

## Inspired by Dance: A Future for Kinesiology

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Although the beginning of North American post-secondary level dance education is often traced to physical education, dance programs have since migrated to Fine Arts Faculties. Despite these developments, dance has not entirely disappeared from physical education contexts which are now often under the umbrella of kinesiology. This context can hold new possibilities for dance-inspired movement education. In this paper, I, as a trained dancer with a research degree in the broad field of kinesiology, reflect upon my experiences of designing an undergraduate dance-inspired movement fundamentals course in a multidisciplinary, research-led Faculty of Kinesiology, Sport, and Recreation in Canada. I further contemplate possible positive implications of including dance research, dance practices, and dance education in this context and the undergraduate kinesiology curriculum.

**Keywords:** kinesiology, dance education, somatics, mind-body awareness, movement fundamentals

When we think of the context we work in, a kinesiology Faculty in a large research-based North American university, we think of one that is interested in sport, physical activity, and health, in short, the moving body. As a kinesiology scholar and dancer, I have often come to advocate for dance as a movement practice relevant to our Faculty. How dance, given its history as a performing art, contributes to the field of kinesiology is not always readily apparent to those with whom I work. I believe, however, that it is important to think about how dance enhances knowledge about the moving body in the post-secondary education of kinesiology students. Therefore, dance educators can constructively draw from, but also inform the field of kinesiology. In this paper, I reflect upon my experiences designing an undergraduate dance inspired movement activity course in a multidisciplinary research-led Faculty of Kinesiology, Sport, and Recreation (KSR). To contemplate possible positive implications of including dance research, dance practices, and dance education in this context, I first locate dance in the North American post-secondary kinesiology undergraduate education. Next, I detail my course design to then conclude by discussing the need for movement education that draws on dance in the kinesiology curricula.

## DANCE IN THE CONTEXT OF NORTH AMERICAN POST-SECONDARY PHYSICAL EDUCATION, AND KINESIOLOGY

North American tertiary level dance education is often traced to the University of Wisconsin-Madison in the United States, where Margaret H'Doubler established a specialized major in dancing within the course of physical education for women in 1927. This was soon followed by a masters of arts in physical education with a specialization in dance (Vertinsky, 2010). H'Doubler, not a dancer herself, viewed dance, in line with female physical educators at that time, as a personal, non-competitive activity where participation and enjoyment (Ross, 2002), instead of skill development and performance, should be the major goals. H'Doubler's student, Martha Hill, is credited with taking dance out of physical education and developing it into 'an art form' through her Bennington School of Dance that, established in 1932, focused on dance as a performing art and thus, reoriented dance "towards a vocational and professional model" (Vertinsky, 2010, p. 1114).

Although initiated by physical educators, many post-secondary level dance programs in North American tertiary education have since migrated to Fine Arts Faculties (Hagood, 2000; Pulinkala, 2014; Risner, 2010). The current binary division of dance education (of dance teachers and dance performance) can be seen to complement the earlier division of dance participation in physical education versus training professional performers in dance schools. Risner (2010) confirmed that the relocation of dance to Fine Arts has resulted in "long-standing 'artist versus educator' binaries that privilege dance performance and choreography while marginalizing commitments to teaching, pedagogy, and dance in the community" (Risner, 2010, p. 96).

Our Faculty of Kinesiology, Sport, and Recreation (KSR) is located within a large university with a strong research orientation and offers both undergraduate level dance courses and graduate level dance education<sup>1</sup>. Previously named Physical Education and Recreation, my Faculty originally housed a larger undergraduate dance program with dance activity courses (DAC) in, for example, ballet, jazz, and social dance, a compulsory dance history course, senior level modern dance, choreography, dance injury courses, a course on children's dance as well as the Orchesis Dance Group that provided performance experiences to the students. With recent changes made to the undergraduate kinesiology curriculum, several of the dance courses have been cut. However, the kinesiology curriculum now offers an innovative space to include dance in its newly defined movement activity core. The course that I focus on in this paper was developed as a part of this activity core.

## WHAT CAN DANCE INSPIRED EDUCATION OFFER TO UNDERGRADUATE STUDENTS IN KINESIOLOGY? A CASE STUDY

At present, North American kinesiology Faculties are dominated and organized by a scientized sub-disciplinary approach organized into fields such as exercise physiology, biomechanics, motor learning, sport/exercise psychology, sport management and sport sociology<sup>2</sup> (Kretchmar, 2008; Newell, 2007). In addition, the sub-disciplines tend to operate within insulated knowledge silos (Kretchmar, 2008) and are further bifurcated (Andrews, 2008) into bioscience and humanities orientations. My Faculty is no exception as it includes members from most of the typical kinesiology disciplines (adapted physical activity, health/exercise/sport psychology, sport management, leisure, sport and tourism, neuroscience, physiology, sociocultural study of physical activity). The undergraduate curriculum reflects this sub-disciplinary divide with sets of mandatory courses from year 1- 4 in each sub-discipline.

In addition to these theoretically oriented courses, our curriculum previously included compulsory physical activity courses (PAC) about different varsity-aligned sports that remained from when the Faculty changed its name. With the name change, however, these types of PAC courses that were compulsory 'core activities' for physical education degrees were no longer required in accredited kinesiology programs in Canada (<https://www.ccupeka.org/accreditation/>). Current kinesiology programs, nevertheless, were to include 'active learning' and 'movement' experiences which are considered integral also in my Faculty. Consequently, a new type of 'activity core' has been implemented that 'provides engaged, participatory, inclusive, and holistic based learning experiences across an array of movement settings and contexts' (University of Alberta, 2023). In these courses students learn foundational through to advanced movement skills along with the accompanying theory, carry out movement analysis (both qualitative and quantitative), and develop the skills necessary in order to teach others. Rather than sport-discipline based movement skills, students are to learn about inclusive and accessible practices that will translate to lifelong participation in sport, recreation, and physical activity in addition to optimizing their own pedagogical and leadership practices.

In this paper, I focus on a new 100-level course, *Introduction to Movement Fundamentals*, developed as a part of this activity core. I was asked to design and teach the course due to my background in dance. The course was to focus on teaching movement fundamentals and the mind-body connection, known as 'somatics' to those in the dance industry (Eddy, 2009; Fortin, 1995, 2017). The 'somatic' approach was designed to connect the qualitative (mind-body components) and quantitative (basic anatomy and movement fundamentals) approaches to movement analysis previously

absent in the curriculum. In meetings with the Faculty undergraduate curriculum administrators, it was agreed that students needed to learn how to connect to, understand, and ‘feel’ movement in their bodies. As future clinicians and movement practitioners, the students, in addition to learning about their own moving bodies, also needed to develop the somatic skills that assist in explaining movement fundamentals to others (e.g., clients, patients, athletes). The somatic approach in the course was designed to facilitate these two primary outcomes (‘doing’ and ‘understanding-explaining’) and as a result the following course description was created:

*An introduction to integrative movement practice to understand the optimal functioning of the body through a holistic approach. Students will be introduced to the mechanics of body alignment through the exploration of various movement patterns across different regions of the body, the importance of breathing to facilitate the body-mind connection, and the roles of mindfulness, body awareness, and various body ideals in different fitness, exercise, and well-being contexts.*

The course’s learning objectives aligned with the description and the activity core learning experiences:

- students will be able to understand and practice different components of the mind-body connection;
- define holistic (physical, emotional, cognitive) approaches to fitness/exercise;
- acquire an understanding of the basic anatomy of movements for various regions of the body;
- compare and contrast the knowledge components that comprise “optimal functioning of the body” in different contexts, and recognize that fitness, exercise, and well-being movement contexts each have their own respective perspectives of movement theory.

The course was held three times per week (one lecture and two movement labs) in a large dance studio with mirrors and barres for 40 students. I organized the course content based on a detailed discussion of different regions of the body (the hips, the core, spine, shoulders, head and neck, extremities). However, I intentionally incorporated the following components of mind-body connection in the discussion of each body region: breath, proprioception, balance, sensing alignment, executing kinetic chain stacking, imagery, and physical and mental set-up. These topics are familiar to most of those with a dance background and thus, my advanced knowledge in dance was integral to building and applying the mind-body connection to the discussion of movement anatomy and optimal body function. The course readings drew on books (Franklin, 2012; Hackney, 2002) and scholarly research articles in dance education where the somatic mind-body connection was discussed more commonly than in kinesiology.

I used a synchronous approach: the lecture addressed the anatomical and mind-body theory and the labs focused on ‘doing’ by applying integrated mind-body concepts to various exercises. Over the course of the term, students practiced using multiple mind-body components for each exercise or movement pattern. Next, I provide several examples of this from the labs.

To enhance a lateral side stretch of the spine/back, the students practiced using breath to connect the movement with a full inhalation into the ribcage and upper back. The students explored proprioception by slowly walking barefoot around the room with exaggerated joint articulation, quickly while emphasizing a strong heel strike, or with exaggerated pronation and supination. This component flowed naturally into a balance exercise when the students practiced standing on one leg controlling their balance while flexing their supporting knee, tilting their torso forward and then returning to the upright stance. They further explored the exercise with their eyes open and closed to understand and feel how vision affects balance. The students actively engaged in ‘sensing alignment’ and ‘kinetic chain stacking’ when learning the proper alignment of the spine in its various states (a natural S-curve, extension, flexion). In addition, students worked on optimal alignment of the leg during take-off, flight, and landing of a vertical jump by sensing their stacked joints going through full flexion and extension (the hip-knee-ankle-foot kinetic chain). Exploring the core, students practiced using imagery to hold a full plank position: they pictured and subsequently ‘felt’ themselves pushing the floor away with their hands, while perfecting the image of their body as a straight, stiff, horizontal board. As the course progressed, the students were encouraged to make their own decisions as to which mind-body component(s) they thought was most applicable to each exercise. It is important to emphasize that I did not mention dance when instructing the lab exercises, but rather drew from my sensibility and knowledge as a dancer to design the somatic movement connections. In the next section, I expand on why dance inspired movement education should inform kinesiology curricula.

## **WHY INCLUDE DANCE INSPIRED MOVEMENT LEARNING IN KINESIOLOGY?**

As illustrated by the case study, I incorporated dance-based knowledge within the fundamental movement education necessary for all kinesiology students. This enabled them to integrate theoretical knowledge from anatomy and biomechanics with embodied movement practice (by both doing it themselves and being able to explain it to others) and become more informed professionals. Dance based movement concepts such as the somatic mind-body components, can assist the students to connect their theoretical

knowledge with optimal functioning of the body. In my course, many students commented that this approach immediately helped them with their own movement practices outside of the course labs and expressed joy with their personal progress. Therefore, the somatic premise of the course worked well to meet the learning objectives of the course and the activity core. I now discuss 'finding the missing piece,' exposure to qualitative movement analysis, and discovering stretching as specific benefits of dance-inspired movement education in kinesiology.

I concluded that I was pleased with the end result and enjoyed teaching the course, because I had carefully considered how I would deliver somatic knowledge to kinesiology students (as opposed to dancers, for whom it quickly becomes intuitive). The approach using modules about the regions of the body that were familiar to kinesiology students, in conjunction with mind-body components was effective though not without challenges. A small number of third and fourth year students struggled to combine their existing (advanced) anatomical knowledge with embodied practices that required them to think and apply knowledge contextually. My holistic approach that combined anatomy with actual movement practice appeared new to the students with primarily quantitative theoretical courses where anatomical knowledge was not integrated with somatic components. However, I noticed the improvement of the students in several areas of practice: their balance and flexibility (mainly hamstrings, hip flexors, spine mobility) improved by the end of the term. In addition, the students reported using some of the basic strengthening exercises in their weekly fitness routines due to the positive results they felt during movement labs. These, as they described, were the missing pieces in their routines. I was also pleased to hear the students report a general improvement in their mood and physical well-being on movement lab days. Overall, this validated the learning objectives of both the course and the activity core which emphasized the well-being that mind-body practices can deliver.

To further facilitate the optimal functioning of the body, I included Laban Movement Analysis (LMA) commonly used in dance education. It provided a broadly applicable framework for building or analyzing movement patterns by breaking it down into the four major concepts of Space, Time, Force, and Body (Gilbert, 2015). In my course, it provided an alternative to the quantitative movement analysis the students learn in biomechanics and anatomy labs. For example, I used the concept of Space to work on the quality of a bilateral vertical jump by observing the depth of the plié (knee flexion) and the height of the jump; the concept of Time to illustrate the differences of executing a quick jump compared to a slower jump; and Force to explore how different action words changed the force production in their jump (i.e., soft versus explosive). The focus on the quality of the movement, common in dance, helped the kinesiology students to explore optimal movement performance in a variety of contexts.

As a dancer, flexibility is an integral aspect of my practice and I felt strongly about including stretching in my course. Realizing that this was new to many of the students, I covered basic theories (passive, dynamic/active, and isometric/PNF stretching) in the lecture and practiced stretching the major muscle groups in the movement labs. Students were somewhat apprehensive at first, as they deemed themselves to be 'inflexible' and thus, were worried about their performance amongst their peers. They, nevertheless, started to see improvements as the course progressed and gave positive feedback about this module. It was obvious that many students had never been physically taught how to stretch using their own bodies to learn. It is somewhat surprising that our curriculum does not include a course in stretching although there are specific courses devoted to other health related fitness components (cardiovascular endurance, resistance training), but I was pleased that the dance-inspired movement knowledge provided students with this learning opportunity.

## CONCLUSION

In this paper, I have shared my experiences using dance-inspired movement education to design an undergraduate kinesiology course in movement fundamentals and the mind-body connection. This was a positive experience for the students and for me as a researcher. My hope is that by sharing these experiences, I can facilitate understanding of the benefits provided by integrating dance-inspired movement education into the kinesiology curriculum. As a dance researcher and practitioner, I demonstrated that I can constructively draw from such kinesiology knowledge as anatomy, but also inform the field of kinesiology by integrating this knowledge into movement practice.

The dance inspired approach to kinesiology can offer students a body-focused method from which to learn movement fundamentals through the mind-body connection for optimizing movement in a range of contexts. My approach to the course strongly aligned with the learning objectives set out in our Activity Core part of the curriculum where learning motor skills is coupled with theory. Consequently, dance-inspired movement education provides a unique way to teach the mind-body connection and movement fundamentals in a more inclusive and accessible approach to teaching embodied movement. Currently, our Faculty is moving to implement a curriculum that embraces equity, diversity, inclusion, and indigeneity. I believe that dance inspired education that connects to a broad range of cultures, genders, sexualities, ethnicities, and ages, can further enhance these goals. Consequently, I advocate dance inspired education to be included in a broad range of kinesiology courses to help further address

equity, diversity, inclusion, and indigeneity in movement education and physical activity cultures.

## NOTES

Note 1: KSR offers several graduate degrees (e.g., MA, MSci, MCoach, Ph.D.) and it is possible to choose dance as the primary topic for one's graduate research. As a result, several graduate students have focused on dance in their MA or Ph.D. studies although there is no graduate program in dance per se.

Note 2: According to Newell (2007), "Kinesiology is a collective field of study organized around the umbrella construct of physical activity" (p. 14). The National Academy of Kinesiology (2014) defines kinesiology as a highly diverse field that relies on a number of specialized areas that include (but are not limited to): biomechanics, psychology of physical activity, exercise physiology, history of physical activity, measurement of physical activity, motor development, motor learning and control, philosophy of physical activity, physical activity and public health, physical education pedagogy, sport management, sports medicine, and the sociology of physical activity (Bouffard & Spencer-Cavalier, 2016).

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