience in an experiential learning course”. Your participation is voluntary and there will be no impact on your grades.

Consent to Participate
By agreeing to participate, I confirm that:

- I have read this information form and understand the potential risks and benefits associated with participation in this study, and
- I have had the opportunity to ask questions about this study and received satisfactory answers to my questions, and
- I am aware that I can withdraw from the study without adverse consequences at any time by not submitting my survey responses, and
- I agree to participate as a volunteer in this study.

I understand the details of this study and agree to participate *This question is required.

Yes
No
Interview Consent Form

Study Title

Exploring the first-year student learning experience in a practice-based learning course.

Background and Study Purpose

The student learning experience is influenced by several factors. Developing an understanding of the student experience may help teachers and course instructors to better promote learning and to maximize the benefit of experiential learning environments for kinesiology students. The purpose of this study is to explore the first-year students’ experience in a practice-based course. We anticipate that the findings will help to structure and deliver the course material to accommodate a variety of learning styles.

Study Procedures

As a participant in this interview, you will be asked to answer questions related to your experience in KPE 181 - Fundamental Principles of Fitness and Exercise and to provide feedback about the course instruction and administration. Each participant will interviewed once on the St. George Campus of the University of Toronto in the Clara Benson Building (320 Huron Street) and each interview will be an hour to an hour and a half in duration. Within one week of the interview, you will be sent a summary of the interview to review and return. The purpose of this is to ensure that the researcher’s representation of your experience is accurate.

Risks and Benefits

The questions asked in this study will be related to your experience in the KPE 181. As a result, it is natural to worry that a response will be passed to your instructor or influence your marks in some way. Please be assured that your responses will be kept confidential and in no way be used to influence your status in KPE 181. The results from this study will be used to yield insight into the process of learning so that future course instruction may be enhanced to meet your needs as a student. Essentially, you are being asked to collaborate in the process of enhancing the student learning experience. Furthermore, this is largely an opportunity for you to provide your feedback and input into the construction of the course. Both researchers welcome all feedback, whether constructive to identify something that could be improved, or reinforcement to identify something that was done well.

Confidentiality and Privacy of Information

If you agree to participate in the questionnaires, a unique identification code will be assigned to you. Your data will be linked with this code, but your personal information will not be linked with the data. Only the faculty investigator will have access to the names of participants and will keep this information locked in his personal filing cabinet for a minimum of 5 years. Following
the interview, the digital recording will be transcribed and a pseudonym name will be used in the study publication.

Your participation in this study is voluntary. Should you wish to have your data removed from the study, investigators ask that you contact them via the contact information below. If you wish to withdraw from the investigation, your data will be removed from the analyses and your questionnaires will be destroyed. Your decision to withdraw from this study will be kept anonymous from your instructors and will in no way impact your mark in the course.

**Participation**

You are eligible to participate if you are currently enrolled in KPE 181 – *Fundamental Principles of Fitness and Exercise*, are currently in your first year in the program, and if you completed KPE 180 - *Introduction to Movement Observation and Evaluation* in the Fall of 2015. As a participant in this study, you have the right to refuse to participate and to withdraw your consent at any time without penalty. To do so, you can send an email to the investigators (see below) saying: “I no longer wish to participate in the study titled: “Exploring the student learning experience in an experiential learning course”. Your participation is voluntary and there will be no impact on your grades.

The Research Ethics Board (REB) has approved the procedure for this study.

**Inquiries**

If you have any further questions or would like to receive more information about this study, please contact the student investigator (Stefanie Bronson). If you have questions about your right as a research participant, please contact the *Office of Research Ethics*.

Stefanie Bronson  
Department of Kinesiology and Physical Education, stefanie.bronson@utoronto.ca

David Frost, PhD (Faculty-investigator), Assistant Professor  
Department of Kinesiology and Physical Education  
Email: d.frost@utoronto.ca  
Phone: +1 (416) 946-5562

Or the University of Toronto’s REB:
Daniel Gyewu, Research Ethics Board Manager, Office of Research Ethics, 12 Queen’s Park Crescent West, 2nd Floor, Email: ethics.review@utoronto.ca
http://www.research.utoronto.ca/for-researchers-administrators/ethics/

I understand the nature of this study and agree to participate.

__________________________  ________________________________  ______
Student Signature  Name  Date
Appendix B: Learning Style Document Sent to Volunteers (sample)

Information on Your Learning Style

Your Learning Preference Scores:
Concrete Experience (CE): 21
Reflective Observation (RO): 29
Abstract Conceptualization (AC): 27
Active Experimentation (AE): 43

Concrete Experience (feeling):
- This approach relies on engaging with experiences to develop an understanding.
- Individuals preferring CE rely on their intuition, they interact well with others, and are able to adapt to unstructured environments.

Abstract Conceptualization (thinking):
- This approach relies on logic, theory, and concepts – a pure scientific approach
- Learners preferring AC are skilled at meticulous design and enjoy analyzing various concepts and ideas.

Reflective Observation (watching):
- This approach emphasizes descriptive observations of experiences.
- Such learners seek to understand why or how an event occurred by reflecting on what happened.
- Individuals skilled at RO are able to identify different perspectives and use thoughtful judgment.

Active Experimentation (doing):
- This approach requires experimentation for the sake of altering an environment of experience.
- AE strives to create practical, effective solutions to problems.
- AE learners take risks for the sake of achieving learning goals.

Learning Styles

Diverging (feeling and watching – CE/RO)
- Imaginative and mindful of meaning and values
- Strengths in generating and evaluating alternatives
- Preference for watching over doing

Perform best:
- In idea generating situations (i.e. brainstorming)
- In groups
- When they can talk through an idea and use creativity to come to a solution
- When they receive personal feedback

Assimilating (watching and thinking – AC/RO)
- Preference for concise, logical approach to learning – Strengths in understanding a large amount of data and organizing in clear, logical format
- Prefer ideas and concepts over people and relationships

Perform best:
- When they can work with logically sounds theories and ideas as opposed to approaches based on practical value
- When they can do readings, listen to lectures, explore analytical models, and are given the opportunity to think things through
**Converging (doing and thinking – AC/AE)**
- Emphasizes technical tasks over social/interpersonal settings
- Good problem solvers and decision makers
- Strengths in reasoning and applying ideas to practical situations

*Learn best:*
- Completing technical tasks
- When able to experiment with new ideas and work with practical applications

**Accommodating (doing and feeling – CE/AE)**
- Action and people oriented
- Willing to take risks and implement new strategies
- Strengths in executing plans, being open to new experiences, and adapting to change

*Learn best:*
- When they can rely on their ‘gut’ feelings rather than logical analysis.
- When they can talk ideas over with others

Making use of all four approaches to learning will maximize your learning potential and strengthen your understanding of the learning material, however, in order to structure your studying to align with your preferred learning style, the following may be helpful.

**Diverging (feeling and watching – CE/RO)**
- Find a video that explains the topic and use the information provided to have a conversation about the material with someone else.
- Explain or try to teach the material to someone else – other students, your partner, or your parents – talking about and explaining the material will help you develop a deeper understanding of the topic.

**Assimilating (watching and thinking – AC/RO)**
- Read and watch everything you can about the material of interest. Give yourself time to think through the material covered. After giving yourself time to process and digest the information, create tables, lists, or diagrams to summarize your understanding of the material.

**Converging (doing and thinking – AC/AE)**
- Once you have developed a general understanding of the learning material (using the suggestions above), challenge yourself to apply this material to practical settings or real-life problems (e.g. how would the ACL rehabilitation process occur in real-life, what plan could you make to outline this process?)
- Create a number of sample questions to test yourself on the material, use these questions to strengthen your understanding.

**Accommodating (doing and feeling – CE/AE)**
- Structure your learning or studying sessions around conversing with others about the material. Ask your study partner questions to deepen your thinking of the material.
- Writing out a study calendar or timeline will also be extremely helpful for accommodating learners

Information summarized from:
Appendix C: Demographic and Learning Style Questionnaires

Questionnaire #1 – Modified Demographic Section of National Survey of Student Engagement (Kuh, 2001)

1. Write your year of birth:
2. Your sex:
   a. Male
   b. Female
   c. Transgender
   d. Prefer not to say
3. Are you an international student or foreign national?
   a. Yes
   b. No
4. What is your racial or ethnic identification? (Mark only one)
   a. American Indian or other Native American (Indigenous)
   b. Asian, Asian American, or Pacific Islander
   c. Black or African American
   d. White (non-Hispanic)
   e. Mexican or Mexican American
   f. Puerto Rican
   g. Other Hispanic or Latino
   h. Multiracial
   i. Other
   j. I prefer not to respond
5. What year are you in?
   a. First
   b. Second
   c. Third
   d. Fourth
   e. Fifth or above
6. Did you complete KPE 180 – Introduction to Movement Observation and Evaluation in Fall 2015?
   a. Yes
   b. No
7. Did you begin higher education at the University of Toronto?
   a. Started here
   b. Started elsewhere
8. Since graduating from high school, which of the following types of schools have you attended other than the University of Toronto? (Mark all that apply.)
   a. Vocational or technical school
   b. 4-year university other than this one
   c. College
   d. None
   e. Other: _______________
9. Thinking about this current academic term, how would you characterize your enrolment?
10. Are you a member of a social fraternity or sorority?
   a. Yes
   b. No

11. Are you a student-athlete on a team at the University of Toronto?
   a. Yes
      i. On what team?
   b. No

12. What have most of your grades been up to now at the University of Toronto?
   a. A+
   b. A
   c. A-
   d. B+
   e. B
   f. B-
   g. C+
   h. C
   i. C-
   j. C – or lower

13. Which of the following best describes where you are living now while attending university?
   a. Dormitory or other campus housing (not fraternity/sorority)
   b. Residence (house, apartment, etc.) within walking distance of the institution
   c. Residence (house, apartment, etc.) within driving distance of the institution
   d. Fraternity or sorority
   e. None of the above

14. Are you currently receiving OSAP?
   a. Yes
   b. No

15. Are you currently registered with Accessibility Services?
   a. Yes
      i. Do you receive accommodations for this class?
      ii. No
      iii. Prefer not to answer

16. What is the highest level of education that your parent(s) completed? (Mark one box per column.)
   a. Father:
      i. Did not finish high school
      ii. Graduated from high school
      iii. Attended college but did not complete degree
      iv. Completed an associate’s degree (A.A., A.S., etc…)
      v. Completed a bachelor’s degree (B.A., B.S., etc…)
      vi. Completed a master’s degree
      vii. Completed a doctoral degree
   b. Mother:
      i. Did not finish high school
      ii. Graduated from high school
      iii. Attended college but did not complete degree
      iv. Completed an associate’s degree (A.A., A.S., etc…)
      v. Completed a bachelor’s degree (B.A., B.S., etc…)
      vi. Completed a master’s degree
      vii. Completed a doctoral degree
Questionnaire #2 – Kolb Learning Styles Inventory (Kolb, 2005)

On the following pages you will be asked to complete the sentences that describe learning. Each has four endings. To respond to these sentences, consider some of the recent learning situations you’ve just thought about. Then rank the endings for each sentence according to how well you think each ending describes the way you learned. Following the example as shown below, select 4 next to the sentence ending that describes how you learned best, and so on down to 1 for the sentence ending that seems least like the way you learned.

• Be sure to rank all the endings for each sentence ending.
• Each ranking must be a different number.
• When you are finished with each question click Next Question.
• Do not use the Back / Forward or Refresh buttons on your browser.

Hint: Some people find it easiest to decide first which phrase best describes them (4–careful) and then to decide which phrase is least like them (1–fast). Then they give a 3 to that word in the remaining pair that is most like them (3–logical) and a 2 to the word that is left over (2–happy).

1. When I learn:
   a. I like to watch and listen
   b. I like to deal with my feelings
   c. I like to think about ideas
   d. I like to be doing things

2. I learn best when:
   a. I trust my hunches and feelings
   b. I rely on logical thinking
c. I listen and watch carefully
d. I work hard to get things done
3. When I am learning
   a. I tend to reason things out
   b. I am quiet and reserved
   c. I have strong feelings and reactions
   d. I am responsible about things
4. I learn by:
   a. Doing
   b. Watching
   c. Feeling
   d. Thinking
5. When I learn:
   a. I am open to new experiences
   b. I analyze ideas
   c. I like to try things out
   d. I examine a lot of information
6. When I am learning:
   a. I am a logical person
   b. I am an active person
   c. I am an intuitive person
   d. I am an observing person
7. I learn best from:
   a. Personal relationships
   b. Observation
   c. A chance to try out and practice
   d. Rational theories
8. When I learn:
   a. I feel personally involved in things
   b. I like ideas and theories
   c. I take my time before acting
   d. I like to see results from my work
9. I learn best when:
   a. I rely on my ideas
   b. I rely on my feelings
   c. I rely on my observations
   d. I can try things out for myself
10. When I am learning:
    a. I am a reserved person
    b. I am a responsible person
    c. I am an accepting person
    d. I am a rational person
11. When I learn:
    a. I get involved
    b. I am practical
    c. I like to observe
The remaining eight items in the inventory assess how you learn in different situations in your life. For each of these situations, try to think of actual examples in your life before you rank the four choices. For example, if the general situation described in the item is "When I try to complete a task on time" your actual life examples might be "finishing my term paper", "preparing my taxes on time" and so on.

With your examples in mind, rank the four sentence endings as you have done in the previous items, giving a 4 to the item that best describes how you deal with the situation and a 1 to the item that least describes your response.

13. When I start something new:
   a. I try to be practical and realistic
   b. I imagine different possibilities
   c. I rely on my feelings to guide me
   d. I analyze the situation

14. When I decide between two alternatives:
   a. I collect information about them
   b. I try them out
   c. I establish criteria to evaluate them
   d. I rely on what feels right to me

15. When I plan something:
   a. I am organized and logical
   b. I am goal and action oriented
   c. I consider all possibilities
   d. I am open to making changes

16. When I learn in a group setting:
   a. I sit back and listen
   b. I look for experts
   c. I jump in and contribute
   d. I get to know everyone

17. When I try to influence someone
   a. I share my feelings with them
   b. I take initiative to talk to them
   c. I explain my ideas logically
   d. I try to understand their point of view

18. When I evaluate an opportunity
156

19. When I analyze something
   a. I search for its practical applications
   b. Intuition is often my best guide
   c. I look at it from different perspectives
   d. I think about how the basic principles relate to each other

20. When I want to know someone better
   a. I pay attention to their feelings
   b. I analyze why they act the way they do
   c. I listen to them
   d. I do things for them
Appendix D: Full Interview Guide

These questions will act as a guide for the interviews that will be conducted. The interviewer will use follow up questions and prompts in addition to what is listed if she feels there is opportunity to elaborate on the student’s learning experience. The potential prompts have been listed.

Introduction

“I am a Master’s student in in the Faculty of Kinesiology and Physical Education and I am conducting a number of interviews with students such as yourself in order to better understand first-year students’ experience in KPE 181. My hope is to speak with you about your learning experience in the practice-based course. As was mentioned in the consent letter, everything we talk about today is completely confidential. Only I will know your personal information. The audio recording will be stored under a pseudonym name on a password-protected computer so your instructor or the course coordinator (Dr. Frost) will not have access to any of the information discussed. My goal is to use what we talk about today to help improve the learning experience for students in the faculty’s practical curriculum. I am hoping that you will feel comfortable discussing both the positive and negative aspects of your learning experience. Do you have any questions before we begin?

Student written consent form – Student will be asked to sign the final consent form before the interview begins.

Introduction Questions

1. Tell me about your experience in KPE181 “Fundamental Principles of Fitness and Exercise”. What are you general opinions of the course?

2. What interested about the course before taking it?

3. What are the main learning outcomes you achieved as a result of taking this course?
Main Questions

1. What knowledge and experience did you have on the topic of “fitness and exercise” before taking the course?

Potential Prompts:

• Did you have any informal education like past experience as an athlete or online readings?

• Did you have any formal education in the topic like any courses or certificate programs?

2. Has your view on the topic of “fitness and exercise” changed in any way as a result of taking the course? If so, how? What facilitated this change?

Potential Prompts:

• How did doing different exercises help facilitate this change?

• How did receiving feedback from peers help facilitate this change?

• How did your personal reflections on the course content help facilitate this change?

• How did the course content help facilitate this change?

• How did experiencing through trial and error help facilitate this change?

3. What learning activities did you participate in as a part of the course?

4. How did you find the pace and progression of the course?

Potential Prompts

• How did you find the time allocated to practicing and learning about each topic?
• Was there advancement in the learning activities across the course? Please explain.
  o Difficulty of experience?
  o Depth of reflection?
  o Theoretical understanding?
  o Apply knowledge to new problem/ testing new ideas?

5. In what ways did you learn about fitness and exercise in the course?

Potential prompts:
  • What did you do in the classroom or while studying for the course that assisted your learning?

6. How did you feel as a student in the course?

7. How did you perceive yourself as a student in the classroom?

8. What did you think about while in the class?

9. How did you behave in the classroom activities?

10. How did the classroom environment influence your learning?

Potential Prompts:
  • How did the physical space of the classroom influence your learning?
  • How did your feelings about the course or the classroom influence your learning?
  • Did you feel accepted and welcome in the classroom? Did this increase your learning? Please explain.
11. What options for learning did you have in the course?

Potential Prompts:

- How were you involved in construction of the course learning outcomes?
- Did you have a choice in the activities that you completed?
- Did you have a choice in how you were assessed?
- What options for learning would you like to see implemented in the course?

Conclusion Questions

1. What were the main strengths of the course?

2. What recommendations do you have for improvement?

3. How do you see your learning on fitness and exercise continuing past this course?
Thank you very much for volunteering your time to participate in this study. It is my hope to use the information that you have provided to enhance the practical learning experience in higher education for years to come. Below is my interpretation of all that we discussed in our time together. I would like you to review this summary to ensure that I have not mistaken your experience and comments on the course. Please make any corrections or additions that are needed to better represent you KPE 181 learning experience.

General Opinion of the Course

- Overall good
- Perceived purpose of course:
  - Preparation for personal training
  - Helping general population with proper exercise form
- Interesting and useful for me and my goals, but this might not be the case for all students

Interests Prior to Taking the Course

- Not sure what to expect

Main Learning Outcomes Achieved

- Coaching cues
- Strategies of interacting with clients
- How to get and give feedback
- How to explain to general population so that they understand

Previous Knowledge

- Not very much, very new

Changed View of Fitness and Exercise as a Result of the Course
- Yes, now see that not many people have proper technique even though they think they do
- Seeing the exercises broken down into their components helped to shape this view
- Feedback also helped facilitate this change

**Learning Activities in the Classroom**

- Breaking down exercises into specific parts
- Doing work with partner, then doing with group, and then taking up as a class really helped make sure that we understood the material
  - If me and my partner didn’t understand then we could get more feedback from other groups or from the entire class discussion

**Views of Pace and Progression of Course**

- Pace was good. Everything we learned was a continuation of a previous class and that helped us develop a better understanding.
- Could reflect on previous classes to help us with new and current learning material
- Were able to apply earlier learned concepts (i.e. neutral spine, spine flexion/extension) to later issues

**Ways of Learning about Fitness and Exercise**

- Breaking down movement into different aspects and breaking down fitness programs into different components (i.e. strength, speed endurance, etc…)
- Liked to replay the movement or even physically do the movement
  - Helped me develop a better understanding of what questions were asking and how I should answer them
- Used visualization during exams to problem solve through questions

**Feelings as a Student in the Course**

- Always ready to learn because I found the material interesting and always felt that I was learning something new
- Felt accepted and welcome because I knew a lot of people
- Because we got to get to know everyone pretty well, doing activities and class work became more comfortable which helped my learning

**Perception of Self in Class**

- I felt pretty good. I tried to encourage people in the class and ask questions.
- I tried to interact with everyone because I learned that everyone has different opinions
and even though my answer might make sense, their answers make sense too and it was interesting to see everyone’s different viewpoints
- Saw self as a leader in the class (tried to be a leader)
  - Did this by getting my group together and encouraging them to start working and I helped get materials and organize the activities

**Thoughts in the Classroom**

- Thinking that I should try my best because I knew I could benefit from the course
- Knew that other people were slacking and I thought that that was a waste of time and money
- Thought that since I was interested in the material I was going to try my best to understand

**Behaviour in Class**

- Very engaged
- Tried my best to be involved

**Classroom Environment:**

- Good environment, good balance of people who were taking the class seriously and those that weren’t trying very hard
- When there are people in your group that are putting you down, even if you like the class, you don’t want to try as hard
- Started to become friends with a lot of the students in the class and that helped make the activities and asking each other questions more interesting
- Benefited from getting along with others in the class
- Can be hard for people that aren’t as fit… they might be slacking because they can’t do the activities as well

**Physical Space of the Environment**

- Good, both the smaller space (last semester) and the bigger space (this semester) worked because the instructor was able to make use of the environment
- In the larger space it was easier to concentrate on what my group was doing because in the smaller space you could get distracted by other groups that were closer to us
- With more room my partner and I could focus on what we were doing and we were able to bring everything together
  - Weren’t focused on what other people or groups were doing
- Being able to work with others helped facilitate learning because input from others
allowed me to see the information from different viewpoints
  o This helped me learn more than what I would have learned on my own

Options for Learning/Assessment

- Didn’t have any options for learning, whatever was written on the paper was what we did
- Don’t think that having a say in what we did would benefit me because the professors know more and they know what we should be doing
- Everyone just had to do the same things and learn the same way every day
- No options for how we were assessed – whatever we did in class was what we were assessed on
- Options for learning might be beneficial in later years when we know better what we are interested in and what we want to learn
- Don’t think I would learn as much if I got to choose

Difference Between KPE 180 and KPE 181

- Last semester didn’t seem as serious, it was less structured and organized
- Last semester we learned a lot of different things, but this semester was good because we kept building off previous material and that really helped ingrain it in our memories
- This semester was more about personal training. It was more strict.

Thoughts on Motivation and Engagement

- If you are interested in the learning material, you will want to learn it more than if you are less interested
  o I found the course content interesting so I wanted to learn and this benefited how much I learned

Thoughts on Course Content

- Found it very interesting because regular people don’t necessarily know about how their form in moving could be causing them injury
  o Also saw how it related to my life in the weight room and in exercising
- Could use the material to help other people
- Saw an alignment with KPE 160
  o Felt like I was learning more because we could learn about it in different ways – the written down and memorization method and the doing method
Alignment with Long-term Goals

- Goal is to be a sports medicine doctor so I see how I can use this material to give athletes good advice and coaching cues

Perception of Instructor in Class

- Good summaries and discussion
- Allowed us to lead the warm up which helped us get more involved in the class and ready for the learning activities
  - Leading the warm up also helped me feel like a leader and allowed me to feel connected to my classmates

Connection with Learning Style

- I learn best when I do it myself so the structure of this course worked very well for me
- Knowing what it felt like helped me a lot

Concern with Marks

- Because everyone cares so much about marks, they might be doing things like answering questions or leading warm up just to get marks not because they really want to
- If you are just studying for marks, you might not get as good an understanding of the material
  - Will probably remember the material better if you are learning to understand rather than learning to get marks

Main Strengths of Course

- Giving us the opportunity to physically do what we were learning about
  - This gave us the opportunity to look at the material from different angles and from different points of view
  - Being able to feel the exercise helped me a lot

Recommendations for Improvement:

- Being marked for leadership was a little problematic because we got marks for answering questions and leading warm ups but you can’t lead warm up every day and sometimes you may not understand the material well enough yet to answer questions
  - When I did get a better understanding and started answering questions on the second day, I would only get marks on the second day, not the first and this
decreased the overall mark
  o Also, sometimes I just wanted to learn, I didn’t want to have to worry about answering questions to get marks, especially if I didn’t understand the material that well yet
  o Recommendation: Not entirely sure, but could maybe make the mark for the entire week instead of just day by day

**Progressing From This Course**

- Being able to connect with clients will help me in the future
Appendix F: Additional Ideas and Statements from Participants

Tenet Two – *Learning is Grounded in Experience*

Continuity of Experience

- "I guess in a way it wasn’t really like a continuation it was kind of like I had like a basic knowledge and then we kind of just like went everywhere with it." *Isaiah*
- "Yeah I think it was. It was a fairly good transition between the two (previous knowledge and course material), it wasn't like a ton of things that I have never heard of before and it wasn't like stuff that I already know so it was a good mixture between everything. I felt like it helped me... a lot of the stuff was building on prior knowledge that I had so it wasn't like completely new information it just gave terms and explanations for what I didn't know... just about exercise and stuff which is really useful. I find that I can speak.. like I know what I am talking about now and (can) give reason for things and I guess it helps with my own training and if I am helping other people but I am not really interested in going into the whole personal training thing." *Tessa*
- "I felt that a lot of it was review from prior courses so I mean like high school exercise science, biology, and then courses we have taken this year because there is meant to be a lot of overlap with the course we did there but I felt that it was so much so that it also the issue is that the two courses would almost end up contradicting each other" *Diego*
- "It was mostly just applying it. I guess it felt kind of like job training almost... they even said it was kind of like job training... so it was just taking what you know and then applying it to like how you could help others with it." *Noah*
- "Well it set a pretty good base (his previous knowledge) and being in (the course) it was like a nice review of previous experiences." *Hector*

Influence of Feedback

- "They (the instructors) would discuss the answers and that actually helped us to learn more quickly because we know what we did wrong and we can correct it more promptly ."*(Sheryl)*
- "It just expanded my thoughts. Again like I have an idea but I think to have feedback from everyone because again, [I'm] not the most knowledgeable person in fitness and exercise and I think hearing everyone's feedback and hearing what they thought of the situation because it brought up new points sometimes I was completely wrong, sometimes I was partially right and it was just good to hear everyone and see their opinions on everything." *Lara*
- "I just again going back to the feedback hearing everyone what they had to say definitely furthered what I knew." *Lara*
- "I guess it was really helpful because it I didn't kind of know if I was doing it correctly. I really like people tweaking what I am doing because that helps me learn better so I think that really helped because it was gradual it wasn't just like this is it and they just throw you into it. It is like we will help you learn how to do it properly and beneficial to like everyone." *Ella*
Influence of Feedback continued…

- "I think the feedback is basically the way you learn the best after like applying something because it is one thing to learn it and you think you know it and then it you try to apply it, if you are wrong say, the feedback is what really corrects your understanding of it so you could think you understand something but the feedback could prove you wrong and then I think that is really where you start to learn." Noah
- "There wasn't really much feedback sessions like we would work together as partner but there weren't like sessions where it was like this is what you are doing right and this is what you are doing wrong." Hector

Beneficial or Detrimental Experiences

- "I think, for example we did sprinting mechanics and we were watching our starts (on video) and you could do it in slow motion just on your phone and it really helped you because … when you are running you don’t really think you look like what you do but you can see it on the video and that was really interesting and you can kind of do it and then go back and see what you are doing wrong and then you can go back and do it again to see if you changed what you thought you did...it was really helpful." Isaiah
- "So we would split off into pairs we [would] create our own 5 minute agility program and then one of us runs it and the other coaches another groups' person so that's an example of a very dull very boring, I'm not liking anything, I don't want to be here, in this class, it is 9am in the morning on a Monday and they have us running 5 minute agility pairs. So detrimental. Boring! I'm not thinking about [it]. I'm like I want to leave, I'm not thinking about the work." Thomas
- "I liked the ones where you I don't know if there is a … category for it but I liked those that had competitions." Sheryl
- "We did a lot of coaching exercises so we would have to coach others through activities so I felt that helped a lot because for someone who has been physically active for a long time you kind of know like this is what a burpee looks like but then when you are thrown into being a coach, you have to break everything down I guess that is really helpful because it is things that I never thought of before because I always like knew how to do things but you realize that not everyone knows how to do specific exercises and it really helped." Ella
- "I think the activities were people got to come up with their own stuff was the most beneficial. Yeah, it is like different than saying on the sheet pick this training module and ... change it around rather than find your exercises that do the same body movements or work the same muscle groups and figure out how many reps/sets and all the training stuff. Figure it all out on your own and then show it to your peers and then the peers would give feedback and I feel like that is a good constructive way because there wasn’t really any scenarios were it felt like really judgmental which was nice. A couple of times sometimes it felt like ... we weren't doing stuff right and we were a bit confused in the course but you could always ask other students in other (practice-based) classes and stuff like that." Tessa
- "It felt to me that the instructors hadn't been briefed properly or didn't have enough time to fully understand what they were doing properly. There was a lot of them going to check with other instructors to figure out what was going on so if felt that it wasn’t very clear in terms of the way the workshops were structured and I don't think the benefits of
Pace and Timing of Class

- "I thought most of the time it was pretty good. We had enough time where we could perform the exercise and then we had enough time to have a slow conversation talk and bring it in in a bigger group and then have a talk, so the progression was pretty well."
  *Thomas*

- "I feel like sometimes we were kind of rushing because we spent too much time in the beginning to talk about... the last assessments, the last lecture, and the this lecture so there is lots of stuff to discuss so we have limited time to actually do the activities. Sometimes there's less than what is listed on the uhh activity form itself and then they do like they reduced the time for activity in order to give more time for discussion in the beginning and the end of the course so I think they can try to even it out yeah or maybe more time for activities too."  *Sheryl*

- "Towards the beginning I thought it was there was enough time but as we went on longer our instructor... made us become more independent and he put us in group work and he would give us an allotted time and sometimes we would go over the time to work within our group and then we wouldn't have enough time to talk about it in a full class discussion because that is how we usually did it. We would be divided into groups and then we would have discussion so sometimes we lacked time for the whole group discussion but within our groups we would definitely have enough time."  *Lara*

- "I think for some classes we had a lot of time and the others we didn’t have enough time. So that was kind of annoying. I had class right after and I would have to run all the way across [campus]... so I think some classes should have more days focused to them because a lot of them are more important rather than us doing like similar things and taking no time and we all just sit around and do nothing."  *Ella*

- "Well the instructors had to do what they could with the time. Two hours, sometimes it would be more than enough time and sometimes it would be a like bit of a struggle and we would have to skip a few things but even then if we had to skip some things it was still pretty clear set what we were learning and what we had to do."  *Noah*

- "Sometimes we were short on time and we had to cut it a bit short but I feel like that was okay because as I said before I felt like some of the activities were redundant and we didn’t need all that time to get it done. But when the instructor had to cut it a bit short and just get to the main point of stuff that might have been a bit more useful."  *Hector*

- "Well I know our instructor always went over our time limit... I don't think there was always a lot of time it seemed like at the end when we were reflecting and stuff it seemed crunched because he was just trying to get us out. I mean sometimes we didn't do warm ups and stuff and I think that was to conserve time because there was so much to do so I’d say that would just be cause Hugo was really explaining stuff and taking our questions and stuff but sometimes the workshops just seemed like a lot. So yeah it was crunched at times."  *Heidi*

- "I feel like it was really well thought out. Like we have two hours let's see if this activity will last two hours. There were times that we did go over but I think it is just natural like sometimes we would just fool around or something it takes a bit more time or something but I think it was planned pretty well that two hours was enough to finish what was planned."  *Tonya*
Interaction with Other Courses

• "They (the instructors) would discuss the answers and that actually helped us to learn more quickly because we know what we did wrong and we can correct it more promptly." (Sheryl)
• "It just expanded my thoughts. Again like I have an idea but I think to have feedback from everyone because again, [I'm] not the most knowledgeable person in fitness and exercise and I think hearing everyone's feedback and hearing what they thought of the situation because it brought up new points sometimes I was completely wrong, sometimes I was partially right and it was just good to hear everyone and see their opinions on everything." (Lara)
• "I just again going back to the feedback hearing everyone what they had to say definitely furthered what I knew." (Lara)
• "I guess it was really helpful because it I didn't kind of know if I was doing it correctly. I really like people tweaking what I am doing because that helps me learn better so I think that really helped because it was gradual it wasn't just like this is it and they just throw you into it. It is like we will help you learn how to do it properly and beneficial to like everyone." (Ella)
• "I think the feedback is basically the way you learn the best after like applying something because it is one thing to learn it and you think you know it and then it you try to apply it, if you are wrong say, the feedback is what really corrects your understanding of it so you could think you understand something but the feedback could prove you wrong and then I think that is really where you start to learn." (Noah)
• "There wasn't really much feedback sessions like we would work together as partner but there weren't like sessions where it was like this is what you are doing right and this is what you are doing wrong." (Hector)

Specific Activities

• "I can definitely tell you how different specific drills could have been made more fun, but overall, how could have been made more fun would be... one time sticks out when we were doing agility and we had to do all these different criteria to make the drill where it was a closed, anticipated cue. It was very concrete and we didn't have a lot of room to play with a lot of stuff to do, so everyone did a 5m sprint thing kind of thing, jog back, 5m sprint, kind of thing and something where we would have more opportunity to play something where we incorporated the agility exercises into into like ahh a throwing game. You know, like throwing a bean bag into a bin and we have an agility part of that would have made it more fun because there is some sort of competition you can do something where people can compare and they can each try it out and it is not just running." (Thomas)
• "I think as the year progressed it became more of a burden than it was a fun thing to do. It was a lot of just sitting around listening to the same thing being repeated over and over again and then having to go and do the same exercise over and over again that weren't necessarily direct related to what we were doing that week." (Diego)
Suggestions to Improve

• “I think maybe if the talking… was kind of broken up more. I felt like you go and it was supposed to be a practical class but you would just end of sitting there for like 45 minutes trying to take notes on your leg or whatever and it wasn’t as enjoyable I don’t know if there is a way that you could do it so that it was better because it is kind of hard but if there is a way that it could be broken down so that [there was] shorter talking, shorter exercises, I’m not sure how you would do that.” Isaiah

• “Maybe if we came in, I know there is certain theoretical background we need to get through, maybe if [we got] through half of it, get through the other half and then start the activity or something like that just kind of break it up a bit I’m not sure how I know it would probably have to be structured a bit differently, but that would probably help a bit.” Isaiah

• “I think it is something that can be addressed next semester… having the first day as more icebreaker type activities as opposed to just going over the syllabus for an hour or two hours. It should be ways to create that cohesive unit so that you know everyone there and you are comfortable working with them... whether you want to or not as least you are comfortable with it.” Diego

• “For us to work in groups when we are reading over the workshops… so instead of the professor (instructor) reading the workshop back to us and listening like kids. I didn’t like that. You know coming to university we are thinking about being independent.” Thomas

• “I think spending some time in the weight room and in other environments… the assessments just being more clear and I think that is something that the whole group expressed because at times I would be texting my friends or someone would be calling me for clarification and yeah just making the [questions] a bit more clear or open ended because sometimes things were really specific… everything is different for everyone so I think maybe having a little more open ended questions instead of specific questions simply just so that we can give our input.” Lara

• “Marking participation. I think… the biggest downer in the course was having participation be such a big factor especially since it was so individualized based on the instructor who is grading you. Even though I know they tried to equal the playing field… it is still very opinionated…. Having guidelines… like, if they asked like this, if they are doing the activity and not slacking off. I’m loud I guess, but there are people in the program who definitely aren’t and if they are scared to ask a question or if they are not comfortable in the environment asking a question, I don’t feel like they should be penalized for that.” Ella

• “More communication between instructors of the theoretical class and then the practical class [would be ideal] so that course content lines up week to week, which can be difficult because the theoretical class can drag behind, but at the same time if there is so much overlap I think it should be changed so that… there is less time explaining the same thing twice.” Diego

• “I guess structure the marking scheme a little more to clarify the way assessments… need to be written.” Noah

• “I agree with the leadership marks in a way but I also disagree with it so I just think something should be done about that.” Hector
General Comments

- "That is hard to explain, I can't really articulate it. Because the questions were pretty precise... this is the question, and this is the answer... there is not much argument, it made it difficult to come up with laws because the answers were so specific in case."  *Thomas*
- "I found that the assignments we not very aligned with the workshops, I often went into the assignment thinking I don't know how the workshop prepared me for this."  *Thomas*
- "(Individual assignments were) helpful in the way that they make you think for yourself. Some of them were a bit more challenging... they made you think for yourself, but I am a person who likes more the group work so I was more inclined to do the group stuff."  *Lara*
- "I think some people don't feel very comfortable giving their ideas in class which is a big part of our mark actually... the leadership takes a toll on your mark [and] some people might not feel comfortable or very outgoing in the group aspect so they might not be [achieving]... to their full potential in that certain thing and I think that is where they need to make it up on individual assessments. Personally for me I think thrived more in class than I did on assessments, simply because I like talking about it as opposed to writing it down because sometimes when you write something down it can be different from what you think to what the instructor understands."  *Lara*
- "I liked the exam, it was all case studies which was very cool. I also liked the individual assignments but then the group assignments were kind of hard to do because each questions flowed into the next so you can't really separate it and they were really tough about our graphs and stuff like that so that was hard."  *Ella*
- "I feel like the assessments were fair. It was it was good to keep up to date on... [a] biweekly basis. Sometimes it was it was difficult to remember to all the days because I know they are given in the syllabus but I know that I missed an assessment due [date] just because it was on like some Friday or something like that and I totally just didn't remember so I think that it would be good to have them on two days of the week where you can be like oh yeah this is the day that assessments are usually due so I can check if one is due. So that would help with organizing a bit more but the content of the assessments was good. It was [more] fair towards the end of the year [because as]... I mentioned it got a bit more clear as to what the purpose of it was and just being able to review so that not everything is crammed for the exam."  *Tessa*
- "It felt almost as if I was in class, except for I wasn't being taught I would just have to regurgitate what I had learned in class and outline what it was. Basically exactly the same as our assessments, so it felt pretty comfortable."  *Noah*
- "I agree with how we were assessed in terms of the written assignments but the leadership marks I found that wasn't totally necessary because based on how much you are involved in class and answering questions and stuff that did contribute to what mark we got [and] I felt that wasn't necessary."  *Hector*
Suggestions to Improve

- “I think… if you had different instructors mark different things to try and make it more fair. Like maybe that would help. Or if like…I’m sure there are certain rubrics that they have to follow but I guess if there the other thing that was frustrating was that… I didn’t even get back my individual assessments and I did well on most of them so… I didn’t really care but that’s kind of frustrating if you can’t even see. Because I know… on my group assignments that we found [some questions] had been marked incorrectly and we gained marks back. It was frustrating that we didn’t even get to see our assessments.” Isaiah
- “Before the assessments were handed out to us maybe the instructor can kind of talk about what [they] are looking for in those assessments and… [at the] end of each lecture maybe summarize how we performed so that we are more aware of how we can improve our leadership skills.” Sheryl
- “I think maybe having the instructors on more of a unified understanding of everything… with the marking and participation and stuff. Because I know that if students feel more comfortable participating, [it] won’t feel as pressured. It won’t feel like a job that needs to be done for marks… Because students do talk to each other and we know when other instructors are marking harder or when things are unfair so I think in a course like this where it is so heavily based on each individual class, there is so much room for variation in marks.” Tessa
- “They could do it the way they do it for the exam where each instructor takes one and marks all of them. That of course puts a whole lot of burden on them especially if it was one person doing or two people doing the assessments. I think it is just more clear cut answers and less ambiguous questions, which isn't necessarily realistic but at least if you design a question that answers key point that would be an easy way to see okay look this person understands this and understands this and then from that there should be reflection questions in class that give you the opportunity to add in the 'it would depend on' section of that.” Diego
Appendix G: Student Information Form for First Day of Classes

Please answer the following questions to the best of your ability. Your responses will be used to structure an activity on the first day of class and to provide me (your instruction) information about your interests, learning style, and goals so that I can best modify class instruction to suit your learning needs and personal goals.

My name is __________________________

I prefer to be called _____________________

Circle one of the following statements:

- a. I live in residence on campus.
- b. I walk to school from off-campus
- c. I commute less than 30 minutes to campus.
- d. I commute over 30 minutes to campus.

My favourite kinesiology subject is:

- a. Biomechanics
- b. Anatomy
- c. Sport and Exercise Psychology
- d. Physical Cultural Studies
- e. Physiology
- f. Other: ________________

I would describe myself as a ______________ learner.

1. When I learn*:
   - a. I like to watch and listen.
   - b. I like to be doing things.
   - c. I like to deal with my feelings.
   - d. I like to think about ideas.

2. I learn by*:
   - a. Doing
   - c. Thinking.
   - d. Feeling.

3. I learn best from*:
   - a. Observation.
   - b. Personal relationships.
   - c. A chance to try out and practice.
   - d. Rational theories.

4. When I learn*:
   - a. I like to see results from my work.
   - b. I take my time before acting.
   - c. I like ideas and theories.
   - d. I feel personally involved in things.

5. I learn best from*:
   - a. Seeing the results of my actions.
   - b. Classroom education.
   - c. Real-life experiences.

6. When I learn*:
   - a. I get involved.
   - b. I am practical.
   - c. I like to observe.

I may be interested in pursing a career in (circle all that apply):

- a. Physiotherapy
- b. Public Health
- c. Sports Psychology
- d. Exercise Psychology
- e. Researcher in ________________
- f. Medicine
- g. Personal Training
- h. Strength and Conditioning
- i. Other: ________________
d. Reflecting on what I hear and see.

d. I evaluate things.

Total your answers from questions 1 – 6:

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* Questionnaire modified from Kolb (2005)

Activity

Get into a group with 2 or 3 other people and consider the following picture:

Imagine from Speck (2013)

Reflect on the following questions:

1) What can you say about the alignment of this person doing a squat?

2) If something is incorrect, what is the issue?

3) What is the cause of this issue?

4) How can this issue be corrected?