

FINDING AND IMPLEMENTING RESOURCES

Finding and Implementing Relevant Resources in Adapted Physical Activity (APA):

It's easier said than done...

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ABSTRACT

The purpose of this research was to explore challenges to operationalizing and implementing relevant resources for Adapted Physical Activity (APA) and to develop a framework on how resources should be developed and implemented to foster appropriate APA. An unobtrusive methodology was used to examine existing resources and training/learning opportunities for practitioners teaching APA. Data were collected via unobtrusive methods: documents, records, literature and feedback forms. After the findings were summarized, expert consultations were completed using a modified Delphi-technique to confirm the findings. A constructivist approach and phenomenological orientation was used to analyze the data and develop the “ideal” resource. Results indicate there are limited APA resources and teaching/learning opportunities for practitioners and there is a need for practitioner facilitation through professional development on finding and implementing resources. Future research should develop and evaluate the “ideal” resource and strive to improve the connection and consistency of resources in APA.

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GLOSSARY

Adapted Physical Activity (APA): programming developmentally appropriate movement suited to the interests, capacities and limitations of students with disabilities (Sherrill, 2003). In this study, this term is used to encompass Adapted Physical Activity, Adapted Physical Education, Inclusive Physical Activity, and Inclusive Physical Education as it represents programming and individualized instruction overall for individuals with disabilities

Adapted Physical Education: is physical education, which may be adapted or modified to address the individualized needs of children and youth with disabilities (McDermott & Turk, 2011)

Differentiated Instruction: is responding to varying student needs by providing a balance of modeled, shared, guided and independent instructional strategies (Ontario Ministry of Education, 2008)

Disability: any restriction or lack of ability (resulting from an impairment) to perform an activity in a manner or within the range considered normal for a human being (McDermott & Turk, 2011)

Exceptionalities: students that are classified with regards to behaviour, communication, intellectual, physical, or multiple disabilities (Bennett, 2009)

Inclusion: is setting suitable learning challenges, responding to diverse learning needs, and striving to overcome barriers to learning and assessment for everyone (Department for Education and Employment/Qualifications and Curriculum Authority, 1999)

Inclusive Physical Activity: is a philosophy that embraces access to programs, accommodations, values participants differences and encourages structural change for more success in programs for all abilities (Kasser & Lyte, 2013)

Inclusive Physical Education: including students with special needs into regular physical education classes using a variety of modifications and accommodations (SPARK, 2014)

Practitioners: a person who works in a profession (Merriam-Webster Dictionary, 2014). In this study, it refers to both pre-service and in-service practitioners: physical education teachers, generalist teachers, paraprofessionals, volunteers, and instructors in an educational setting

Resources: materials used to support teaching: online and hardcopy materials, professional development opportunities, and literature

Special Needs: a term used similar to describe an individual with mental, physical, or emotional problems requiring a special setting in education (Merriam-Webster

Dictionary, 2014). Also referring to an individual with an exceptionality or with a disability. In this study, this term is used most often in reference to youth, children, or teens with disabilities and exceptionalities

Station-Based Pedagogy (SBP): is an approach to teaching and learning based in activity contexts that uses task breakdown and progressions. SBP is constructed by a spectrum of dimensions of movement that include: Games Skills, Fitness and Conditioning, Gross Motor Skills, Body Management Skills, Fine Motor Skills, and Sensorimotor Development (Connolly, Lappano, Hogan, Morrison & Lenius, 2012)

Chapter I: INTRODUCTION

Me, the teacher...

It's easier said than done... but if you don't even try...

This statement makes me curious; why don't my university students and individuals I have mentored take the initiative to try the things they say they will? Why do they struggle to work through the challenges they encounter when trying to apply knowledge or in the application process of learning and why don't they use the information or resources given to them to succeed? I believe, when it comes to teaching and learning, we need to stop simply saying things and we need to start doing things to make change, especially when it comes to teaching individuals with special needs. This seems like 'common sense' but I don't think it is common.

Reflecting on my journey of becoming a teacher, I believe my practical application experiences – the doing – have been the most beneficial components of my professional development. Teaching physical education, coaching multiple sports, and facilitating others to lead movement activities for youth has made me realize that everyone's experiences are different, whether you are the instructor or the participant. Our experiences are critical components to learning; "learning is a continuous process grounded in experience" (Kolb, 1984, p. 27). Experiential learning and practical application connect education, work, and personal development through the opportunities to participate in learning and apply knowledge to real world scenarios (Kolb, 1984). If we have the opportunity to use our experiences and reflect on them, both learning and teaching can improve. The goal of experiential learning and reflexivity in teaching is to establish better practice, instruction, and to learn from our actions (Schon, 1987). This

seems logical, but a lot of teachers don't have a practical component or experiential opportunities in academic lessons to help all learners with application and implementation of knowledge and understanding.

In my experience thus far, working with my colleagues implementing movement and Adapted Physical Activity (APA) programs and lessons has had an impact on my teaching philosophy, shaping my strategies for and my knowledge and understanding of, teaching. When I develop a lesson and am able to adapt for various learners by changing activities on the fly, I know in those instances that my learning is being transferred and transformed through my teaching. Another component critical to my knowledge transfer is reflecting on my experiences and having an opportunity to discuss them to make connections. But it is not always those experiences that make my teaching successful; resources are important tools that contribute to and can facilitate teaching and learning especially when it comes to modifying or adapting lessons for APA. Being actively involved in the learning process and having the chance to implement resources for APA has helped me be a more effective teacher overall and avoid the many problems associated with implementation and facilitation of programming for all learners.

The purpose of this research is two fold. First, it is to explore the challenges to operationalizing and implementing relevant resources for Adapted Physical Activity. Second, is to develop a framework that informs how resources should be developed and implemented to foster appropriate Adapted Physical Activity to support these challenges. Background information on where it all started, what I have seen, why movement, physical activity and special needs, and what I am going to do and why is provided in the

following chapter to provide insight on my experiences and to describe the purpose and research questions of this research study.

Where it all started: S.N.A.P

In my Physical Education Undergraduate Degree, I had the opportunity to coordinate the Special Needs Activity Program (S.N.A.P) at Brock University. The S.N.A.P outreach is a movement education based program that encourages developmentally appropriate physical activity for youth with special needs. I was introduced to a group of teachers, mentors, learners, and students willing to work together in a movement activity setting to benefit physical, social, and emotional interactions of youth. Children ages 5-20 years old from the Niagara region participate in movement activities in a station based pedagogy learning environment. The S.N.A.P outreach helps develop individual's motor milestones for a chance to engage in daily physical activity, recreation, and to lead a healthy active lifestyle. The Special Needs Activity Program is a community service learning initiative created to serve youth and children with special needs. Some other benefits of the Special Needs Activity Program are that it brings together the community, it incorporates individualized programming for special needs, and it is a site for experiential learning.

As a coordinator and now a mentor of the program, I have had many opportunities to facilitate volunteer training sessions geared towards working with the children who attend the program. Our training consists of topics such as professionalism, the program structure, roles and responsibilities, communication strategies for the population, activity stations, equipment, and safety considerations. The training is an introduction for students and volunteers to get an idea of how to create activities based on the structure of the

program and to ensure the participants attending are instructed with clear objectives. This training and experience has encouraged me to look at beneficial ways to instruct for effective Adapted Physical Activity programming. It's one thing to learn about physical activity and special needs but the actual process of learning to teach physical activity to individuals with special needs still presents challenges.

I have also been actively involved in developing and implementing Station-Based Pedagogy (SBP) as a strategy for instruction and a resource with Dr. Maureen Connolly to assist in providing meaningful Adapted Physical Activity for children with special needs. I use the SBP strategy and resources in training for volunteers and teachers working directly with children with special needs in programs and schools facilitating APA. Station-Based Pedagogy focuses on developing movement stations to focus on a particular aspect of a child or youth's movement repertoire just as activity stations are used in academic classrooms. The main movement categories include: fine motor, sensory motor, games skills, gross motor, fitness, and body management. The Station-Based Pedagogy strategy and S.N.A.P outreach are geared towards individuals with disabilities. They create a lived body experiences to help develop each individuals activities of daily living through movement education. Stations have an embedded curriculum, which is linking important movement concepts and skills to physical activity in order to transfer learning in different settings. Individuals I have worked with and the target audience for implementing and training in this field are practitioners: physical education teachers, generalist teachers, educational assistants, resource teachers, support workers, volunteers, undergraduate students, board coordinators, consultants, and university educators. This target audience listed above, the SBP, and resources on APA

are a driving force for my research. I believe it would be beneficial to provide experiences or professional development opportunities that assist practitioners how to implement resources existing for teaching APA in order to help transfer knowledge for appropriate implementation of Adapted Physical Activity.

What I have seen...

There have been multiple critical instances through my teaching experiences where I have seen challenges rise when viewing others teach physical activity to individuals with special needs. I have seen practitioners and volunteers disregard resources that have been provided to assist their teaching, and I have witnessed incidents that seem to be challenges to applying knowledge directly and understanding how to teach APA. This is like excluding relevant evidence in a trial with no grounds to do so.

Examples: not using a visual schedule for a child with Autism Spectrum Disorder when instructions suggest to use one, not following a detailed lesson plan that has shown success before, not using demonstrations to explain an activity, not incorporating the information provided at a workshop such as how to break down movement skills and then expect it to magically happen, not being creative with activities or going beyond ‘traditional sports’ with individuals with special needs and not using provided content such as an IEP (individual education plan) and literature to help planning and instructing methods... Practitioners may assume that resources provided to them aren’t relevant or they don’t need them to facilitate. Many of the resources I have given to practitioners, who disregarded them or did not use them effectively, have been supplementary documents or lesson plans to encourage their professional development and understanding to teach APA.

My assumptions are, that there are barriers or challenges that occur when learning to teach and teaching physical activity to individuals with special needs, specifically with resources. I am curious to know why practitioners disregard resources or their challenges with them. When given resources and information to teach Adapted Physical Activity why are the ‘common sense’ problems still evident?

Why movement, physical activity & special needs?

Another disconnect evident, is teachers’ understanding the importance and purpose of teaching Adapted Physical Activity and its connection to Individual Education Plans (IEP’s). Teachers are required to have an IEP for their students with special needs; some of these students may be on an alternate program but creating this individualized plan helps teachers target life skills and appropriate learning specifically to each child’s needs and abilities. However, many physical education and generalist teachers do not see or understand the importance of including movement and APA in and IEP for individuals with special needs. I believe that we need to emphasize *why movement and physical activity* to teachers. My colleagues and I are often asked by teachers – why bother with movement? Movement is a foundational component for participating in activities of daily living (ADL). It helps improve motor milestones, fundamental movement skills, and encourages leading a healthy active lifestyle. Learning through movement is about building a repertoire of skills needed for confidence and competence in physical, cognitive, and affective domains of one’s life. Movement reassures an individual’s ability and potential to successfully participate with same aged peers, advance their ADL, and it supports health and safety for life. The instruction for movement and physical activity should be progressive and developmentally appropriate; APA meets the various needs,

capacities, limitations and interests of all individuals (Sherrill, 2003). This type of movement allows for activities to be individualized fostering proper sequential and correct growth and development in youth. The movement education concept “emphasizes guided discovery instruction, with many possible correct ways of answering a task” (Connolly, personal communication, September, 2013). Movement is an essential quality for life and individuals with special needs should have the opportunity to engage in meaningful physical activity in the community, at school, and at home. Teachers need to know *why movement* is imperative for individuals with special needs in order to teach movement to them.

What I am going to do and why?

My experiences in teaching Adapted Physical Activity have shown me that it is easier said than done to use resources to assist our teaching and to transfer knowledge in a practical setting. Why are we not providing the opportunity to teach practitioners how to use these resources properly? When it comes to operationalizing, implementing, applying and demonstrating knowledge transfer of these resources in Adapted Physical Activity, there are surprising challenges that can be detrimental to teaching, learning and safety. I believe that it takes a qualified and motivated individual who is given an opportunity to learn and practice using resources to teach Adapted Physical Activity effectively. I am not sure that there are enough opportunities, accessible opportunities, or awareness of such experiences for both pre-service and in-service teachers to gain experience in Adapted Physical Activity.

Purpose: The purpose of this research is two fold. First, it is to explore the challenges to operationalizing and implementing relevant resources for Adapted Physical Activity.

Second, is to develop a framework that informs how resources should be developed and implemented to foster appropriate Adapted Physical Activity to support these challenges.

Research Questions:

The research questions I have developed from my curiosity, experiences, and a review of literature are:

- 1) What relevant resources exist to teach practitioners to teach Adapted Physical Activity to individuals with special needs?
- 2) What types of training or learning opportunities exist to teach Adapted Physical Activity strategies to practitioners?
- 3) What challenges do practitioners experience when attempting to use resources to support their adaptations and their subsequent teaching?

I have chosen to use my purpose, research questions, and a literature review to guide the development of a framework that informs how resources should be developed and implemented to foster more effective resource implementation and more effective teaching strategies for Adapted Physical Activity. This framework assists/supports the use of the resources found to encourage effective teaching of APA for individuals with special needs who are at different stages of movement skill development. This is the next step to better understand the impact of knowledge transfer in an application setting, why common sense is not always so common in teaching, and why it is easier said than done to use resources. Providing a framework that informs how resources should be developed and implemented allows practitioners to have an opportunity to understand movement, station development, activity plan creation, and how to effectively use resources for APA. I want to give practitioners and individuals working with the special needs population the

opportunity to use their experiences to learn, create, and transfer knowledge to teach effectively.

Individuals working with this population in activity settings believe their prior knowledge is enough to be effective at teaching; my observations lead me to believe there are still ‘common sense’ challenges when implementing Adapted Physical Activity.

When determining the details of the murder in the game “Clue” you can’t just suggest it was Colonel Mustard, in the lounge, with the candlestick without the facts of the case or guessing before you’ve gained any clues in the game; there are hundreds of possibilities. I also believe there are many resources that guide teachers and instructors in *what to do* to make an inclusive environment in their classroom but there isn’t anything to provide insight on *how to use resources* to teach inclusion and *when to use resources, or why to use resources for given situations*. Giving a practical application opportunity such as a workshop or training course on HOW to use available resources and HOW to use one’s knowledge effectively could help implementation. If practitioners have a better understanding when it comes to implementation: what to do, how to implement, where to implement, when to implement and understand why they are implementing resources/Station-Based Pedagogy/inclusive teaching strategies to teach Adapted Physical Activity, perhaps their abilities and common sense will improve. Therefore, I will explore the challenges to operationalizing and implementing relevant resources for Adapted Physical Activity and I will develop a framework that informs how resources should be developed and implemented to foster appropriate Adapted Physical Activity to support these challenges.

Chapter II: REVIEW OF LITERATURE

The following chapter will describe the research literature in relation to teaching, learning, and Adapted Physical Activity. Literature on instructing Adapted Physical Activity for children and youth with special needs is very limited. Moreover, I have chosen to provide an overview of teaching in Adapted Physical Activity including programming and research on practitioners' experiences teaching individuals with special needs. Also, I have focused on theories of learning, theories of teaching, pedagogy and andragogy as a conceptual background. It is important to support my research findings and the development of a framework that informs how to develop and implement resources for practitioners to teach Adapted Physical Activity with a review of the literature on teaching and learning.

Teaching Adapted Physical Activity to Individuals With Disabilities

Adapted Physical Activity (APA) "is a diversified program of developmental activities, games, sports, and rhythms, suited to the interests, capacities and limitations of students with disabilities" (American Association for Health, 1952, as cited in DePauw & Doll-Tepper, 2000, p. 136). Individuals with disabilities deserve *and* need the opportunity to participate in physical activity and develop skills to lead healthy active lifestyles. APA allows individuals with disabilities to engage in safe and developmentally appropriate physical activity to improve their movement skills. APA emphasizes engaging in movement in a variety of environments rather than in a separate program from generalized physical education. "A cross-disciplinary theory and practice that attempts to identify and solve motor problems throughout the lifespan, develop and implement theories that support access to sport and active lifestyle, and develop cooperative home-

school-community service delivery and empowerment systems” (DePaw & Doll-Tepper, 2000, p. 136). APA is about developing individuals with disabilities movement repertoire in different environments to enhance every day living tasks.

Whether it is in a school setting, a community program, or recreation activities, teaching APA takes knowledge, skill, and a deeper understanding of the individuals to implement effectively. Physical education teachers are generally trained to teach physical activity to different age groups and they learn the concepts on how to modify and accommodate for all students. Generalist teachers on the other hand have had minimal opportunity to attend in-service practice for adapting, including, and integrating especially when it comes to physical education (Chandler & Green, 1995). Teachers still experience difficulty integrating students with disabilities into physical education or activity programs because they haven’t had training *specific* to physical education (Chandler & Green, 1995). “If pre-service teachers do not possess the knowledge and skills to implement inclusion appropriately, the included students with disabilities in their future classes will certainly have diminished opportunities to attain desired outcomes regardless of teachers’ attitudes toward inclusive reforms” (Cook, 2002, p. 263). Beyond the challenges in-service and pre-service teachers experience, other essential workers – educational assistants, resource teachers, inexperienced teachers, parents and volunteers – don’t always have the tools to implement resources or information on how to teach physical activity to youth with special needs. If these workers can’t pursue support from the teachers, there then becomes limited positive transfer from multiple sources to encourage living a healthy active lifestyle with the fundamental skills for daily movement activity. In the physical education and activity environments, these workers are often the

ones working daily with the individuals. The problem that arises is their limited experience with Adapted Physical Activity, progressive development, and movement education. They need the support from the teachers to learn and assist in implementing the curriculum or life skills for students.

Knowing, understanding, and planning for movement activities is the physical education teacher's role but other practitioners without this background are teaching activity to individuals with special needs. Inclusion is still "fitting" students with disabilities into existing programs, but this is not adapting or including students with their dignity, development, and personal well-being at hand (DePaw & Doll-Tepper, 2000; Goodwin & Watkinson, 2000). Most teacher education programs instructing health and physical educators do not require a specific placement for teaching physical education to individuals with special needs. It is in the placement requirement that you would encounter this experience. Even when having experiences teaching physical education to individuals with disabilities, there is hesitation and a lack of support by teachers to include disabilities in physical activity (Kirk et al., 2006). Teacher training and teachers understanding of inclusion, disability, and Adapted Physical Activity is insufficient (Kirk et. al., 2006).

Research conducted on teachers in physical education indicated that "the lack of initial teacher training they received in this area adversely affected their ability to deliver inclusive physical education effectively" (Fitzgerald, 2006, p.760). Pre-service teachers have challenges with preparation experiences and instructional practice for inclusion in their training (Cook, 2002). Many programs and qualification courses have "special education" content embedded into their curriculum but this does not mean that

placements, dialogue, or instruction is provided for effective knowledge acquisition (Cook, 2002). If there was an increase in the opportunities to be reflective, the opportunity to experience relevant issues to problem solve, and practice decision-making, the effectiveness of teaching inclusive pedagogy and Adapted Physical Activity could occur (Kirk et al., 2006). This active approach to learning is described as field experience, an important tool to practice reflexivity for educators in the learning process and to teach.

We view the body to understand it but we do not take into consideration all aspects (Fitzgerald, 2006). It is important to have the lived body as a part of the experience – having active involvement to improve the conditions of physical activity for special needs by those with special needs. Fitzgerald (2006) expresses that individuals with disabilities in research are often observed and generally involved as “subjects” in research rather than engaged through the process to gain knowledge from. Learning from individuals with first hand experience, training pre-service and in-service teachers, and collaborating with those individuals who have had challenges implementing Adapted Physical Activity can assist in making more effective APA for individuals with disabilities.

What Is Learning?

Behavior, cognitive processes, social interactions, and environmental elements all have an impact on an individual’s perspective of what learning is and how one learns. Saljo (1979) explains that learning in the educational environment has multiple meanings and individual’s conceptions of learning are different. Learning has previously been seen as a transfer of facts, memorization, understanding information for real life, and making

sense of knowledge (Saljo, 1979). There are many varying perceptions on learning that differentiate from both an objective and subjective view on learning and different notions based on the individual. Brandsford (2000) supports that learning goes beyond Saljo's (1979) list and is more about the process, how we develop, the transfer of knowledge, learning opportunities, and the combination of the brain, mind, body, and experiences.

Because of the complexities of learning, the starting point to engage learners is a difficult task. It is more about understanding who the learners are and how they learn than it is about what to teach and why teach it. Bass (2012) describes learning as a process and function of the brain in which the acquisition of knowledge takes place. Learning involves change and using prior knowledge to formulate new meanings and understanding (Bass, 2012). To have an understanding of learning, one needs to appreciate that learning differs from the early stages to the later stages of development where learners try to use what they have been taught. Differences in every learner, the approach to learning, and teaching strategies all influence the learning process.

The literature describes different learning styles and modes of identifying learning styles through identity theories as a means of gaining a better understanding of how unique learners are. With knowledge of learners, come theories of learning. Theories of learning and the models and concepts used for understanding how individuals comprehend information are abundant in the literature on learning and are used in this study to inform the framework developed for developing and implementing resources for APA. These theories include how individuals actively engage in the process of acquiring knowledge and how they develop products to illustrate their learning. Theories such as transformative learning, social learning theory or social cognitive theory, situated

learning, service-based learning, and experiential learning are developed to help understand the learning process and its impact on knowledge transfer. This field of literature also provides a framework from which the analysis of data for this study is based.

Learning Styles and Identity Theories.

A key starting point before breaking down the learning process is to understand who the learners are and how will learning help them. Gaining knowledge about the learners specifically and searching for personal characteristics among those learners should be an initial consideration in teaching. Observing and identifying the learners' needs, abilities, and interests allow an in-depth understanding of the learner; this is the basis of the learning process for both the learner and the instructor (Jonassen & Grabowski, 1993). There is no denying that there is diversity in learning styles amongst individuals. But, when viewing the learning process that diversity impacts perception, cognitive processes, and retention of information (Sarasin, 1999).

A learning style is characterized as how someone creates an understanding of content or how they “perceive and process information” (Sarasin, 1999, p. 2). Beyond the notion of ‘understanding,’ that occurs in learning: acquisition of subject matter, constructing meanings to transfer knowledge and the ability to apply knowledge, also varies person to person (Jonassen & Grabowski, 1993). People’s decision-making skills and interactions influence the way a learning style is formed (Snyder, 2000). Accepting that each individual is different – not only with physical, social, and economical status differences – impacts teaching and every-day learning.

Learning styles are defined as characteristics and traits that individuals' demonstrate when dealing with learning and problem-solving situations in their every day lives. They are described through observing learners' primary senses, psychological characteristics, and intelligences (Sarasin, 1999). Determining a learning style requires the use of interests, prior successful learning experiences, and exploring how different instructional methods have an impact on what individuals' understand or enjoy in the learning process (Sarasin, 1999; Castellan, 2012).

Primary Senses.

Processing information through auditory, visual, and tactile/kinesthetic senses are dominant features in learning styles. The emphasis is not on the categorization of the learner as auditory, visual, or tactile/kinesthetic but rather how they use cognitive processes to complete tasks (Sarasin, 1999). Cognitive processing in learning relies on differentiation of instruction for learners, which will assist the learning process and the learner becomes more efficient and effective (Snyder, 2000). Auditory learners are those that utilize verbal instruction and hearing or oral communication, which is beneficial to their processing and understanding of information (Sarasin, 1999). Visual learners have a tendency to need a visual representation of information or to see the content in order to be able to grasp concepts for knowledge and understanding. Incorporating a mental model and allowing for diverse pictures, written exemplars, or other video type projections can assist visual learners in the process of learning (Zapalaska & Dabb, 2002).

Tactile/kinesthetic learners use sensory touch, movement, and a physical hands-on approach to learning (Sarasin, 1999). Motor memory and using tactile stimuli triggers the

physical senses to engage in understanding, gaining knowledge through action and retention of information through physical action.

Psychological Characteristics.

Both the cognitive and psychological aspects of learning influence the aspects of perception. Psychological affects are ways in which a learner's awareness and development can be related to prior knowledge, experiences, and the environment (Freedman, Echt, Cooper, Miner, & Parker, 2012). Psychological characteristics use sensory information like the auditory, visual, and tactile/kinesthetic learners. The difference is that they also introduce the individual's prior knowledge, motivational stimuli, influences from instruction and the environment to better understand the learning process (Freedman et. al, 2012). Theories behind this learning concept allocate learning styles into different classifications: concrete, sequential, abstract, and random learning tendencies, which reflect the learner's behaviours and way of thinking (Sarasin, 1999). Similar to this idea, the cognitive, perceptual, behavioural/affective classifications are based on processing new information for greater understanding (Sarasin, 1999). These theories represent the diversity that is in each learner on a continual scale of cognitive, affective, and psychological individualities that differentiates each of us.

Multiple Intelligences.

Gardner introduces eight intelligences for various learners: logical-mathematical, naturalistic, bodily-kinesthetic, visual spatial, musical-rhythmic, interpersonal, intrapersonal, and verbal linguistic (Gardner, 2006). These intelligences are interests and strengths that each individual possesses (Gardner, 2006; Sarasin, 1999). The theory of multiple intelligences is shaped around a learner's personal and shared positive

experiences. It is a way of providing choice in learning to enhance a student's engagement. Multiple intelligences focuses on an individual's specific needs and allows them to explore learning with a worldview and techniques that encompass their strengths.

Pedagogy and Instructional Strategies

Pedagogy means focusing on how learning can be effective for children and youth (Leonard, 2002). This concept "simultaneously embraces and informs rationale, curriculum design, teaching and learning" (p. 430) for a particular subject matter (Penny & Waring, 2000 as cited in Penny, Brooker, Hay & Gillespie, 2009). Pedagogy is a critical quality that promotes student learning and guides teachers to provide instruction for effective learning. Instructional models and teaching strategies are ways to promote effective learning and inclusive pedagogy (Penny et. al., 2009; Rink, 2010). Inclusive instructional models and strategies take into consideration the teacher, students, environment or context, content, and styles for effective teaching and learning (Penny et al., 2009). Inclusive pedagogies support the active involvement of individuals as they are embedded in the learning process; having interactions with peers, the teacher, and the environment provides students with equal opportunities at success (Byra, 2006).

A teacher's instruction matters especially when working with special needs learners in movement or activity learning situations; being able to teach the whole child can increase the success of the learning process. Differentiated instruction (DI) is a tool to assist teachers with the challenge of effective teaching for effective learning.

"Differentiated instruction is not individualized instruction. It is responding to varying student needs by providing a balance of modeled, shared, guided and independent instructional strategies" (Ontario Ministry of Education, 2008, p. 5). It's about guiding

and assisting students through their learning and engaging with experience to gain a better understanding of the content (Yardley, Teunissen & Dornan, 2012). Knowing the learners and building awareness of students' learning strengths, needs, interests, readiness and learner preferences, allows teachers to respond with appropriate differentiation. Teachers should use a variety of instructional and assessment strategies in their pedagogical practice to address how students learn and how they demonstrate learning through the content, process, product and learning environment (Ontario Ministry of Education, 2008). This is true for all learners, but it is imperative to accommodate and modify learning for individuals with special needs for successful learning opportunities.

Instructional Strategies.

Other major factors that impact the learning process are a teacher's strategies and the differentiated methods they use to create new learning opportunities. Direct instruction is when a teacher has specific instructions, demonstrates and describes structured tasks around their learning objectives and they focus on a step-by-step process (Rink, 2010). This instructional style is a teacher-oriented strategy and the chosen information is 'provided' in a controlled instructional manner. Students then actively take the content and demonstrate their learning based on the teachers instruction (Byra, 2006; Rink, 2010). When the teacher controls instruction it is a teacher-student interactive process, which is reflective of a direct style of teaching. The simple strategy of teacher telling and students doing has the teacher being dominant in the learning process (Rink, 2010).

When "student thinking, feeling, or interaction skills are built into learning experiences designed by the teacher" the teaching strategy shifts to indirect instruction

(Rink, 2010, p. 179). This is a student-centred structure for teaching and the content is broken up to relate to student abilities and interests for meaningful progressive learning (Rink, 2010). Similar to indirect teaching, is peer teaching roles where students have a designed task to work with other students and take more responsibility for their learning (Rink, 2010). The teacher can still provide instruction but students have the opportunity to provide feedback, observe and reflect, and partake in social interaction (Byra, 2006).

Cooperative learning is another strategy that involves students working together to assist each other with the learning process. It is effective for allowing students to interact and manage diverse groups of students with their varying experiences along with accommodating individual differences at the same time (Byra, 2006). It has both a cognitive focus for learning goals and social interaction aspects that teaches individuals to work together for life skill development. Incorporating social, personal, and environmental factors in the learning process makes cooperative learning a holistic approach guiding students to be well-rounded learners (Rink, 2010).

Another approach is station teaching or task teaching. It is arranging the environment into sections where different tasks or skills are broken down and can take place simultaneously. Being able to work at your own pace, or through the process of a learning task in more than one area, fosters an environment for developmentally appropriate tasks. In physical education, station teaching is used to break instruction into pieces so students can focus on one part before moving to the next and eventually putting them together for a wider understanding of the skills broken down (Rink, 2010).

Having students take responsibility for their own learning and to discover their opinions and beliefs about learning, is an active approach to teaching called guided

discovery or discovery learning. Learning concepts individually allows learners to apply the information to real-life scenarios, in different context and environments (Leonard, 2009). This strategy is a cognitive tactic that provides a lot of questioning and problem-solving responsibilities for students to complete (Rink, 2010). Through this active exploration, teachers are able to see where learning is happening and how to foster more instructive methods in order to help students apply their knowledge.

Andragogy

Brown (2006) believes “the learner, the learning process, and the context of learning form the cornerstone of the field of adult education” (p. 706). Andragogy is the approach to teaching adult learners with a learner-centred view where certain strategies and implementation methods could enhance the effectiveness of teaching and learning in adult education. “Adults have specific ways of learning that may be different from those of younger learners” (Bass, 2012, p. 387). Andragogy is concerned with utilizing adults experiences and prior knowledge to further advance or relate new concepts in the learning process (Bass, 2012). Assumptions about andragogy state that teaching should influence a need to know understanding with: self-concept, life experience, readiness to learn, orientation to learning, and motivation to learn for effective teaching and learning (Brown, 2006; Leonard, 2009). Similarly, there is an emphasis on: independence, experience, integration of daily encounters, here and now problem solving, and motivational tactics, which are clear andragogical learning influences (Abela, 2009).

Encouraging experiences in real-life scenarios, contexts, and situational learning enhances the relationship adult learners have with the learning process (Freedman, et. al., 2012). The way in which we emphasize these learning processes is through the

instructional strategies, learning theories, and teaching practices. Some learning theories and strategies often used to support andragogy and that are relative to adult learning and education include self-directed learning, transformative learning, experiential learning, and critical reflection (Bass, 2012; Abela, 2009). Andragogy assumes that adults are independent, have varying experiences, relate learning to everyday life, connect to problem-solving tasks and are motivated internally (Abela, 2009). These help explain how adult learners “assimilate new knowledge in the context of their prior knowledge” (Bass, 2012, p. 387). Incorporating these theories along with learners’ needs, and teaching best practices can impact the teaching and learning relationship and effective outcomes.

Theories of Learning

To understand how individuals – both students and practitioners – are being taught and how they are experiencing the learning process, I have reviewed a variety of learning theories. Learning theories are concepts and models established to help create positive opportunities for knowledge dissemination, knowledge transfer, and knowledge retention. Establishing an overview of learning theories will provide insight to instructional methods and how individuals may learn differently. Such theories include: social learning (cognitive) theory, transformative learning, situated learning, and experiential learning.

Social Learning (Cognitive) Theory.

Social learning theory was designed to look at human behaviours oriented in social settings (Chavis, 2012). Gibson (2004) describes social learning theory as “a dynamic interplay between the person, the environment, and behavior” (p. 193). The

learning process, cognition, and social dynamics are all concepts influenced *by* and contributing factors *to* social learning theory. As learners, we observe others' behaviours in hopes to gain new knowledge and information. Through this observation, we view modeling, body language, and imitation to assist our outlook on the situations at hand (Chavis, 2012). Social learning helps understand cognitive processes through social interaction and observation to examine their effect on behaviour (Bandura, 1977).

In the early development of social learning theory, behaviourism, cognitivism, and personality theory were concepts explored by theorists to describe factors that influenced behaviour (Gibson, 2004). The aspects explored were "behavior potential, expectancy, reinforcement value, and the psychological situation" (Gibson, 2004, p. 194). This focus for social learning theory was based upon observational learning. Later, Bandura (1977) developed his ideas on the theory from a cognitive standpoint relating cognitive processes to observation (Gibson, 2004). Bandura believed "humans can learn through observation without the need for imitation; learning could be either direct or indirect (vicarious) in that one could learn through observing others' behaviors and the consequences of those behaviors" (Gibson, 2004, p. 195).

Bandura (1977) explored self-regulation in social learning, stating that humans relate their actions and surroundings to their behaviour. In the social system, people create an atmosphere that encourages development of personal and social wellbeing (Bandura, 1977). Human involvement advances change and allows individuals to discover a sociocultural environment in learning (Bandura, 2001). Social systems and communication depend on people to both construct and be present in the environment

(Bandura, 2001). Behaviour and the social structure are codeterminants for the sociocultural environment; they are not viewed as separate entities (Bandura, 2001).

Social learning theory emphasizes social participation in learning (Wenger, 2009). To demonstrate social participation as a process of learning, individuals must make meaning of the world, be involved in practice, create a shared and social community, and develop a learning identity (Wenger, 2009). From this, an individual's social learning is richer from experience, active engagement, belonging to a community of practice, and knowing their individuality to improve their learning (Wenger, 2009).

Social learning theory is a well-rounded approach in understanding learning behaviours or behavioural concerns (Chavis, 2012). The theory is an encompassing concept to many disciplines and allows to be implemented in a variety of learning contexts (Chavis, 2012; Gibson, 2004). Social learning theory has been influential in understanding learning concepts, human development, and human behaviour (Chavis, 2012). Its application to multiple aspects of life for individuals assists in connecting learning, behaviour, and the environment together (Gibson, 2004).

I believe social learning theory is an important theory to draw upon for my research because my assumptions are that practitioners teaching APA have various backgrounds with education and experiences. The variety of learning experiences that practitioners may have experienced is an influential aspect to their teaching, behaviour, and the environment they create for their students. I believe the environment and the teacher matter when it comes to the learning process. Viewing feedback forms from practitioners who have engaged in professional development opportunities will provide me with information on different learning contexts and practitioners interactions in the

learning process. Social learning theory establishes a foundation for my interpretations on the practitioners, their behaviours, and the learning environment for implementing resources and training/learning opportunities.

Transformative Learning Theory.

Transformative learning is a developing concept where an individual's worldview, personal development and experiences have an impact on learning. Paulo Freire discusses transformative learning to be one's "consciousness-rising" (Dirkx, 1998, p. 2). This idea focuses on how learners "analyze, pose questions, and take action on the social, political, cultural, and economic contexts that influence and shape their lives" (Dirkx, 1998, p. 2). Freire's view is a strong emancipatory outlook centring on personal contributions to learning and providing individuals with a voice throughout the process (Dirkx, 1998). When developing a critical consciousness, we are able to engage in the learning process at a deeper level in order to understand how the environment is influential (Dirkx, 1998).

Mezirow's beliefs on transformative learning theory differed from Freire as he saw the process of learning to be a guiding point for learners to reflect on their experiences and the assumptions they developed through learning (Abela, 2009).

Transformative learning "is the process of effecting change in a frame of reference" (Mezirow, 1997, p. 5). It is evident that engaging in multiple experiences influences assumptions, decision-making, and expectations people have (Bass, 2012).

Transformative learning involves discovering meanings and constructing new interpretations from our prior experiences (Bass, 2012). This means we are taking our experiences and transforming what we know to better understand the context and

situations we engage in (Bass, 2012). Transformative learning emphasizes this new frame of reference through considering our perspectives and intrinsic motivations on our experiences (Abela, 2009).

Mezirow also saw transformation as critical reflection; learning from experiences must involve reflecting on those experiences (Dirkx, 1998). Critical reflection in transformative learning is the process where we recognize the impact our actions, behaviours, and assumptions we have (Bass, 2012). It drives questioning and encourages discourse with others to help recognize the significance of experiences (Abela, 2009; Bass, 2012). Personal reflection to make meanings from experiences leads to Boyd's notion of "transformation as individualization" (Dirkx, 1998, p. 6). Encouraging dialogue allows one to be self-aware of how interpretations and actions guide our experiences improving personal progression (Dirkx, 1998). Reflection and dialogue also assist active engagement with experiences allowing learners to "explore and examine their own assumptions, values, beliefs, experiences, and worldviews" (Harris, Lowery-Moore & Farrow, 2008, p. 321).

Freire proposes that critical social theory, as a relative concept to transformative learning theory, "views people as subjects, not objects, who are constantly reflecting and acting on the transformation of their world so it can become a more equitable place for all to live" (Freire as cited in Brown, 2006, p. 710). Social transformation through the learning experience is a factor that encourages critical reflection in the learning process and changes individuals' perspectives to make meanings from the reality of their experiences (Brown, 2006). Freire's critical reflection must be connected to questioning, contextual changes, and interactions with other learners (Taylor, 1998). He believes a

power shift can occur with this transformation as when individuals become critically aware or reflect from an experience we can ‘transform’ society and this will impact one’s reality and way of being (Taylor, 1998).

Learners have the opportunity to reflect and see themselves as important contributors or “active agents” which allows them to make change in a variety of constructs (Brown, 2006). It is apparent that participating in reflection and dialogue helps learners explore: “doubt, criticism, curiosity, questioning, a taste for risk-taking, the adventure of creating” which leads to a better understanding of their learning experiences (Freire, 1993, p. 50).

Perspectives and the development of transformative learning have both a constructivist and holistic view. Constructivists believe our personal meanings and interactions with our experiences help us understand those experiences in greater detail (Taylor & Cranton, 2012). We formulate knowledge and understanding on these perceptions, which validates the importance of experiences and clarifies its impact on our learning (Abela, 2009). Transformative learning is not solely directed to past experiences or present encounters, it is intrinsically directed which is important for the holistic view of being a well-rounded person. Individual growth and development is key for balance with learning and understanding. Personal development guides the learning process and encourages individuals to create a new outlook on themselves from their experiences in their worldview (Dirkx, 1998).

Transformative learning is largely geared towards adult learning and higher education (Dirkx, 1998). We reflect on our experiences to connect the theories that we have been taught while we apply our knowledge (Harris, Lowery-Moore & Farrow,

2008). Transformative learning supports self-awareness, self-actualization, and recognizes we make our own choices in experiences to allow for critical reflection (Harris, Lowery-Moore & Farrow, 2008; Taylor & Cranton, 2012). Transformative learning theories depend on individuals to explore different experiences for learning and for learners to reflect on experiences. It encourages learning to be applied.

Transformative learning has changed from understanding learning as “what we know” to the real question “how we know” what we know and why what we know is or is not important, relevant, or meaningful (Harris, Lowery-Moore & Farrow, 2008, p. 320).

As I plan to view both pre-service and in-service teachers experiences with teaching APA and using resources, I believe transformative learning theory is an essential adult learning theory that may help me understand practitioners’ experiences in teaching APA. Practitioners’ prior knowledge and experiences are critical elements for the learning process. If resources don’t allow for practitioners to use their prior knowledge and experiences than they may encounter challenges when attempting to learn new strategies and content for teaching APA.

Situated Learning.

Situated learning theory has a direct focus on how a specific environment or real life scenarios can influence learning and instruction (Anderson, Reder & Simon, 1996; Light, 2011). Situated learning can be viewed from an educational outlook or a community of practice contextual perspective (Langer, 2009). It is commonly described through a constructivist view which interprets its meaning as learning in authentic situations (Langer, 2009). Langer (2009) notes that situated learning and situated cognition have been interchangeable concepts; he states “the term “situated” can specify

both physical as well as a social setting” (p. 184).

Utlley (2006) looks at situated cognition from theory to practice in three interrelated dimensions that relate to the importance of *context* that is embedded in situated learning. These ideas include social interaction and in-depth communication for learning, having authentic tasks to develop individual skills, and building a learning community for support from other individuals and the environment (Utlley, 2006). Situated learning revolves around these standard concepts to allow for educators to involve students in the learning process.

Situated learning is described as cognition of an individual and is a social phenomenon. Some theorists believe the thinking process is a personal matter, where others think the community of practice where social interactions occur are the centre of learning (Anderson, Reder & Simon, 1996). Another issue related to social cognition is in transferring learning from school environments to work based environments (Langer, 2009; Anderson, Reder & Simon, 1996). Learning and understanding in a traditional classroom environment may not always relate to the workforce. With situated learning, transferring knowledge is more about understanding concepts through learning in different contexts. It has a stronger focus on the purpose “to transform student consciousness and expand their viewpoints toward an active engagement as professional citizens” (Edmonds-Cady & Sosulski, 2012, p.48). In regards to the learning context, giving and gaining knowledge to ‘ground’ in experiences is more important than transferring to unrelated areas (Edmonds-Cady & Sosulski, 2012). The theory is an example of connecting learning and understanding to both related and other various situations to display a wide knowledge base in that area of interest (Edmonds-Cady &

Sosulski, 2012).

Other perspectives on situated learning include: the psychological position and the social constructivists' 'situated' position (Cobb & Bowers, 1999). Learning in the psychological position involves social practices and is a process where interaction and participation have a direct impact on learning (Light, 2011). Its particular relation to participation is to form better learning and immersion practices in various contexts (Light, 2011). This perspective uses differentiated instruction for learning. This allows the exploration of a variety of environments, both independent and group interactive tasks, and incorporates personal active involvement in learning.

"From a situated learning perspective learning is a whole-person, transformative process arising from participation in practice within a particular community of practice" (Light, 2011, p. 372). The idea of situated learning was to use students' knowledge from traditional learning settings to then transfer knowledge to develop individuals' professional and practical skills through active learning (Edmonds-Cady & Sosulski, 2012). For example, engaging in field experiences and using concepts in a more complex setting would allow students to demonstrate their learning in a different more 'observable' way (Edmonds-Cady & Sosulski, 2012). The emphasis on the realistic setting and learning in an environment that one can transfer knowledge from, further highlights a "comprehensive understanding involving the whole person and the world within which they live and participate in social practice" (Light, 2011, p. 373).

The constructivist view incorporates the community of practice or a social practice as a specific context. This means having individuals engage in learning with others. Embedded in the curriculum is working in a group setting where roles and a

supported community can be created (Edmonds-Cady & Sosulski, 2012). Collaboration with experts, professionals, teachers, and peers provides a greater opportunity for students to connect their skills in various situations. It also allows students to test their knowledge whether the community is created in their school environment or actually using a field experience to engage in learning (Edmonds-Cady & Sosulski, 2012).

Another concept that is involved within community of practice is the idea of enculturation which influences the complex social aspect connected with situated learning (Utlley, 2006). It focuses on conversations to share ideas, understanding through learning in the social setting, and exclusively learning together (Utlley, 2006).

From a cognitive psychological standpoint, more discrepancies on situated learning theory become evident (Anderson et. al., 1996). Situated learning in education – instructing students, transferring knowledge, the learning process, and the learning environment – is different from an apprentice or work based situation. Anderson et al. (1996) contrasts the traditional views on situated learning because all 4 aspects: cognition, transfer, instruction, and context, vary typically for every individual. But allowing individuals to experience a variety of methods for their learning in different contexts, with social structure, and with an opportunity for application can assist learners to have a better understanding overall.

Situated learning is an evolving learning theory. Structuring teaching and learning around realistic environments and encouraging authentic learning, can only benefit students in their practical application of knowledge and help assess the learning process. Every situation and environment is different and has many variables.

Incorporating active involvement for students to learn, can assist in building a community

of practice that will help knowledge transfer for realistic environments and is ultimately learning through situations.

I believe that every situation is different when it comes to teaching in APA. The students, the environment, and the teacher all can be influential factors for effective learning. I have chosen to view situated learning theory because the professional development opportunities, teaching situations, and the potential variety of resources to assist practitioners in teaching APA may be very different. I believe it is important to interpret the data through this theory as I will be gathering data from the lens of a teacher in various situations. I also think that situated learning may become a factor that resources are ‘situated’ for different environments, practitioners, or children, which could contribute to the framework for developing and implementing resources I intend to construct.

Experiential Learning.

David Kolb (1984) believed that “learning is the process whereby knowledge is created through the transformation of experience” (p. 38). Along with the development of knowledge, he described that “learning is a continuous process grounded in experience” (Kolb, 1984, p. 27). Experiential learning is a unique practice that allows active involvement to assist the learning process and help with knowledge acquisition. Having multiple layers, experience is a phenomenon that links making meanings from cultural, societal, cognitive, historical, conscious, subconscious, immediate, and reflexive influences to context and the environment (Fox, 2008). Illeris (2007) stated, “experiential learning can primarily be understood as learning in which the learning dimensions of content, incentive, and interaction are involved in a subjectively balanced and substantial

way” (p. 94). Experiential learning involves creating knowledge, adapting to the world around you, and interacting with others and the environment (Kolb, 1984).

Engaging in experiential learning promotes the application of knowledge. It allows individuals to implement what they know and what they have been taught in different environments. Experiential learning connects education, work, and personal development through the opportunity to participate in learning and apply it to real world scenarios (Kolb, 1984). The concept of experiential learning strives to educate through a working environment whether that may be in the classroom or at a job to facilitate meaningful personal and career related development (Kolb, 1984). “Both positive and negative learning experiences will have powerful impacts on student learning” (Chan, 2012, p. 405). Concrete and abstract experiences, prior experiences, students’ knowledge and the reflection process all assist in the learning process and application of knowledge (Chan, 2012).

Experiential learning has been a developing theory since the early 1900’s. There is a common theme noted by theorists: experiential learning is in opposition to “school learning or learning from being taught” (Illeris, 2007, pg. 84). It is viewed as a fundamental concept for learning that uses and accounts for “experience, perception, cognition, and behavior” (Kolb, 1984, p. 20-21). Freire described his idea of gaining a critical consciousness, which is a deeper understanding in learning, to be strongly related to experiential learning (Freire, 1993). He believed experiential learning is “the active exploration of the personal, experiential meaning of abstract concepts through dialogue among equals” (Kolb, 1984, p. 16). It is the interaction with others and the environment that promotes learning and understanding – experiential learning.

In early development of experiential learning, Piaget focused on learning and cognitive development from an experience, concept, reflection, and action point of view that involved the individual stages of growth and development (Kolb, 1984). Piaget's theory was driven by cognitive development and how "intelligence is shaped by experience" (Kolb, 1984, p.12). He believed the relationship with the environment and actively engaging with the surroundings has an influence on learning and intelligence. To coincide with the cognitive view, Bruner thought that "the purpose of education is to stimulate inquiry and skill in the process of knowledge getting, not to memorize a body of knowledge: 'knowing is a process, not a product'" (Bruner, 1996, p. 72, as cited in Kolb, 1984, p. 27).

With a strong focus on learning and development, Malcolm Knowles specifically viewed andragogic versus pedagogic learning strategies with experience (Yardley, Teunissen & Dornan, 2012). He saw that experiences for andragogic learners were self-directed and they initiated the experience to benefit their learning. "Traditional classroom-based learning and experiential learning are complementary to each other as the former generates theoretical knowledge inside the classroom whereas the latter enables individualized experiences and skills to be developed outside the classroom" (Chan, 2012, p. 405).

Kolb (1984) describes that Kurt Lewin's phenomenological perspective was an instrumental viewpoint to experiential learning; it focused on action research and laboratory training through experiential research learning approaches. He favored implementation of experiential learning for developing organizations (Kolb, 1984). The model focuses on how concrete experiences impact abstract concepts. He believed

“immediate personal experience is the focal point for learning, giving life, texture, and subjective personal meaning to abstract concepts” (Kolb, 1984, p. 21). This personal contact to experience helps understand the abstract concepts but also gives significance to the ideas formed in the concrete portion that occurs in the learning process (Kolb, 1984). Lewin also introduced the aspect of feedback, which is a crucial component for a full experiential learning cycle (Kolb, 1984).

John Dewey was another important contributor to the work on experiential learning (Illeris, 2007). He had a strong focus on quality of experiences for an educational purpose. Dewey (1938) stressed the importance of continuity and interaction. These two ‘principles’ demonstrate the value of experiences, the importance of connecting past experiences to learning, ensuring opportunity for problem solving for future experience, and linking individuals to the environment (Dewey, 1938). Some of the major concepts in his model include: individual’s impulse behaviour and actions, knowledge and learning, judgment of learning and actions, observations, and purpose of experience (Kolb, 1984).

David Kolb built his foundation with similar beliefs as such theorists discussed but he focused on the individual, their thoughts, and the learning process:

Neither the transmission of knowledge from teacher to student, nor the students’ active involvement in a variety of tasks, provide for a true education, but that an education has to be grounded in experience and that this experience needs to be complemented by reflection (Kolb as cited in Kreber, 2001, p.218).

Kolb (1984) valued how concrete experience, observations and reflection, abstract conceptualization, and active experimentation would impact the learning process. He understood that different learning styles would be factors with dissemination of knowledge in learning and created a cyclical representation of learning that was individual and experience focused (Kayes, Kayes & Kolb, 2005). Kolb (1989) believed ideas, knowledge, and learning are “formed and re-formed” through experience (p. 26). His model encouraged “the learner to experience, reflect, think and act in a cyclic process in response to the learning situation and what is learnt” (Chan, 2012, p. 218). Actually having first hand experience and feelings, observing and reflecting, thinking about observations, and applying and planning through active experimentation is the on-going cycle of experiential learning (Chan, 2012).

Experiential learning encourages students to express their understanding or ‘evidence of learning’ through practical application, which can influence effective learning. Practical application is when the learner makes use of information in a context different from the one in which it was learned. This can create a foundation for proper application of knowledge. Incorporating the notion of application of learning assists teachers in assessing students’ success in the learning process. This application can be evident through an experiential learning environment; students are not only able to use their knowledge in the setting, but they are involved in the learning process and reflecting on their experiences.

Knowledge is created and applied when students are able to engage in active learning (Kreber & Cranton, 2000). “Experiential learning theories explain how individual people learn individual things in individual ways as they react to individual

perceptions of experiences throughout their lives” (Yardley, Teunissen & Dornan, 2012, p. 103). Experiential learning involves interpreting experiences and relating personal meanings with them through planning in response to interpretations (Yardley, Teunissen & Dornan, 2012). Active engagement and interaction in the experiential learning environment allow students to apply their knowledge and acquire new knowledge from a concrete experience (Yardley, Teunissen & Dornan, 2012). Individuals are then able use their surroundings to advance what they already know to put their knowledge in action (Yardley, Teunissen & Dornan, 2012). “Learning becomes ‘experiential’ only after experiences or events have been transformed by either reflection or action, preferably both” (Kreber, 2001, p. 220).

Experiential learning can involve field trips, community service involvements, practicum experiences, apprenticeships, workplace or educational placements, active experiments, classroom-based activities, and hands-on activities (Chan, 2012; Kreber, 2001; Kolb, 1984). Experiences become truly experiential when instructors encourage reflection and have “students transform these events (or experiences) either by strategies that bring about reflection or those that bring about experimentation” (Kreber, 2001, p.220).

Experiential learning opportunities.

Types of experiential learning activities include active learning, self-directed learning, problem-based learning or inquiry-based learning, and service-learning (Wurdinger & Carlson, 2010; Kreber, 2001). Active learning is traditionally used for group or individual interactions that involve student participation (Wurdinger & Carlson, 2010). Such activities used in classroom environments are presentations, debates, role-

plays and dramatizations (Wurdinger & Carlson, 2010). Being in the classroom setting, the engagement among individuals and different group settings fosters the exploration of ideas and facilitates a different type of learning environment.

When teaching self-directed learning through experiential learning, the main focus is to have individuals use prior and present experiences to reflect on in order to gain a better understanding of content and learning. Kolb “suggests that learners experience both through the felt, intuitive and creative qualities of *apprehension*, and the intellectual qualities of *comprehension*” (Kreber, 2001, p. 224). This proposes that students make informed decisions through self-directed learning: “what to learn, why to learn, how to learn it, and how to assess the validity and value of learning” (Kreber, 2001, p. 225).

Another strategy used for experiential learning is problem-based or inquiry-based learning: “finding solutions to authentic problems through in-depth investigation” (Wurdinger & Carlson, 2010, p. 31). Problem-based learning involves critical thinking and problem solving abilities in different settings or for issues that are present. When the facilitator organizes problems, individuals then collaborate to apply their knowledge to determine and discover solutions to the problems introduced (Wurdinger & Carlson, 2010). Problem solving is often used in andragogy; adult engaging in the learning process and have opportunities “to work collaboratively, use their informal and formal prior knowledge, engage in constructivism, and develop their self-directed learning” (Wurdinger & Carlson, 2010, p. 31).

Lastly, service learning is commonly paired with experiential learning theory and for teaching and the learning process. It is an approach that encourages community involvement and is experience centred. Service learning occurs when its main

components of fulfilling a community need, action, and reflection are all present (Wurdinger & Carlson, 2010). The learning process is strongly influenced by the experience that occurs; ‘learning from service’ and providing the service should be equal outcomes from the experiential practice (Wurdinger & Carlson, 2010).

Connecting knowledge to practice and using experience in a realistic setting is a primary goal of service learning (Castellan, 2012). Service learning helps guide learning and understanding. It links understanding content from a course or instruction, to the process of being actively engaged (Castellan, 2012). Individuals are able to learn and experience in a structured community environment (Kraft, 1996). This concept incorporates reflecting upon experiences and learning (Castellan, 2012). It demonstrates a relationship between ‘theory-to-practice’, which becomes evident through learning and assisting knowledge application in a practical way (Castellan, 2012). Another way to describe this concept is bringing together learning with service which has a shared goal of engaging in meaningful practice/programming with the community and encouraging structured reflection (Castellan, 2012).

Service learning couples course-based educational practice with community needs in an organized setting, along with using acquired skills to support learning in the experience setting (Bringle, Hatcher, and McIntosh, 2006). It provides “a broader appreciation of the discipline, and enhanced sense of personal values and civic responsibilities” to learning and the community (Bringle, Hatcher, and McIntosh, 2006, p.12). Service learning enhances student learning through a developmental approach that includes learning for gaining knowledge, sharing their learning through experience, and help a community setting to share knowledge and help others (Kraft, 1996).

Service learning initiatives involve individuals from different public groups: teachers, students, community members, and organization members. They work together to encourage learning for self and for the public endeavors (Felton & Clayton, 2011). Other key components established through service learning are developing individuals' critical thinking skills, reflective practice, knowledge, skills, collaboration and interaction among community members (Felton & Clayton, 2011).

From my learning and teaching experiences I believe that experiential learning theory is essential to consider when developing learning opportunities. I will be keeping a reflexive journal through data collection and analysis, and I believe the experience of gathering data is comparative to the experiential learning cycle. I will observe, reflect, apply and engage in training/learning opportunities as well as resources to gain an in depth understanding of the resources for APA. I also believe this theory is important to draw on to compare how resources and training/learning opportunities are currently developed and implemented. I will evaluate if resources and training/learning opportunities are framed around experiential learning and if they incorporate active learning, self-directed learning, problem-based learning, and service learning to view the types of experiences for practitioners.

Teaching

Effective teaching is commonly reflected through positive outcomes in learning and it is constructed around individual learners and the curriculum. "Teaching is conceptually and practically dependent on learning" (Noddings, 2003, p. 242). Though there is a correlation between the processes of teaching and learning, positive learning is not always an outcome of teaching. Research on teaching and learning is done both

independently and together in order to ‘bridge the gap’ between the two complex topics (Wilson & Peterson, 2006). Theories of teaching encompass the beliefs of theories of learning; how we teach is dependent on the learners. Learning theories are similar to teaching theories because they are based on what the teacher incorporates in their instructional methods to foster positive learning. Such theories include: experiential learning, cooperative learning, active learning, and viewing behavioural, cognitive, and constructivist approaches to learning. As we teach to a variety of learners in multiple settings, teaching strategies are formed to reflect positive learning goals and encourage successful learning.

The literature reveals that teachers, learners, and our learning environment are all variables and key factors that influence the effectiveness of learning and influence change in teaching (Atkins, 1988). To gain a better understanding of how teaching and learning theories connect, I will establish a context for best practices in teaching viewing the reflective practitioner and the scholarship of teaching. This will support the development of a framework to develop and implement relevant resources for practitioners teaching APA.

The Reflective Practitioner.

In teaching, we encounter significant experiences and events that contribute to our learning as educators. These experiences can be powerful instances that we use to benefit our teaching practice. Larrivee (2000) states “unless teachers engage in critical reflection and ongoing discovery, they stay trapped in unexamined judgments, interpretations, assumptions and expectations” (p. 294). Engaging in a reflexive relationship between theory and practice brings teaching and learning together (Gracia et al., 2006). Reflection

is the process that allows us to view our knowledge and our execution of knowledge in different settings and to understand ourselves through a different lens.

Donald Schon introduces the concept of ‘reflection *in* action’ and ‘reflection *on* action’ in teaching and learning. The goal of reflexivity in teaching is to establish better practice, instruction, and to learn from our actions (Schon, 1987). Reflection *in* action is during an experience such as thinking about what we are doing in the moment. It is the time span while actively engaged that learning is present to make changes to what we are doing (Issitt, 2003). Reflection *on* action is thinking about an experience after it has occurred or post considerations of a specific event and how one handled a situation. It is “looking back, evaluating, and learning from what we have done in order to develop the ‘intelligence in action’ when difficult, on-the-spot judgments have to be made” (Issitt, 2003, p. 180). This concept helps educators, especially practitioners in teacher training courses, understand the *interpretive process* while we teach and learn (Garcia et al., 2006). Providing reasoning for why we change something during a lesson, how our actions are of impact while we teach and the feedback process on post-teaching experiences are essential components to the reflective process and learning.

Reflecting *in* and *on* action of teaching experiences provides detailed perspectives and allows teachers to inquire into their individual teaching strategies. This type of reflection during and after teaching is an essential tool for improving one’s teaching and in becoming a reflective practitioner (Schon, 1987). Going through the process of reflection assists in finding the challenges we face in teaching and learning or the successful measures we execute. Hedberg (2009) states, “Learning is acting *and* observing, doing *and* being, and telling *and* listening” (p. 10). This helps our practical

experiences that we engage in become more meaningful. Reflection is essential for understanding how what we do is relative to our lives (Hedberg, 2009). “When we reflect, we give the learning a space to be processed, understood, and more likely integrated into future thoughts and actions” (Hedberg, 2009, p. 11).

The many perspectives on scholarship all emphasize the importance of research on teaching, research on learning, and a teacher’s development of ways to instruct and collaborate in learning (Kreber & Cranton, 2000). I believe it is important for me to note that though scholarship is generally used in higher education and I believe practitioners are encouraged to pursue professional development. I assume that professional development for practitioners would encompass strategies and information regarding research on the specific teaching domain, use research on learning for practitioners, and provide opportunities for teachers to instruct or learn to facilitate learning more effectively. Being a reflective practitioner through data collection *on* the resources I counter as well as *in* the process of data collection, will allow me to establish a better understanding of how reflection is used by practitioners. In viewing resources and training/learning opportunities, I plan to draw upon this theory to see if reflective practice is seen as effective by practitioners’ feedback or if it is being used in these opportunities.

The Scholarship of Teaching.

One of the most important components noted about teaching in the literature is the relationship between the teacher and the learning process. Learners’ benefit from teachers’ development and efforts towards teaching, which is why teaching and learning are synergetic practices (Kreber, 2002). Teachers not only focus on the learners but they engage in professional development to become lifelong learners themselves. When

viewing higher education, the notion of scholarship surfaces in teacher development (Kreber, 2002). The different types of scholarship are discovery, integration, application, and teaching (Boyer, 1990). I am curious to see whether practitioners, including pre-service and in-service teachers in elementary and secondary schools, have opportunities to build on their personal scholarship of all of these domains. To teach with quality and use all of your knowledge as an educator one must engage in the different elements to be truly scholarly (Boyer, 1990). Being scholarly includes knowing content, teaching, learning, and facilitating based on the learners that can lead to displaying the scholarship of teaching (Kreber, 2001). “Teaching is the highest form of understanding” (Aristotle as cited in Boyer, 1990, p. 23) which leads me to discuss how scholarship and the scholarship of teaching have a significant impact on teaching and learning.

Scholarship entails the pursuit of new knowledge, the application of knowledge in a practical way while incorporating theory into practice, and the connection of disciplines for a wider contextual understanding (Booth, 2004). Kreber and Cranton (2000) further expand Boyer and Rice’s notion of scholarship in teaching by suggesting that scholarship is import when providing knowledge in appropriate ways for learning. I hope to view different training and learning opportunities for practitioners to understand how practitioners are being taught about APA and how they are using resources. Scholarship is used for cross-curriculars or integrated studies and incorporates strands of disciplines together in learning to integrate information in an “accessible, interesting, and meaningful way” (Kreber & Cranton, 2000, p. 477).

According to Boyer (2000) the scholarship of discovery allows teachers and scholars to explore their passion for research. Engaging in research to learn new

knowledge, to exemplify innovative thinking, and to uncover meaningful information allows teachers to foster their own learning and development (Boyer, 2000). When it comes to integration in scholarship it is the idea of bringing information together for further insights and interpretations on research (Boyer, 2000). The learning connection across disciplines, whether they are similar or not, is linking knowledge and research to advance learning (Boyer, 2000). The scholarship of application refers to bringing theory and practice together to use knowledge *and* gain knowledge from the application experience. “New intellectual understandings can arise out of the very act of application” (Kreber & Cranton, 2000, p. 23). The application process for teachers requires active learning but it also includes the dynamic relationship from learning during and from the experience; the application process is not always provided to link the experiences and knowledge.

The many perspectives on scholarship all emphasize the importance of research on teaching, research on learning, and a teacher’s development of ways to instruct and collaborate in learning (Kreber & Cranton, 2000). In data collection and analysis I plan to interpret resources and training/learning opportunities to see if they are establishing similar criteria as scholarship entails. The last domain of Boyer’s (2000) model in scholarship is the scholarship of teaching. It includes being excellent, or an excellent teacher, which means to “hold extensive knowledge about teaching and learning” (p. 447). Excellence does not always mean that teachers can transfer their knowledge to educate others appropriately (Kreber & Cranton, 2000). Teaching “means not only transmitting knowledge, but *transforming* and *extending* it as well” (Boyer, 2000, p. 24). To be recognized as excellent in the scholarship of teaching, teachers should engage in

the learning process while reflecting on experience, research, and gaining knowledge on instruction, pedagogy, and the curriculum to improve learning (Kreber & Cranton, 2000). Kreber and Cranton (2000) describe that “teaching effectiveness is inferred from the product that was created; it is the product that is the indicator of scholarship” (p. 477).

Scholarship of teaching also focuses on instructing learners and those “who will be enthused and enabled to become tomorrow’s scholars and able to participate actively in a wider culture” (Booth, 2004, p. 252). Boyer emphasizes ‘good teachers’ that “stimulate active, not passive, learning and encourage students to be critical, creative, thinkers, with the capacity to go on learning after their college days are over” (Boyer as cited in Booth, 2003, p. 254). Teachers’ development of personal teaching styles leads to their progression of being and excellent – or displaying quality in your work – which enhances the learning experience for themselves, research, and ultimately students. “In the scholarship of teaching, the teacher cares deeply about the discipline, but, equally, about the learners and their connection to both the material, the discipline, and learning” (Theall & Centra, 2001 as cited in Kreber, 2001, p. 42).

Beyond displaying qualities of the scholarship of teaching and being excellent, there is the notion of expertise in teaching for scholarship (Kreber, 2001). There are three evident perspectives (Kennedy; Dreyfus and Dreyfus; Bereiter and Scardamalia as cited in Kreber, 2001) on expertise in the scholarship of teaching: “expertise as technical skills, the application of principles and theories, critical analysis, or deliberative action” (Smith, 2001 as cited in Kreber, 2001, p. 71). The first notion is if a professional is engaged in tasks, uses their knowledge, interprets scenarios and learning, and have interactions through reflective practice, expertise is being explored through teaching

(Kreber, 2001). The second notion of expertise is Dreyfus and Dreyfus (as cited in Kreber, 2001) transition from novice to expert through a series of developmental milestones that use teaching experiences and a teacher's intuition to advance through the stages. This concept involves the progressive steps when it comes to understanding content, recognizes situations, incorporates choice in developing teaching methods, and then uses intuition and experiences for critical decision making (Kreber, 2001). Lastly, "progressive problem solving" and "investigating in one's own learning" contribute to being an expert in the scholarship of teaching while reflection on personal teaching knowledge and performance (Kreber, 2001, p. 75). It is the teacher's effort to further their skills to develop their teaching and more specifically the scholarship of teaching.

Chapter III: METHODOLOGY

Paradigmatic Perspective**Interpretive Worldview.**

My research inquiry and main interests are informed by an interpretive worldview. When exploring the purpose of my research study, to explore the challenges that occur for practitioners while operationalizing and implementing relevant resources to teach Adapted Physical Activity, I have made every effort to understand how these individuals construct meanings about their experiences. An interpretive worldview is incorporating and actively inquiring about new information, while acknowledging the importance of multiple perspectives on and understanding of, a phenomenon under study (Patton, 2002). Developing an understanding through constructing and reconstructing knowledge is imperative to interpretations in the research process (Guba & Lincoln, 1994). The framework when being interpretive is to construct realities through a variety of processes such as social and experiential knowledge construction (Guba & Lincoln, 1994). "Reality is not something that simply exists independently outside of the social meaning that people use to account for it;" (p. 87) we have to take into consideration our environment and the social world within which humans interact in forming knowledge (Clare, Hamilton & Stevens, 2004).

The interpretive worldview has allowed me as the researcher to appreciate and discover meanings through presumed realities and literature about these challenges that have surfaced when exploring my research questions. Through data collection and analysis phases, I was able to produce a framework that informs how resources are developed and implemented to foster appropriate Adapted Physical Activity. My

unobtrusive data sets involved materials gathered on teaching and learning, literature on Adapted Physical Activity, resources, and professional development feedback forms. I have chosen to use my purpose and research questions to guide the development of a framework that informs how resources are developed and implemented to foster appropriate Adapted Physical Activity. This framework will foster more effective resource implementation and more effective teaching strategies for Adapted Physical Activity to ensure meaningful experiential learning opportunities for practitioners, and by extension their learners.

Research Orientation, Theoretical Orientation & Methodology

Phenomenology.

The research orientation for my research is phenomenology. With a phenomenological orientation, gaining a deeper understanding of possible lived experiences of resource use in the field has been a main focus in my analysis and interpretation of data (Patton, 2002; Liamputtong, 2009). Phenomenology is about describing and interpreting information. I have discovered descriptive content of these experiences through literature, unobtrusive data collection, unsolicited testimonials and specific expert consultations (Patton, 2002; Liamputtong, 2009). The phenomenological meaning has been ‘widely embraced’ but its common focus is “exploring how human beings make sense of experience and transform experience into consciousness both individually and as shared meaning” (Patton, 2002, p. 104). Perception and description, understanding of the ‘lived experiences,’ and the experiential learning environment are factors that allowed for the phenomenological perspective to be embraced during the research process (Patton, 2002).

I believe it is important for me to note that my direct experiences have been used to be as close to the phenomenon as possible. I have also related to the shared experiences encountered, and my role as a researcher was embodying the ‘teacher’s perspective’ through data collection to find resources (Patton, 2002). Phenomenology investigates individual’s experiences; I have employed a phenomenological sensibility, allowing myself to embody the experience of finding resources. Collecting data allowed me to find materials in the lens of a teacher. My experience finding resources influenced the “ideal resource” developed in this study for practitioners teaching APA. Factors such as motivation, knowledge, searching for resources after a long day of teaching, and the struggles to find information on APA were also influential components leading to the development of the “ideal resource”. The phenomenological orientation is used to reflect an individual’s experiences; in this study it was imperative for my experience to be illuminated as well as other practitioners experiences. The “ideal resource” helps describe this experience and “how we perceive it, describe it, feel about it, judge it, remember it, make sense of it, and talk about it with others” (Patton, p. 104).

Constructivism.

The theoretical framework for my study is constructivism. I have chosen to use a constructivist theoretical base for analyzing my data. Constructivism recognizes that reality is created and understood by people differently. “Constructivists study the multiple realities constructed by people and the implications of those constructions for their lives and interactions with others” (Patton, 2002, p.96). This approach is integrating knowledge built about reality with no bases of unitary beliefs from individuals; everyone’s worldview can be different, even if we live in the same world or are in the

same context (Patton, 2002). Analyzing feedback forms and engaging in expert consultations to validate my consolidated findings had me asking, “how have people in this setting constructed reality?” (Patton, 2002, p. 132). The different realities and experiences of resource operationalizing and implementing is dependent on each practitioner. Using a constructivist approach and interpretive worldview demonstrates that I will look for a comprehensive outlook and view the thought, meanings, and truths of others as their own realities constructed in their contexts (Patton, 2002).

Methods

The process of my research has been to collect relevant data to help me to answer my research questions:

- 1) What relevant resources exist to teach practitioners to teach Adapted Physical Activity to individuals with special needs?
- 2) What types of training or learning opportunities exist to teach Adapted Physical Activity strategies to practitioners?
- 3) What challenges do practitioners experience when attempting to use resources to support their adaptations and their subsequent teaching?

Furthermore, following data collection I began my robust analysis, which led me to develop a framework that informs how resources are developed and implemented to foster appropriate Adapted Physical Activity to train practitioners to use resources and more effectively teach Adapted Physical Activity.

Unobtrusive Data Collection.

Unobtrusive data collection is about examining information from existing sources and drawing on materials available and publically accessible such as documents, records,

and literature. Unobtrusive measures are navigating information in a “non-reactive” method (Liamputtong, 2009, p.88). Unobtrusive measures also encompass “written records, audiovisual records, physical traces, or human behaviours” (Liamputtong, 2009, p. 88). In my research, I have used unobtrusive data collection for documents, records, and literature to find resources. For example, I have searched the Internet for resources and learning materials for practitioners teaching APA. I have also collected feedback forms that have been beneficial because they “document what participants are actually doing in the world without being dependent on being asked by researchers” (Liamputtong, 2009, p. 93).

Unobtrusive Data Collection: Documents, Records, and Literature.

When collecting documents, records, and literature I started looking for materials or “resources” teachers could use to help them teach adapted physical activity/adapted physical education/inclusive physical education. I chose to use a modified snowball approach, sampling unsystematically at the beginning of data collection which lead to creating an outline of materials to search, and started with search engines to see what the Internet brought to my attention. I quickly discovered while gathering this data what counts as a resource became a question in itself; this lead me to make some decisions before I continued my data collection and moved forward to analysis. The decision-making steps are outlined in Chapter 4. I then continued to use the websites I found as references for other sites and I quickly found the same sites; I was able to reach saturation quite efficiently, as there are salient and common websites one would come across looking for resources. After perusing multiple search engines including Google, Yahoo, and Scholarly databases, I reviewed the library to find hardcopy documents and records

to support the online sources. The Internet was able to link me to multiple types of resources including: websites, textbooks, equipment sites, lessons, organizations, blogs etc. This information, mostly organization and teacher websites, directed and supported me in a second search locating professional development resources viewing conferences, workshops, and webinars.

I used relevant literature from practitioner-based research to complete an in-depth review exploring teaching, learning, Adapted Physical Activity, types of training and the components needed to develop a framework for a training experience. This information was also found through professional development topics at conferences and workshops, on professional affiliation sites such as Physical and Health Education Canada (PHE) and Ontario Physical and Health Education Association (Ophea), and through Adapted Physical Activity Quarterly (APAQ), which is a scholarly literature based resource. Through my collection and analysis of this information, I was able to include a document analysis of existing relevant resources to support the literature on the existing practices in conjunction with answering my research questions. I proceeded to review published materials and records on teaching evaluations of courses and programs, website commentary from practitioners, and other documents such as news articles and teaching guides that are important as they provided me “with information about many things that cannot be observed” (Patton, 2002, p.293).

Unobtrusive Data Collection: Feedback Forms.

As a supplementary supporting data set, I collected feedback forms from the following modes of delivery: training courses, workshops, webinars, and conferences related to APA and special needs learners. The unobtrusive feedback forms are

professional development content and are directly related to experiences in teaching, learning about Adapted Physical Activity, and engaging in a training course. These data were collected through written records that were anonymous and provided to me by the facilitators or organizations running the sessions. After discovering multiple professional development opportunities and key documents from my first data set: documents, records, and literature search, I then had an additional set of data comprised of feedback forms from practitioners who participated in these previously mentioned learning opportunities. I was able to gain access to feedback from different contexts including professional organizations, school board workshops, and specialized conferences. This feedback has been essential for understanding and obtaining a “behind-the-scenes look” (Patton, 2002, p.294) at the practices, resource, and of professionals’ opinions. These evaluations were based to help programs, workshops and presentations become more successful and useful.

Sample

Experts.

Purposive sampling, “the deliberate selection of specific individuals, events, or settings” (Liamputtong, 2009, p.11), guided the choice of experts that participated in this study. Specifically, the population sampled draws from professionals who have experience with implementing resources and teaching Adapted Physical Activity (APA). Through my involvements in many community programs, affiliations with school boards, and academic networks, I approached these individuals via email, phone call, and in person to inform them of the purpose of my research. The three experts approached, all agreed to contribute their knowledge and expertise on the subject matter of my research

study. These individuals include: school board fitness and wellness consultants or physical education consultants and school board special education consultants, who are former teachers and all have experience with resources and APA. Purposive sampling was chosen based on their expertise in the field of APA. It is important to have feedback and evaluations from experts “not only to confirm findings but to make sure the right questions are being asked” (Patton, 2002, p. 560). Purposive sampling is inquiring about and choosing individuals who are “information-rich” and will provide “in-depth” realities and experiences to the phenomenon; the expert’s contribution has been to assist my findings in order to “illuminate the questions under study” (Patton, 2002, p.46).

Expert Consultations & Evaluation.

To triangulate my data – using multiple methods of collecting data to offer more heterogeneity of perspective – I have chosen to engage in expert consultations to gain insight and opinions on the use of resources and teaching Adapted Physical Activity (Patton, 2002). Research on participants or experts reviewing findings has been seen as an important form of triangulation (Patton, 2002). In quantitative research studies experts are often used to verify face validity and content validity to ensure strength in scales and measures done. For the purpose of my research, I have chosen expert consultations and evaluations for face validity using a modified Delphi technique gaining confirmation or disconfirmation of the consolidated findings. The modified Delphi technique entailed having experts view my findings and narrow the information to come to a consensus, which led them to confirm or disconfirm the results presented. “The ultimate test of the credibility of an evaluation report is the response of primary intended users and readers of

that report” (Patton, 2002, p. 661). These consultations are used to help me understand different viewpoints of experiences with resource operationalizing and implementation.

After I summarized my findings, the consultations were to assist me in “understanding the interaction and mutuality between the evaluator and the people who use the evaluation” (Patton, 2002, p. 561-62) or in this case, how experts view my findings on existing resources and the use of resources by practitioners. Similar to a research study using quantitative methods, where face validity is to assess whether the inferences made for what is being measured appears to have been measured correctly, the expert consultation was used to demonstrate whether my findings reflect the expert’s knowledge on my research questions or not (Hardesty & Bearden, 2004). The experts are providing a service to the field; these consultations are also purposeful because they have allowed me to receive evaluative outlooks on different teaching methods, learning considerations and types of training for teaching Adapted Physical Activity. As Patton (2002) explains, discussions with others “allows us to enter into the other person’s perspective” (p. 341) and to gather others’ stories. The experts agreed to share their opinion on the phenomenon under study. Each consultation started with an evaluation form (Appendix A) to be filled out where they were able to evaluate my consolidated findings from my analysis on documents, records, and literature (data set 1) and feedback forms (data set 2) and on the types of training programs and resources available for teaching Adapted Physical Activity. The experts were provided with a description of my findings for them to confirm or disconfirm. My consolidated findings are a summative reporting of the research done in a “full report presenting data, interpretations, and recommendations” (Patton, 2002, p. 435) for experts to provide valid insight on the

findings. The evaluation form not only allowed the experts to decide whether the findings measured what they intended to, but it had opportunity for experts to validate if it represented “a proper sample of the domain of a construct” i.e. content validity (Hardesty & Bearden, 2004, p. 99).

Patton (2002) states “questions emerge from the immediate context and are asked in the natural course of things; there is no predetermination of question topics or wording” (p. 349). My approach for acquiring face validity and content validity from experts was indirect; I chose to establish an evaluation document for the experts so they can use their expertise to provide insight and information regarding the analysis and its relationship to my research questions. I used open-ended questions throughout the evaluation form allowing the experts to speak freely and explore the meanings of their experiences and share their knowledge if they desired (Liamputtong, 2009). My role as the researcher in guiding these consultations has been to establish others’ perspectives on the research questions to gain knowledge to assist me in the development of a framework that informs how resources are developed and implemented to foster appropriate Adapted Physical Activity.

I have chosen to provide the experts with pseudonyms to allow them to speak freely in their evaluation and ensure confidentiality if they chose to respond the general or specific comment options on the evaluation. I have also completed a member check with each expert to ensure rigor and trustworthiness in the inclusion of the expert consultation. I provided them with a document of my findings to ensure that my interpretations of their evaluations represented their confirmation or disconfirmation correctly and that I have portrayed their evaluations and meanings accurately.

Conceptual Framework

Resource Development.

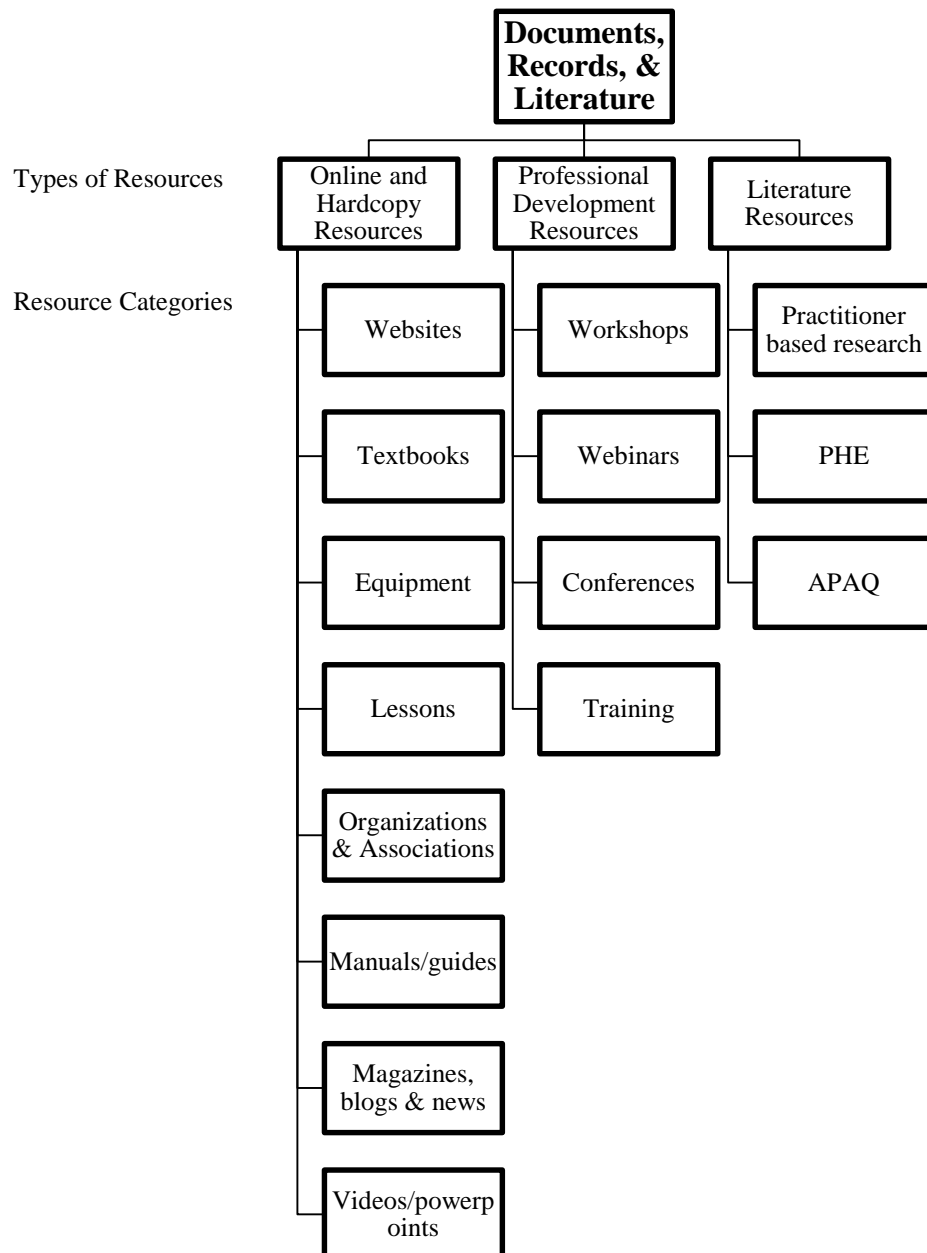
The conceptual framework's outcome for this study is resource development using phenomenological and constructivist orientation. My main objective is NOT to develop a resource that will collect dust on a shelf, but rather to display a framework that informs how resources are developed and implemented to foster appropriate Adapted Physical Activity and provide opportunities that can be translated into meaningful knowledge transfer. The framework developed from my research uses what exists and what is needed for resource operationalizing and implementation to further create phenomenological descriptions of resources. This opportunity facilitates effective use of underused resources to teach Adapted Physical Activity and ultimately gives practitioners an opportunity to learn experientially. If we advocate for differentiated instruction, collaboration of colleagues and implementation of up-to-date research and resources on teaching and learning, then proper modeling for practitioners to teach Adapted Physical Activity and use resources effectively is in order.

Data Analysis

The analysis process in qualitative research has the main goal of organizing data to develop meaningful content and transform the data into findings (Patton, 2002). With my interpretive inquiry there is openness to the interpretation of the phenomenon as I have viewed all of the data as a whole experience and consider many complexities in the analysis (Patton, 2002). The phenomenological perspective allowed me to develop robust and transparent descriptions of the experts' lived experiences, my personal experiences, and experiences derived from the secondary data sets.

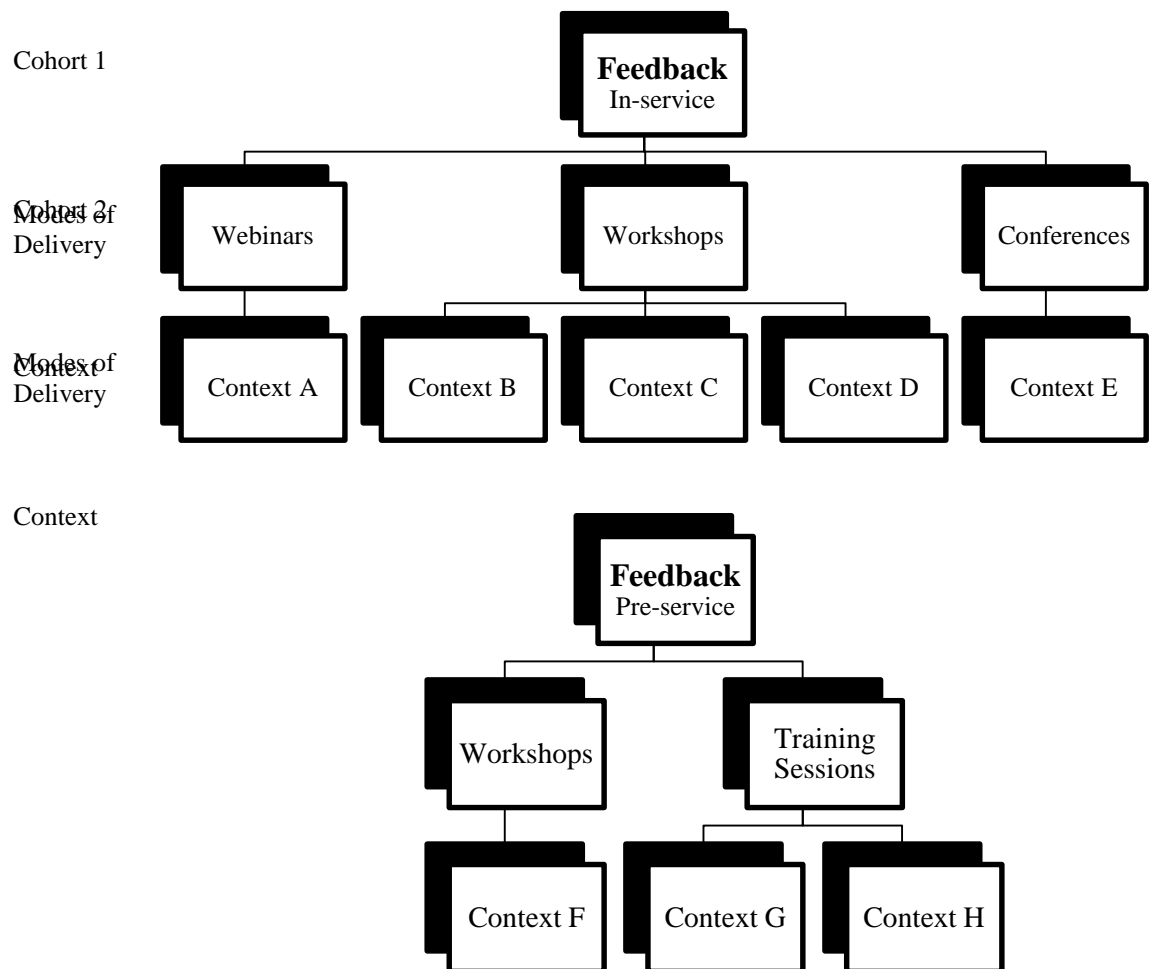
In my first set of data (*Figure 1*) – documents, records, and literature – I had to establish what a resource was. I determined the types of resources were: online and hardcopy resources, professional development resources, and literature resources. Further, I developed resource categories to distinguish between the multiple documents, records, and literature I encountered (further described in Chapter 4).

Figure 1



In my second set of data (*Figure 2*) – feedback forms – I looked at two cohorts: in-service and pre-service teachers. I received feedback forms from the following modes of delivery: workshops, webinars, conferences, and training sessions. These modes of delivery were further broken down into contexts in which the forms were gathered. As I familiarized myself with both data sets, my process began with constant comparative recursive reading, beginning with reading for the whole, establishing meaning units, noting revelatory phrases, key words, and idioms for the separate sets of data. I then developed clusters of patterns and or salience within each, which led to further analytical interpretations as I continued the process of recursive description, reduction, and interpretation.

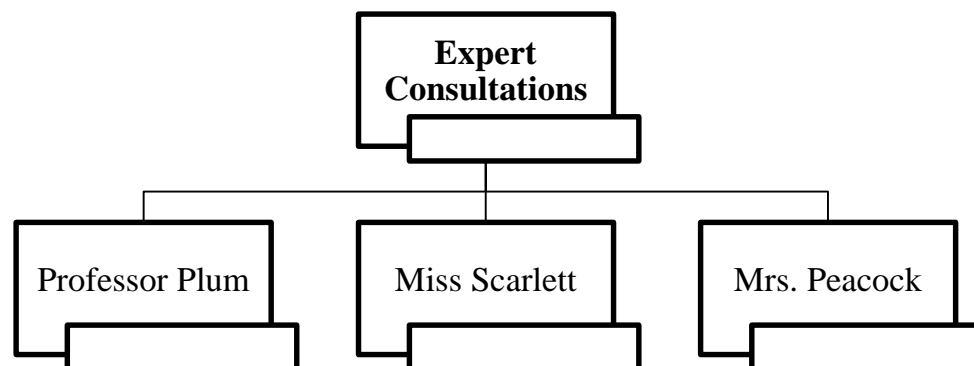
Figure 2



After this initial process of analysis and organizing my data, I further articulated patterns and themes. I compared patterns from each type of resource: online and hardcopy resources, professional development resources, and literature and then across the three types of resources. When looking at the feedback forms I compared patterns from each cohort, pre-service and in-service, looking at the patterns within each context and further looking at the patterns within each mode of delivery. Once I had established sound clusters of patterns and/or salience in the modes of delivery, I compared the feedback cohorts.

For my third set of data (*Figure 3*) – expert consultations – I consolidated initial findings and patterns and/or salience from the documents, records, and literature, and feedback forms in an evaluation form (Appendix A) with descriptions of findings for the experts to comment and provide insight on their professional experiences. After receiving the expert consultation data, I determined the extent to which the experts confirmed or disconfirmed my findings.

Figure 3



From my expert consultation data, to establish my major findings and major themes, I compared all three of each set of data: documents, records, and literature, feedback forms,

and expert consultations. I have used some of the expert's comments in the findings to validate the consolidated findings from the analysis and emphasize the themes that emerged.

This evaluation and analysis provided a foundation for further elucidation of thematics that provided a basis for answering the research questions (Liamputtong, 2009). An in-depth understanding and examination of all pieces of data allowed for the development of themes and the discovery of meaningful features (Patton, 2002). An interpretive view, including rich descriptions from the data analysis, provided support for the findings.

I have used inductive analysis developing themes grounded in the data to assist in understanding the findings. The inductive analysis based in the experts and unobtrusive data sets has allowed for insight into categories and themes I developed (Patton, 2002). Following the initial step of analyzing data inductively, I then applied a deductive analysis to the data by referring to several theoretical frameworks including theories of pedagogical discourse, teaching, learning, and experiential learning. This type of analysis allowed me to examine the data according to existing theories (Patton, 2002). The plan for analysis has not only assisted in understanding the product, but it has assisted in the development of knowledge for my central research question: the challenges that occur for practitioners while operationalizing and implementing relevant resources to teach Adapted Physical Activity. The inductive and deductive analyses are important components as they allow me to use all findings to develop a framework that informs how resources should be developed and implemented to foster appropriate Adapted Physical Activity.

Ethical Issues

Informed Consent, Confidentiality, and Anonymity.

With expert consultations I need to assess the security of ethical and moral obligations. Ethics is to prevent participants from being harmed during the research process or while engaging in interactions with others and the researcher (Liamputtong, 2009). Regarding the experts in my study, in order to gain knowledge and hear experts' opinions based on the evaluation of literature, programs, and resources already available to their access I only have to receive approval from the experts themselves. They have agreed to engage in a consultation based on their expertise.

Informed consent from the expert consults was a verbal agreement as an informal conversation. Informed consent is not a crucial component to my study because the information gathered from the experts is based on their knowledge and willingness to share for research and further is also available in public domain. I provided the experts with the option for pseudonyms for confidentiality purposes as they were providing their expertise for my research and I want to ensure their anonymity if requested. Descriptions from the experts and public domain descriptions used in the research have not been used in the research in ways which identify the expert. Their insight was generally referring my to any further publically accessible materials to ensure rigor and credibility in my research.

Confidentiality is defined as: hiding participant's identity in the research study (Liamputtong, 2009). Ensuring the experts "physical, emotional, and social well-being," (p. 37) can also be instrumental when determining ethical issues. Informed consent and

confidentiality can help minimize potential risk and harm to the experts participating in the research study.

Rigor & Trustworthiness

To ensure rigor and trustworthiness in my research study I have evaluated the quality, credibility, and authenticity, dependability, confirmability, and transferability of the study (Liamputtong, 2009). These criteria are the qualitative research stepping-stones or ‘gold standards’ that are discussed for quality research (Liamputtong, 2009).

Credibility involves looking at the description and information given by the experts and determining if it is a suitable source, or if the “explanations fit the description” (Liamputtong, 2009, p. 21). Building rapport with the experts in the study and having my academic and practical knowledge has allowed me to develop credibility with the experts (Shenton, 2004). For the study itself, I have triangulated my data by combining multiple sources as stated in the analysis to ensure accuracy from descriptions and data collection and analysis (Patton, 2002). As the researcher, I have provided reflexive commentary and insight through the research process in a personal research journal as the interpretive perspective exemplifies my involvement in the research study as an open and integral part for the readers to understand (Liamputtong, 2009). It is important for outside viewers and the target audience of my research to clearly observe where I have situated my reflexivity and understanding in the research process; my role as a researcher has been clearly defined (Liamputtong, 2009). Descriptions from the experts, literature, and feedback analysis have been used appropriately to ensure ethical standards are met (Shenton, 2004).

Transferability refers to the application of my findings to other areas (Shenton, 2004). In qualitative research, the reader determines transferability; that is, can the research “transfer” to the reader’s context? Hence clear and robust description of the whole process contributes to transferability. I have included multiple methods of data collection, allotted time for the study to take place, chosen to view feedback from educational training sessions and literature from a relative sources to teaching and learning that I hope has allowed some transferability of my findings to support the theoretical aspects in other areas (Shenton, 2004). Because I focus specifically on Adapted Physical Activity training and experiential learning, the findings will be presented/interpreted in that context. This transfer of knowledge depends on my clarity and the decision of the reader. With a focus on the pedagogical concern of teaching, learning, and operationalizing and implementation of resources, generalizing the findings is not the goal of qualitative research but the theoretical aspects in the findings may be more easily transferable and beneficial to other areas. I believe that the framework that informs how resources should be developed and implemented in this research will be useful to practitioners in furthering their knowledge on using resources and teaching Adapted Physical Activity.

Dependability focuses on the detailed portion of the process and methods used in the research study (Shenton, 2004). Along with dependability is confirmability; it includes “ the degree to which findings are determined by the respondents and conditions of the inquiry and not by the biases, motivations, interests or perspectives of the inquirer” (Guba & Lincoln 1985, p. 290, as cited in Liamputtong, 2009). In my research, establishing dependability and confirmability is demonstrated through my openness

regarding my role as a researcher, the design, and the detail on every aspect of the research study. I have access to documents and records, my experiences with different experiential learning sites, and the experts who agreed to share their opinion and knowledge on the subject matter. This creates a threshold of confirmability and dependability. I believe I have gathered accurate data and descriptions from the experts and have achieved an analytical saturation in my research study to claim rigor and trustworthiness through out the entirety of the process.

Role as the Researcher

To briefly describe my role as the researcher I will start with referring back to the interpretive worldview and methodological framework for this study. With an interpretive view, I am trying to understand how practitioners construct meanings about their experiences with using resources and to develop a framework that informs how resources should be developed and implemented to foster and encourage more effective and appropriate facilitation for Adapted Physical Activity. My role is influential as I am establishing the approaches that will help develop this framework to what I believe literature, feedback, and experiences suggest needs to be accomplished. My relationship with the findings and my personal knowledge and experiences has only enriched the components essential to help, not hinder, my role in this process to develop such a framework. When reviewing the methodology of my study, I chose to use a phenomenological orientation as I was embodying the role of a teacher searching for resources and describing a framework with my process findings based on that experience. I also used a constructivist theoretical approach for my analysis findings of feedback forms and documents, records, and literature. This has ensured that I viewed all data with

an open mind in the search to develop a meaningful learning experience for practitioners to implement resources.

My role as the researcher is an integral part to the research development and process. The experiences I have had exploring the challenges with operationalizing and implementation of resources to teach Adapted Physical Activity are also present based on my teaching experiences and the fact that I am immersed in the research process.

Through this research study, I hope to provide clarity for effective operationalization and implementation of resources that are essential components to teaching Adapted Physical Activity and to the practitioners' learning process.

Chapter IV: FINDINGS

Finding resources is like being a detective and playing the game “Clue”. How do you choose the suspect? Where did they commit the murder? What weapon did they use? Trying to put all of the pieces of the puzzle together is challenging. The hardest part is navigating all the hallways, trying to gain access into the rooms of the house, and at the same time receiving an abundance of clues to sort through, that only get you one step closer to finding the person who holds that weapon and committed the murder. Is playing the game worth the process? Throughout this chapter, I use the game of Clue as a metaphor for entering into the world of a teacher who is searching for and trying to use an APA resource. In the case of my research, I asked myself who is teaching APA? What challenges to operationalizing and implementing relevant resources for APA do these practitioners have?

I went through the steps that a teacher would likely follow in finding supports for their teaching in APA. With each step I considered each research question: What resources exist to teach practitioners to teach Adapted Physical Activity? What types of training or learning opportunities exist to teach Adapted Physical Activity strategies to practitioners? What challenges do practitioners experience when attempting to use resources to support their adaptations and their subsequent teaching?

Process Findings from a Phenomenological Orientation

I collected documents, records, and literature, which, collectively, I call resources. Searching for and viewing all of the materials found within the first data set (documents, records, and literature), was a frustrating, exhaustive, and complex minefield. As mentioned in Chapter 3, while gathering this data, considering what counts as a resource

became a question in itself. This led me to make some decisions before I continued my data collection and moved on to analysis.

Decision-making Steps.

The decision-making steps became apparent when I realized it's a lot easier said than done to find resources. I needed to categorize the documents, records, and literature and deem what information I had found to be a relevant resources or training/learning opportunities to teach APA. *And the game begins...*

What does resource mean? Where do you start and what do you look for in the game? Through my data collection and search for relevant resources, I have learned that the term resource has many meanings. Resources are like the weapons in the game. They are all different, they have a purpose or sometimes can be used for more than one thing, they sometimes help but could also hinder objectives, and the effectiveness of the resource depends on if you know how to use it or not. A resource is something that supports learning but has many different forms. The main types of resources I have found are online and hardcopy resources, professional development resources, and literature resources. Within these types of resources, there are resource categories:

Table 1		
<i>Types and Categories of Resources</i>		
Online and Hardcopy Resources	Professional Development Resources	Literature Resources
<ul style="list-style-type: none"> - Websites - Textbooks - Equipment - Lesson plans - Organizations & Associations - Manuals or Guides - Magazines, Blogs, & News articles 	<ul style="list-style-type: none"> - Workshops - Webinars - Conferences - Trainings 	<ul style="list-style-type: none"> - Practitioner based literature - PHE - APAQ

- Videos and Power point presentations		
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The dictionary defines a resource as “a supply of something (such as money) that someone has and can use when it is needed” or “a place or thing that provides something useful” (Merriam-Webster Dictionary, 2014). Unfortunately, I could not find a scholarly definition of a “resource” but from my research, I have determined that a resource can also be an individual who is providing information, guiding teaching, training, presenting a mode of delivery (workshop, webinar, conference, or training), and assisting with the navigation of a resource. I believe that the resources for teaching APA are mainly online and hardcopy resources with an ample amount of websites and textbooks.

What are the aspects that make a resource relevant? After finding many resources for practitioners I had to determine what types of resources and resource categories would be most beneficial for assisting a practitioner teaching APA. My first step to answering this question was deciding the relevance of each resource. My inclusion criteria for a “relevant resource” included:

1. The resource is accessible to obtain or readily available for a practitioner/teacher
Accessible Example: *PE Central*, the premier website for health and physical education (www.pecentral.org) is a common website that physical education teachers are prompted to use. It has many resources teachers can access immediately. This website comes up frequently in a standard search on the Internet for Adapted Physical Activity resources. The website layout is direct with a specific section for “Adapted” physical activity and there is information directly on the website to be used.

PE CENTRAL®
The Premier Web site for Health and Physical Education

Newsletter | Contact | About PEC | Home | [SHARE](#) [Facebook](#) [Twitter](#) [Email](#)

Sponsored by: **S&S DISCOUNT**
Sports, Games & P.E. Supplies
MAKING IT EASY to help people play and learn

Challenges ▾ Lessons ▾ Assessment ▾ Best Practices ▾ Boards ▾ Technology ▾ Adapted ▾ PreK ▾ Class Mngt ▾ Videos ▾ Jobs ▾ Prof ▾ Shop ▾ + ▾

Main Menu

- What is Adapted PE
- Ask Our Expert
- Adapting Activities
- IEP Information
- Adapted Web Sites
- Shop Adapted Store

Shop PEC

Physical Activities for Young People With Severe Disabilities
Dr. Timothy Davis & Dr. Suzanne Dillon
Adapted PE Products

Adapted Games & Activities From Toe to Team Building
Pattie Rouse

Physical Activities for Young People With Severe Disabilities
Timothy K. Canales & Rebecca K. Lytle

ADAPTED PHYSICAL EDUCATION NATIONAL STANDARDS
SECOND EDITION
National Consortium for Physical Education and Recreation for Individuals with Disabilities
LUKE E. KELLY

Physical Activities for Young People With Severe Disabilities
Timothy K. Canales & Rebecca K. Lytle
Adapted PE Products

Advisory Board

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- Pam Long
- Donna Lovetro
- Julienne Maeda
- Denise Simmons
- Christine Stopka
- Ann-Catherine Sullivan
- Daniel Webb

PE Central exists to assist teachers and other adults in helping children become physically active and healthy for a lifetime.

What is Adapted PE?
(A written explanation)

Individuals with Disabilities Education Act (IDEA 2004)
(Info about IDEA 2004)

Ask Our Adapted Expert
(Database of answers, [submit questions](#))

Differentiating Instruction for Students with Disabilities
(Activities listed with suggested adaptations)

Assessment Instruments
(Motor skill assessment instruments)

IEP Development
(Individual Education Program tips)

Adapted PE Nat'l Standards
(APENS, Certification program for teachers)

Adapted PE Videos
(Some helpful videos)

Working with Paraeducators
(Info about working with paraeducators, [Sample Job opening](#))

Adapted PE Research
(Articles about Adapted PE)

Adapted PE Products
(Lesson ideas, Nat'l Standards)

Top Adapted Web Sites
(Valuable Adapted PE Web sites)

University Adapted PE Programs
(List of programs at Universities)

Featured Video:
[Teaching Children with Visual Impairments Part 1](#)

Featured Video:
[Teaching Children with Visual Impairments Part 2](#)

Inaccessible Example: *North American Federation of Adapted Physical Activity (NAFAPA)* “is an international organization dedicated to the promotion, dissemination and practical application of results and findings in the field of physical activity for the benefit of populations with disabilities and/or special needs” (NAFAPA, 2014, Homepage). This organization runs a

symposium/conference structured in Adapted Physical Activity particularly.

NAFAPA is specifically based on providing information through this conference and don't provide other resources or information to the public or practitioners via other methods. The location (Michigan), cost (Registration \$175 + travel and hotel), and time (October 16-18th) to attend this conference are not realistic for full-time teachers immersed in their school year.

2. The resource can help the teacher's immediate practice or be implemented for teaching situations; it is "practical". This practicality is more than a basic written resource or information that only focuses on the practitioners and gaining knowledge specifically without hands-on or applied material. Practical relevance is about the actual everyday utility. I asked myself: Can a teacher use this? Would I use this resource? Could this resource be operationalized or implemented in a variety of settings?

Practical Example: *Active Living Alliance for Canadians with Disabilities*

(ALACD): *Moving to Inclusion Webinar* is an online learning opportunity combining knowledge expansion on disability and inclusive activity, planning opportunities, activity modifications, scenario based learning strategies, and supplementary resources for practice.

Moving to Inclusion (MTI) Online is an excellent training and professional development tool for those who are working in or training for a career in the recreation, fitness, education, sport and active living fields. Whether you deliver recreation programs, lead physical education classes, provide children's programming, coach athletes or administer programs in

these areas, MTI Online will provide the knowledge to facilitate inclusive opportunities for those with different levels of ability. As a staff training tool, MTI Online can be used to provide your organization with information and practical approaches to apply in a program setting. Teachers will be equipped with tools, strategies, and creative adaptation ideas to use in a physical education setting. For universities, colleges and other training institutions this interactive resource will complement the materials used in physical education, kinesiology, health, teacher preparation and a variety of other courses. Professionals and volunteers working in the disability field will also benefit from learning about providing inclusive active living opportunities for their clients (ALACD, 2014, *Moving to Inclusion*).

Impractical Example: *Human Kinetics* (www.humankinetics.com) is a common website for purchasing and obtaining resources in the physical activity and health related fields. Most of the resources through this website are in textbook form, providing an excess of reading material. This website is a distributor resource. It is not a resource to implement. Rather, it is a resource used for disseminating information to scholars, professionals, and the public. The mission of *Human Kinetics* “is to produce innovative, informative products in all areas of physical activity that help people worldwide lead healthier, more active lives” (Human Kinetics, 2014, About Us). Practitioners would have to wait to receive the purchased item, once they have the item search through it to learn content or find

what they might be looking for, and then determine what information to implement in their practice.

3. The language used and terms in the resource are relatable to the teaching profession

Appropriate Language Example: *Ontario Physical and Health Education*

Association's (Ophea) Steps to Inclusion resource is a basic introduction to inclusive physical education. This resource includes a glossary and supplementary reference cards/appendices to support the content in the resource. *Ophea* links their resources to the Ontario Ministry of Education guidelines and current resources for teachers in the system using terminology and concepts consistent with board in the province.

Inappropriate Language Example: The literature existing in the field of Adapted Physical Activity and resource implementation is minimal but there are some important journals with information that should be disseminated to practitioners. A journal that dedicates and focuses on current research in APA is the *Adapted Physical Activity Quarterly (APAQ)*.

APAQ provides the latest scholarly inquiry related to physical activity for individuals with disabilities. It is also viewed as one of the major journals in the rehabilitation area. The journal is multidisciplinary and not confined to the use of particular methodologies. In fact, it encourages diversity of topics and approaches. *APAQ* is the journal of the International Federation of Adapted Physical Activity. Regular features include case studies; techniques for adapting equipment, facilities, methodology, and clinical

settings; editorial commentary; article abstracts; and book reviews.

Disciplines from which scholarship may originate include, but are not limited to, corrective therapy, gerontology, health care, occupational therapy, pediatrics, physical education, dance, sport medicine, physical therapy, recreation, and rehabilitation (APAQ, 2014).

Unfortunately, the language and terminology used in the articles is not often practitioner based. The articles have a focus on describing the research and study; in contrast, most practitioners simply need the information related to their practice and broken down for application and why they should know this information. Also, the content is extensive and many articles are inaccessible for individuals to obtain unless they have a subscription (approx. \$100 per year). Sample article statement:

It was obvious from the data analysis that variance existed between the accounts reported by the APE and RPE teachers at local building levels and SEA reports. When the data were examined according to demographic variables, that is, size and location of school districts, no clear or consistent patterns emerged. This may have been due to the moderate sample size (37%) for RPE respondents, which was greater than the 25% response rate of Melograno and Loovis (1988) but consistent with Jansma and Decker's 34% response rate (1990) (Chandler & Green, 1995, p.269).

4. Resources need to be consistent with accepted best practice, curricular guidelines, and ministry standards

Consistent Example: *Physical and Health Education Canada's (PHE)*

Fundamental Movement Skills resource series “aids in teaching fundamental movement and sport skills in an effective, fun and interactive manner” and it is “designed to enable the development of physical literacy as a solid foundation for supporting long-term sport and physical activity participation” (PHE, 2014, Resources). The mission of this resource aligns with the Ontario curriculum’s goals:

Develop the skills and knowledge that will enable them to enjoy being active and healthy throughout their lives, through opportunities to participate regularly and safely in physical activity and to learn how to develop and improve their own personal fitness; develop the movement competence needed to participate in a range of physical activities, through opportunities to develop movement skills and to apply movement concepts and strategies in games, sports, dance, and other physical activities (Ontario Curriculum, 2010, p.3).

Inconsistent Example: Curricular guidelines vary from province to province and country to country. The Ontario Ministry of Education and the Ontario curriculum are the guidelines I have used to relate resources to. There are many resources not specifically from Ontario that are relevant and contain similar guidelines and best practice strategies that I still took into consideration as a relevant resource to discuss in my research. An example of an inconsistent resource would be *Adapted Physical Education National Standards (APENS)*. This resource strictly focuses on the training standards for teachers in the United States. The goals and process of these standards have similar guidelines to Ontario teachers and the best practice

standards but Ontario does not require this specific training and certification for teachers.

5. The resource has key words that determine whether it is meant for Adapted Physical Activity, Adapted Physical Education, Inclusive Physical Education, and Inclusive Physical Activity. Other indicators important are: special needs, disability, inclusion, adapted, ability, least restrictive environment, modifications, or accommodations

Key Words Example: *Developmental/Adapted Physical Education: Making Ability Count* (Horvat, Kalakian, Croce, Dahlstrom, 2010) is a textbook and manual that appears in a search on the Internet and library because it has key words and content in the book that are relevant for teaching Adapted Physical Activity. This book has a section on developing and implementing physical activity programs; Google locates these key words in this text if someone is searching specific information such as “implementing APA” or “what is inclusion”. Textbooks are not generally accessible and they often aren’t consistent using language for practitioners, but I believe this section in the text meets the relevant criteria listed above and is located via key words making it relevant.

What is a training or learning opportunity? When looking at types of training or learning opportunities, I have determined that training consists of gaining skills, strategies, knowledge, understanding, or experience and is “a process by which someone is taught the skills that are needed for an art, profession, or job” (Merriam-Webster Dictionary, 2014). In conjunction with this, a learning opportunity is a practical

experience for practitioners that mainly involve learning strategies for one's subsequent teaching. Some of these strategies are instructional approaches, assessment designs, generating ideas or new knowledge, including modifications, and helping the practitioner advance their education.

Findings from a Constructivist Approach

After this decision-making step, I continued to interact with materials – documents, records, and literature – available in the public domain looking for relevant resources. I then collected my second set of unobtrusive data, which was feedback forms. I thought the communication and information from practitioners would help me establish what practitioners found helpful, useful, or challenging about different professional development experiences to help their teaching in APA.

After data collection, I began data analysis. As I analyzed my two data sets (i.e., materials and feedback forms), I discovered I had very similar findings (these are presented following my levels of data analysis). I then brought in a third set of data which entailed asking experts to evaluate and comment on my findings from analyzing the documents, records, literature, and feedback forms.

Levels of Data Analysis.

Within Each Data Set: Looking within the data sets, I familiarized myself with the materials by engaging in constant comparative recursive reading, beginning with reading for the whole, establishing meaning units, noting revelatory phrases, key words, and idioms for the separate sets of data. I then developed clusters of patterns and or salience within each (1 and 2).

1. Data Set 1 Documents, Records, and Literature: Within Types of Resources

Online and Hardcopy Resources

Professional Development Resources

Literature Resources

2. Data Set 2 Feedback Forms: Within Feedback Cohorts

A) In-service Practitioners

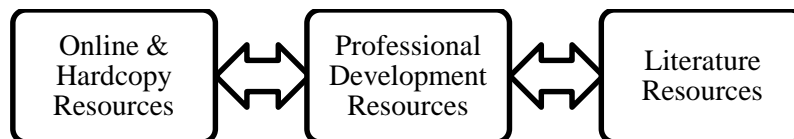
Within Modes of Delivery (Workshops, Webinars, Conferences & Trainings)

B) Pre-service Practitioners

Within Modes of Delivery (Workshops, Webinars, Conferences & Trainings)

Across Each Data Set: I compared patterns in my first set of data: across the three types of resources (3). I then looked at my second set of data, the feedback forms, and compared patterns from each cohort, pre-service and in-service, establishing the patterns from each mode of delivery (4). Once I had established sound clusters of patterns and or salience in the modes of delivery, I compared the feedback cohorts (5)

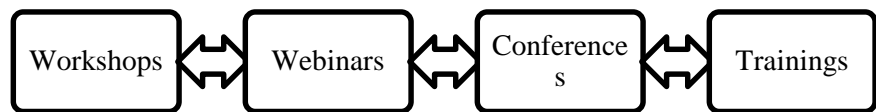
3. Data Set 1 Documents, Records, & Literature: Across Types of Resources



4. Data Set 2 Feedback Forms: Across Feedback Modes of Delivery – Within Cohort

A) In-service Practitioners

Across Modes of Delivery



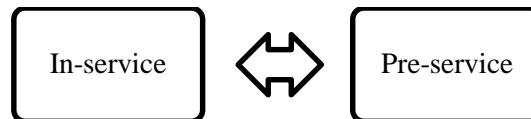
B) Pre-service Practitioners

Across Modes of Delivery

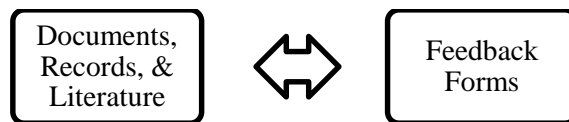


5. Data Set 2: Across Feedback Cohorts

Across Cohorts



Across Data Sets 1 and 2: This is where I compared the two data sets together, establishing similar findings between the two sets.



I consolidated initial findings and patterns and or salience from the documents, records, and literature and feedback forms in an evaluation form with descriptions of my findings for the experts. The experts voluntarily confirmed or disconfirmed my findings in the evaluation form (Appendix A) provided to them and also had the opportunity to deliver insight from their professional experiences on the subject matter. The following are my initial consolidated findings, which is a summary from my analysis of the documents, records, literature and feedback forms:

Resources:

- The term “resource” is very broad and has many meanings; it is also important to note that inclusion criteria need to be set to determine what a relevant resource consists of.
- Also, when looking up resources there are many accessibility issues including: navigating to find resources or navigating the resource itself, cost, travel, and time, to name a few.

Standards:

- I have discovered that there is an inconsistency in standards for: quality Adapted Physical Activity programs, teachers’ qualifications, and resources in general.

The teachers, the content, and the teaching:

- Teachers need to be confident, collaborate with others, they need more education on Adapted Physical Activity, and they are always left wanting more.
- Resources need to be realistic and practical. This includes specific examples of children, hands-on learning, an opportunity for problem solving, and link between the curriculum and the resource content.
- Teachers are looking for strategies and want a progressive step-by-step process. There is a significant need for visuals, demonstrations, and assistance in getting creative; there is demand (yet no articulated parameters) for “teacher friendly materials”.

Terminology & Language:

- I have discovered that advanced or scholarly language is prominent in resources and becomes a barrier for teachers learning new material. Hence, there is also

confusion over terminology and concepts such as: the difference between Adapted Physical Activity, adapted physical education, and inclusion.

Organizations:

- Active Living Alliance, Physical and Health Education Canada, Ontario Physical and Health Education Association, and American Alliance for Health Physical Education, Recreation and Dance discuss the need for inclusive physical education. But, there are limited resources and opportunities for teachers to utilize relevant resources or gain access to learning about adapted physical education.

Experts Confirmation of Disconfirmation of Findings from Data Sets 1 and 2



The experts unanimously confirmed my initial consolidated findings. Once I had this confirmation, the experts had provided me with commentary from their evaluation. The experts were given the opportunity to comment generally and specifically on the initial consolidated findings. I embedded the comments to provide validation to the findings from the documents, records, literature and feedback forms to further support the themes and patterns noted to answer my research questions.

Analysis Across Data Sets 1, 2, and 3

After my data collection and into the beginning of analysis, I recognized my research findings should be broken into the *products*, the *process*, and the *problems*. After my decision making step and establishing resource categories in order to answer my first and second research questions looking at existing resources and training/learning

opportunities for teaching APA, I determined that these resource categories are the *products*. These categories are relevant resources and training/learning opportunities specifically related to supporting practitioners in teaching APA. I found the search for resources was a *process* and there are *problems* when finding, implementing, and operationalizing relevant resources. The following are my analysis findings for the *products*, the *process*, and *problems* associated with finding, implementing, and operationalizing relevant resources in APA.

The Products

Research Question #1: What relevant resources exist to teach practitioners to teach Adapted Physical Activity to individuals with special needs?

Research Question #2: What types of training or learning opportunities exist to teach Adapted Physical Activity strategies to practitioners?

What relevant resources exist? The weapons. The resources listed below are a summary of the resources and training/learning opportunities found for practitioners teaching APA. Unfortunately, not all of these resources follow the criteria I developed in my decision-making steps. The criterion outlines ‘relevant’ resources to teach APA and be implemented by practitioners, but relevance was hard to find for resources in APA. The types of training or learning opportunities that can occur are: face-to-face, online, or through hardcopy manuals/guides. I have found that there are limited opportunities for practitioners teaching APA and minimal relevant resources in APA. The training or learning opportunities can also be found in the chart under the professional development section through workshops, webinars, training or conferences.

Table 2		
<i>Relevant Resources in Adapted Physical Activity</i> <i>- Note: Some limitations from the “Relevance Criteria” are present and stated below in italics</i>		
Resource Types and Categories	Name	Description
Online & Hardcopy		
Websites	PE central: www.pecentral.org	Provides physical education and health related resources to teachers, parents, and students. Resources range from lesson ideas, best practices, videos, and designed programs
	Active Living Alliance for Canadians with a Disability (ALACD): www.ala.ca <i>- Accessibility issues: Not present in Internet searches</i>	Supports and provides Canadians with disabilities opportunities and information on leading healthy active lifestyles
	Ontario Physical and Health Education Association (Ophea): www.ophea.net <i>- Accessibility issues: Not present in Internet searches</i>	Delivers programs and services, advocates for healthy active living in schools and the community, and promotes the lifelong benefits of physical activity and leading a healthy lifestyle
Lesson Plans	Lesson Planet http://www.lessonplanet.com/search?keywords=adapted+pe <i>- Not always consistent with accepted best practice</i>	Provides curriculum resources to teachers: “Where teachers go to find, learn, plan, and inspire”
Textbooks/ Handbooks	Developmental/Adapted Physical Education: Making Ability Count: (Horvat, Kalakian, Croce, & Dahlstrom, 2010) <i>- One relevant section on: developing and implementing the physical activity program</i>	Details a synopsis of what adapted physical education is and should include: information on laws, mandates, modifications to consider for individuals with disabilities for safe physical activity

	Physical activities for young people with severe disabilities (Canales & Lytle, 2011)	A series of lessons/activities for a variety of disabilities in different contexts
	Fundamental Movement Skills (Physical and Health Education Canada, 2009)	Interactive videos & handbooks for practitioners teaching fundamental movement skills and sport skills. Focuses on developing physical literacy and providing the building blocks for movement for participation in daily and continuous physical activity
Equipment websites	Flag House Physical Education Equipment http://www.flaghouse.ca <i>- Need to obtain resources before practical use</i>	Supplies professionals in physical activity, recreation, education, and therapy with resources for the development and support of life skills
Manuals & Guides	Including Students with SEN and/or disabilities in Secondary Physical Education http://dera.ioe.ac.uk/13805/1/physicaleducationpe.pdf <i>- Appendix A</i> <i>- Accessibility issues: Navigation of resource</i>	Delivering lessons and ideas for practitioners planning inclusive physical education: removing barriers, using the curriculum and examples for support
	OPHEA: Steps to Inclusion and Adapted Lesson Plans http://www.ophea.net/programs-services/additional-resources/inclusion-resources <i>- Accessibility issues: Not present in Internet searches</i>	Provides teachers and community partners (e.g., sport and recreation workers, coaches and community center staff) the basic knowledge on creating an inclusive physical activity environment
	Special Olympics: Train at School http://resources.specialolympics.org/TRAIN-Downloads2.aspx	TRAIN (Testing Recreational Activities and Improving Nutrition) @ School provides lesson plans and activities for teaching and implementing good nutrition and exercise within the classroom for students of ALL abilities

Organizations & Associations	National Center on Health Physical Activity and Disabilities (NCHPAD) http://www.ncpad.org <i>- Practical issues: Not generally used for teachers' immediate practice</i>	Provides support, programs, and advocates health promotion/obesity management for individuals with disabilities in partnership with other organizations serving this population
	Ontario Physical Education and Health Association (Ophea) http://www.ophea.net <i>- Accessibility issues: Not present in Internet searches</i>	Delivers programs and services, advocates for healthy active living in schools and the community, and promotes the lifelong benefits of physical activity and leading a healthy lifestyle
	Physical and Health Education Canada (PHE) http://www.phecanada.ca <i>- Practical issues: Not generally used for teachers' immediate practice</i>	Advocated to schools and communities for promoting healthy schools, quality physical education programs and provides opportunities for practitioner personal development
	American Alliance for Health, Physical Education, Recreation, and Dance (AAHPERD) http://www.aahperd.org <i>- Practical issues: Not generally used for teachers' immediate practice</i>	Vision: "Healthy people – physically educated and physically active"; AAHPERD encourages professional development for practitioners and delivers knowledge on research in the field in health and physical education, physical activity, dance, and sport
	Active Living Alliance for Canadians with Disabilities (ALACD) http://www.ala.ca/content/home.asp <i>- Accessibility issues: Not present in Internet searches</i>	Supports and provides Canadians with disabilities opportunities and information on leading healthy active lifestyles
Professional Development		

Conferences	<p>PHE http://www.phecanada.ca/events/conference2015 <i>- Accessibility issues: Location and time</i></p>	<p>“ The National Conference provides an opportunity for delegates to network with colleagues and increase their knowledge and skills to foster healthy active living for children and youth in the school community”</p>
	<p>Ophea http://conference.ophea.net <i>- Accessibility issues: Location and time</i></p>	<p>“The Ophea Healthy Schools Conference provides an opportunity for educators, public health professionals, and other community leaders to increase their knowledge and skills to foster healthy active living for children and youth in their schools and communities”</p>
Webinars	<p>PHE: Developing Physical Literacy in Children and Youth with Developmental and/or Behavioural Disabilities; part 2: Physical Disabilities (Pilot Webinar) <i>- Accessibility issues: Not currently available to all practitioners</i></p>	<p>An overview for practitioners teaching physical education to children and youth with disabilities on planning and programming for an inclusive environment to develop physical literacy</p>
	<p>ALACD: Moving to Inclusion http://www.ala.ca/mti-iem/index.htm <i>- Accessibility issues: Not present in Internet searches</i></p>	<p>A training for practitioners working in recreation, fitness, education, sport, and active living fields to develop their skills and knowledge on inclusion</p>
	<p>AAPHERD: Adapted Physical Education Webinars – Technology to Advocacy http://www.aahperd.org/par/prodev/webinars.cfm</p>	<p>An opportunity to learn new skills, use existing skills, interact with other professionals, learn about research in the field, and improve physical activity programming</p>
Workshops	<p>Ophea: Inclusion and Physical Activity Workshop</p>	<p>Interactive workshops requested by schools focusing on topics like inclusion, types of</p>

	http://www.ophea.net/workshops?id=7&tid_1=6 <i>- Accessibility issues: Not present in Internet searches</i>	disabilities, accommodations, modifications, IEP importance, and meeting the needs of children with varying challenges
	Canadian Sport for Life: Physical Literacy Summits http://canadiansportforlife.ca/mini-summits <i>- Accessibility issues: Not present in Internet searches</i>	An opportunity to explore research while engaging in activities/workshops with other professionals
	AAHPERD: Adapted Physical Education, Adapted Aquatics, & Adapted PE Assessment http://www.aahperd.org/par/prodev/workshops.cfm <i>- Accessibility issues: Location and time</i>	Customized hands-on experiences for practitioners working with youth with disabilities
Trainings	These may be provided to practitioners specifically through schools who require further training or are bringing in professionals but generally done through university courses	
Literature		
Practitioner based research	The literature found in my study did not reflect the criteria for a relevant resource	

Salient resources. *The candlestick and the revolver.* The most often occurring resources when collecting document, records, and literature through Internet and web searches, databases, and the library did not all follow the inclusion criteria for a relevant resource. I believe the resources listed below are important to note as these websites, organizations, or textbooks have the opportunity to make their information more relevant

for practitioners coming across their materials and attempting to use them for assistance in teaching. These resources are:

Table 3	
<i>Salient Resources in Adapted Physical Activity</i>	
Websites	Textbooks
Human Kinetics http://www.humankinetics.com	Emes, C. & Velde, B. P. (2005). <i>Practicum in adapted physical activity</i> . Illinois: Human Kinetics;
Special Olympics http://www.specialolympics.ca	Hodge, S. R., Lieberman, L. J., & Murata, N. M. (2012). <i>Essentials of teaching adapted physical education: Diversity, culture and inclusion</i> . Arizona: Holcomb Hathaway Inc;
Adapt-talk http://naspetaalk.com	Horvat, M. A., Block, M. E., & Kelly, L. (2007). <i>Developmental and adapted physical activity assessment</i> . Illinois: Human Kinetics;
SIRC Sport Research http://www.sirc.ca	Kasser, A. L., & Lyte, L. K. (2005). <i>Inclusive physical activity: Promoting health for a lifetime</i> . Illinois: Human Kinetics;
Wright's Law http://www.wrightslaw.com	Kelly, L. (2006). <i>Adapted physical education national standards</i> . Illinois: Human Kinetics;
PE Central http://www.pecentral.org	Rouse, P. (2009). <i>Inclusion in physical education: Fitness, motor, and social skills for students of all abilities</i> . Illinois: Human Kinetics;
Pelinks4U http://www.pelinks4u.org	Rouse, P. (2004). <i>Adapted games and activities: From tag to team building</i> . Illinois: Human Kinetics;
APENS: Adapted Physical Education National Standards http://www.apens.org	Sherrill, C. (1998). <i>Adapted physical activity, recreation and sport: Crossdisciplinary and lifespan</i> . Dubuque, IA: McGraw-Hill;
Project Inspire http://www.twu.edu/inspire/	Steadward, R. D., Watkinson, E. J., & Wheeler, G. D. (2003). <i>Adapted physical activity</i> . University of Alberta;
SPARK http://www.sparkpe.org	Winnick, J. P. (Ed.). (2010). <i>Adapted physical education and sport</i> . Illinois: Human Kinetics.
	Emes, C. & Velde, B. P. (2005). <i>Practicum in adapted physical activity</i> . Illinois: Human Kinetics;

Distributor resources. *The rope and the knife.* I have also included a list of distributor resources. These distributors are holders of resources that I have found relevant resources through and they have been helpful while searching to find resources

to teach adapted physical activity. They refer the reader to other places to look for resources or access resources.

Distributor resources include:

Table 4	
<i>Distributor Resources in Adapted Physical Activity</i>	
Websites	Organizations & Websites
Human Kinetics http://www.humankinetics.com	Ontario Physical and Health Education Association http://www.ophea.net
APENS: Adapted Physical Education National Standards http://www.apens.org	Physical and Health Education Canada http://www.phecanada.ca
Pelinks4U http://www.pelinks4u.org	American Alliance for Health, Physical Education, Recreation, and Dance http://www.aahperd.org
Wrights Law http://www.wrightslaw.com	International Federation for Adapted Physical Activity http://www.sportanddev.org
Flaghouse http://www.flaghouse.ca	Special Olympics http://www.specialolympics.ca
Gopher http://www.gophersport.com	Active Living Alliance for Canadians with Disabilities http://www.ala.ca/content/home.asp
	Ontario Ministry of Education http://www.edu.gov.on.ca/eng/
	Variety Village http://www.varietylvillage.ca
	Canadian Paralympic Committee http://www.paralympic.ca

The Process

Research Question #3: What challenges do practitioners experience when attempting to use resources to support their adaptations and their subsequent teaching?

Theme: *Accessing and navigating resources. How do you get into that room?*

How many tries will it take me to win? When finding resources, there are many accessibility issues. Some of the accessibility issues include:

1. Navigating to find resources: what to search and narrowing your search, creating memberships, and remembering logins and passwords
2. Navigating referrals from distributor resources, professionals and colleagues
3. Navigating the resource itself: finding information that is helpful or useful
4. Cost: attendance costs for professional development opportunities/resources, purchasing resources, membership and registration fees, ordering equipment, and increasing education
5. Travel: to and from professional development opportunities/resources or to receive resources
6. Space and location: where professional development opportunities/resources take place i.e. gymnasium vs. classroom experiences
7. Time: teachers want more time to learn and interact but it has to be convenient for their schedules

The Problems

Research Question #3: What challenges do practitioners experience when attempting to use resources to support their adaptations and their subsequent teaching?

Theme: Setting standards. *The rules of the game: How do you play?* There are inconsistencies between national standards, provincial standards, board standards, and individual school standards for APA. This variation is also present for quality APA programs, teachers' qualifications when teaching APA, and for resources in general. I believe when looking at the guidelines for the curriculum and IEPs for APA, they are not well defined which makes it more challenging for practitioners to develop or implement them for their students.

The standards in the United States of America are advanced compared to Canadian standards and are setting a trend to follow for creating uniform expectations. For example, Wright's Law and Adapted Physical Education National Standards (APENS) in the United States of America promote educators to be qualified and gain certification when teaching adapted physical education. In Ontario, physical educators or generalist teachers are limited to taking additional qualification courses in special education or generalist teachers taking physical education courses, but the curriculum taught does not overlap these two disciplines. This means in special education training, it is rare to have an experience teaching movement or physical activity to children with disabilities. It is even rare to learn course content on APA in these courses. In physical education additional qualification courses, teachers will be provided information on adapting, modifying, and accommodating activities for different learners. In actual practical experiences or placements if they are required, it's unusual to encounter multiple disabilities in a physical education environment or to even have the opportunity to work with the students.

Theme: The people matter. *Who is your character; what is your role in the game?* "People make all the difference" (The Friendship Circle, 2013). The following data draws from participants who attended professional development opportunities and my interpretations from the documents, records, and literature collected. This information highlights teachers' thoughts on APA, experiences, and challenges to professional development and resource use in APA. I have outlined the following patterns that align with the importance of 'the teacher': confidence in teaching APA, motivation, initiative,

willingness to collaborate with colleagues, challenges with advocacy, support difficulties, knowledge on APA and the teacher's role in facilitating APA.

The teacher. After a long day of work, it is challenging to search for strategies and ideas to teach APA. Practitioners should have motivation and time to access, read, understand, and use resources for teaching APA.

Rather than having to prepare to teach a single class (which is difficult enough), a teacher is given several classes thrown into one and is expected to determine the level of each student and then to create lessons tailored to each student. While this might sound like a wonderful idea to some, the reality is that teachers have neither the time nor the resources to meet these demands. So rather than having the somewhat customized education that students used to receive when divided into classes by ability, the more-able and less-able are educated at the level of the average, so that the less-able are still left behind and the more-able are brought down to average (Matthew Brown, <http://www.newsobserver.com/2013/10/12/3277055/one-nc-husband-whos-happy-his.html>)

To support physical activity, physical education, inclusion, and adapted physical activity, a teacher must be confident in their abilities. Some participants who attended professional development opportunities such as trainings, workshops, webinars, and conferences felt: “Sometimes we feel exercise movement is very hard for our kids and for us, the speakers made us feel we can set up the gym for our kids. They gave us help and encouragement” (Practitioner from Context D). Pre-service teachers in courses and volunteer positions working with children with special needs were asked what they thought the most

beneficial aspects of planning sessions were and many felt “listening to scenarios because it allows a sense of comfort as you’d feel more prepared if that scenario was to happen ever” (Practitioner from Context H). One participant stated: “I think when everyone speaks to their experiences at SNAP from the previous week, it brings us all together, sparks conversation, and can start some laughter to make us feel comfortable” (Practitioner from Context H). Teacher’s comfort level, self-assurance, and having a sense of support allow them to feel confident in teaching situations. A common statement among these participants was also the enjoyment of discussing their “fears and concerns” (Practitioner from Context G). This allows teachers to open up with their colleagues and instructors and work through problems in order to plan and implement physical activity effectively.

Teachers need to be willing to take initiative and to collaborate with colleagues; “the collaborative group work was a good idea” (Practitioner from Context E).

Participants in these professional development opportunities were asked what aspects might be challenging when trying to apply this content in their schools. Their responses included: “having everyone on board (i.e. teachers)”, “adults” and “fitting it in to our daily schedule” (Practitioner from Context D). In an article on *The Top 10 Challenges of Special Education Teachers* one of the challenges was collaborating with general education teachers. “I have to coordinate my schedule with 15 different teachers and their schedules, and that’s not including coordinating with the physical education teacher, art teacher, and the music teacher” (The Friendship Circle, 2013). Having to always prepare for different subjects and transitioning students to different teachers or classes puts more work on the homeroom or everyday teacher. “Teachers need to build relationships with

all students. Be more students centered and in particular ask students with difficulties what they would like to do or what they like to be challenged with, etc. Talk to all students, talk to their parents, make time to talk to their teaching assistant” (Miss Scarlett). Within schools teachers need to communicate and cooperate to create a positive environment for learning and work together to develop plans that will help the children they are teaching. I found the professional development opportunities were beneficial, for teachers at the same school and with different schools, as they allowed participants to collaborate with presenters, their colleagues, and other teachers to build their repertoire of ideas and learning from others.

It is also important that teachers advocate for support and access to resources. Based on the documents, records, and literature I found, there is a good foundation of advocating for individuals with disabilities through organizations and associations. There are conferences and workshops to support this population but they are not well advertised or distributed to the education sector. Teachers need more parent support and communication to assist their programming as well as public support, whether it be taking individuals into the community or being provided access to resources, to better the individuals in their classes. Other disconnects related to the advocacy and access of resources for APA is increasing the awareness of adapted equipment, ability-based approaches to teaching and learning, and the lack of resources to support physical education programs in schools.

The biggest question still unaddressed when it comes to advocacy and support is: how do we get physical activity, physical education, adapted physical education/activity and special education to link?

I believe that most PE teachers have limited background knowledge and expertise in the area of inclusive education and I think that inclusion, although required of them LOOKS much different than what the curriculum has stated. I think that PE teachers are not involved in IEP's and feel excluded in whole school or whole system discussions about children with any special needs of exception (Miss Scarlett).

There is a need for communication and collaboration within home, school, and community. It is also evident that this communication and collaboration should occur across these settings and involve different sectors such as recreation and education. Communication and collaboration allow for advancement with positive advocacy and encourages effective APA to occur across multiple areas of life that benefits each and every individual.

Practitioners should have knowledge and understanding on APA and an opportunity to learn and advance their education in the field for optimal APA programming. Practitioners who attended the professional development opportunities, in which I received feedback forms from, varied in their work experiences and job descriptions. This range included: generalist teachers, physical education specialists, special education teachers, physical education consultants, physical activity specialists, educational assistants, support workers, pre-service teachers, and program volunteers. This variation shows that learning and progression of knowledge should be provided and available to all levels of experience as practitioners should continue being lifelong learners and gaining knowledge in different areas of their teaching repertoire. Professor Plum discusses approaching teaching educators with progressive strategies that can be

“personalized to the learning need of the teacher and the students being taught.” This would encompass a tiered approach viewing resources used for knowledge, communication, and application purposes AND highlighting inclusion, APA, specialized programming, promotion, prevention, and intervention for students. Also noted by Miss Scarlett, moving forward with teaching practitioners about APA the need for purposeful professional development should be provided more to practitioners to learn and develop as educators.

According to resources such as Wright’s Law (2014) and some participant’s feedback forms, a teacher’s role is to prepare, instruct, and assess students; these are general obligations, but reality is, the job entails more responsibilities. There are many more components and qualities to a practitioners job:

These include understanding many things about how people learn and how to teach effectively, including aspects of pedagogical content knowledge that incorporate language, culture, and community contexts for learning. Teachers also need to understand the person, the spirit, of every child and find a way to nurture that spirit. And they need the skills to construct and manage classroom activities efficiently, communicate well, use technology, and reflect on their practice to learn from and improve it continually (Darling-Hammond, 2006, p. 1).

I came across an organization called *The Friendship Circle*, which is a non-profit organization supporting families and individuals with special needs in the United States of America. This organization has a blog for participants from parents, teachers, to community members. A special education teacher stated: “I feel like I’m part of a juggling act in a circus”. The busy lives of teachers don’t just impact the teacher, it

impacts the students too. Teachers' attitudes and actions have a dramatic impact on the students, learning programs, and school atmosphere. "APE is about meeting the unique needs of individual student with disabilities. In APE, the instructor provides planning and assessment, consultation, specialized instruction, and adapts or modifies the curriculum, task, equipment, and or environment so a child can participate in all aspects of physical education" (Wrights Law, 2013, Homepage).

People are resources. An individual presenting a resource or professional development opportunity such as trainings, learning opportunities, conferences, webinars, or workshops should have characteristics and qualifications that allow them to be an effective resource to their peers. The presenter needs to be: well prepared, knowledgeable on the content/subject matter, confident in their abilities and comfortable with the mode of delivery, and be a specialist in the field. Practitioners thought it would be beneficial for professional development opportunities to "include a PE specialist to provide first-hand knowledge" (Practitioner from Context A). Pre-service teachers and volunteer participants of an Autism Movement Camp training were asked what would help their learning experience and what the most helpful aspects of training were. One participant said: "be supportive and patient as we gain the experience" (Practitioner from Context E) and across the feedback forms, individuals enjoyed how the information as "explained well at our level" (Practitioner from Context B).

Theme: Visualize. *How do you prove your guess is right? Show it...* According to feedback from participants who attended the training/learning opportunities, resources should encompass more visuals. There are a lot of resources in written form (textbooks, manuals, and general information on disability or the benefits of physical activity) but

some participants felt that teachers need more visuals and photos to reinforce the written content or oral instruction for their learning. “We need some visuals as to how to do different types of exercises and motions” (Practitioner from Context D).

Many teachers want to be able to visualize their students when they are learning and planning for physical activity. The teachers felt if they were able to see it work through photographs, videos, or in person they are more likely to try in their own context. The feedback from the practitioners in the PD opportunities suggested they wanted to see learning happen in-action and desired the information to be directly relatable to their children or fit their kids’ needs specifically. Broad ideas such as the importance of using a variety of equipment or suggestions on types of equipment to use weren’t enough for these practitioners. “Examples in action/hands-on examples were very helpful. It helps me visualize the specific students” (Practitioner from Context B). Teachers also emphasized the need for “strategies that target various disabilities” (Practitioner from Context A). Working with individuals with disabilities and in a physical education environment is a dynamic process; every child has very different behavior plans, there are often individual physical restrictions with movement and support ratios vary. “Remembering that successful (individualized) movement is more important than a game based activity”(Practitioner from Context C) is a critical aspect for teaching APA. Teachers recognize that “we have to remember to make activities per student ability, and our students have different abilities” (Practitioner from Context D). A pre-service teacher stated: “I found when the instructors brought a child to demonstrate with, it was very useful. We were able to plan what activities he could do and we learned tactics/strategies what worked and didn’t work with the child. This gave great insight” (Practitioner from

Context G). The visual of seeing a child experience movement in a physical activity environment seemed to spark ideas, helped build the confidence of those working with the children, and allowed for discussion to take part on the ways to plan physical activity.

Theme: Resources should be practical and realistic. *How do you use the weapons?* What types of resources and resource categories would be most beneficial for assisting a teacher teaching APA? Many factors effect this question: the learner, the mode of delivery, content, time etc. There are resources for teaching APA but there are limited resources that are relevant for implementation. As learners, we sometimes look for different aspects and strategies for how we learn when we are being taught – different ideas and strategies impact differently. But if a resource has the qualities that encompass a broad scope of learners allowing for many different experiences to occur in the learning process the resource will be more relevant reaching a wider demographic; the “take away” aspects will be greater. Resources should encompass qualities such as being “practical – doable – affordable” (Practitioner from Context C).

Through my data analysis I have discovered that a practical and realistic resource includes: specific examples of children, hands-on learning, an opportunity for problem solving, and a link between the curriculum and the resource content. Participants in the professional development opportunities said: “we need practical and real life situations/ scenarios” (Practitioner from Context F), “loved that it was brief info and that it was hands on group activity” (Practitioner from Context D). From the feedback forms and commentary in documents, records, and literature, practitioners found experiential learning opportunities to be helpful and useful for learning. A practical and realistic resource should have experiential qualities such as: being interactive, having

demonstrations, modeling, engaging in activities, giving scenarios, providing strategies and creating ideas.

Theme: Teachers are always left wanting more. Just one more guess... “I wish we could have a full day with you” (Practitioner from Context C), “more time” (Practitioner from Context B), “more concrete examples,” “more practical strategies,” “more resources,” “more visuals” (Practitioner from Context A; Practitioner from Context B), “more demonstrations & scenarios,” “more ideas,” “more suggestions,” “more hands-on and interactive” (Practitioner from Context A-H).

According to the views of participants in this research, practitioners want more examples, strategies, demonstrations, scenarios, discussion, and interaction to help them learn, plan, and understand APA. They also appeared to want more time on how to adapt activities using equipment, how to be creative with equipment, what type of equipment to order, when to use equipment and resources, and more ideas on how to use what they have. In many conferences and workshops teachers felt more content on equipment should be added: “concrete examples (i.e. specific modifications for games or pieces of equipment)” (Practitioner from Context A), “more concrete examples of adapting equipment to specific activities” (Practitioner from Context A), “would actually like to run through and actually play with the equipment” (Practitioner from Context G), “it was helpful seeing the equipment available” (Practitioner from Context B).

A pattern that emerged was the term *teacher friendly*. The feedback and documents, records, and literature revealed that there is a demand (yet no articulated parameters) for *teacher friendly* materials. Any handouts that were provided during the professional development opportunities from which I received feedback, all said handouts

were helpful but participants stated they were either *teacher friendly* or needed to be *teacher friendly* in order to be useful. A salient statement throughout my analysis was “it was teacher friendly,” and one participant in the from Context A said “the assessment strategies were teacher friendly.” What does *teacher friendly* really mean?

Theme: Application and knowledge transfer of resources is not happening.

What do I do now that I have all of these clues? I have found that practitioners like having the chance to problem-solve but they still want guidance. The participants’ feedback suggested the need for everything broken down into steps and strategies in a “step-by-step” process. These practitioners proposed gaining more help with creating ideas and working on imagination. “The types of resources relied upon often provide general information which means the educator must determine which adaptations are meaningful and beneficial for the child(ren)” (Mrs. Peacock). It was evident that many practitioners are looking for strategies on how to teach APA and want a progressive step-by-step process provided to them: “walk through the activities” (Practitioner from Context G) “outline the steps of the tasks” (Practitioner from Context B). When participants were asked what challenges occurred during their learning experience they said: “having to come up with our own designs” (Practitioner from Context C), “thinking of the activity and starting of the planning of the activity” (Practitioner from Context B), “practicing on your own what you might do with the equipment” (Practitioner from Context B) and “trying to develop activities using imagination” (Practitioner from Context E). There appears to be a significant need for guidance, demonstrations, and assistance in getting creative or knowing where to start and what to do.

Theme: The content in a resource. *Make sure you know the person, room, and weapon before guessing...* Resources can be very effective if the content is current, correct, and concise. Practitioners from professional development opportunities “love the explicit connection to the curriculum” (Practitioner from Context B) and believed the link to the curriculum gave them a good basis to know how to start planning for APA. The resources that were brief, with current research and first hand knowledge were appreciated and well respected by practitioners and organizations supporting the field of APA. To connect to both data sets, the content in resources should also link to the relevant resource criteria listed above, provide specific examples of children/individualized, and include hand-outs or hardcopy material for practitioners to have something to take with them.

When analyzing professional development opportunities I found that the main topics discussed at these opportunities were: teaching strategies, instructional development, technology, assessment, IEP’s, digital, assessing physical literacy... but not APA. The content at these professional development opportunities didn’t seem to link physical activity/physical education to disability/special needs. Also, when searching for relevant resources in documents, records, and literature, the common resources covered content on what a disability and why it is important to do physical activity. The resources weren’t addressing who should be teaching, what to do to teach, how to teach, when to teach, or where to teach APA.

Theme: Organizations to be familiar with. *The suspects.* Active Living Alliance for Canadians with a Disability (ALACD), Physical and Health Education Canada (PHE), Ontario Physical and Health Education Association (Ophea), and American Alliance for

Health Physical Education, Recreation and Dance (AAHPERD) discuss the need for inclusive physical education. But I have found that there are limited resources and opportunities for teachers to utilize relevant resources or gain access to learning about APA. Although these organizations appear to be supportive of APA based on reading their mission statements and information found on their websites, it is not evident through the resources available that they are helping practitioners find, operationalize, or implement APA.

***Theme: Terminology and language.** I don't understand the rules...what happens if you miss a clue along the way?* Terminology can be a barrier for learning, create confusion when learning or finding resources, and can determine whether a resource will be implemented or operationalized for teaching APA. I have discovered that advanced or scholarly language is prominent in resources and becomes a barrier for teachers learning new material. Hence, there is also confusion over terminology and concepts such as: the difference between adapted physical activity, adapted physical education, and inclusion. Some other of the misconstrued terms in the field of education and Adapted Physical Activity are: inclusion (classroom) vs. adapted (gymnasium) and education vs. activity. "There definitely needs to be clear definitions that are shared with all organizations that service these students including recreation, education, health, and parents. This will help align practices across sectors" (Professor Plum).

The "Ideal" Resource

Resources can be used in a person-to-person experience, or practitioner to object experience. A person-to-person experience is similar to a professional development opportunity whereas a practitioner-to-object experience consists of the practitioners

working with types of resources such as websites, textbooks, lesson plans etc. The following are phenomenologically oriented descriptions of an “ideal” person-to-person and practitioner-to-object resource.

Person-to-Person Resource: Professional Development Opportunity.

In professional development (PD) opportunities, practitioners tend to get restless quickly. An appropriate time frame for a person-to-person resource generally shouldn't last longer than 2 hours. However, consecutive opportunities to work with professionals and colleagues post the initial PD opportunity *and* after practitioners have a time to digest information, reflect on their experiences, or even attempt to implement resources is also necessary. The professionals facilitating the person-to-person resource must be specialized and knowledgeable in APA, they should have confidence, and have real-world experience working with individuals with disabilities in physical education. Practitioners thrive and seek attention in PD opportunities. The ratios for a person-to-person PD opportunity should be 1 professional for every 3 practitioners; practitioners want more attention and support through the learning process.

The content provided to practitioners needs to be brief. Ideas for content revolve around information on APA, concepts specific on how to create effective and efficient movement, how to do observe students, and strategies for teaching APA specific to their classes. PD should be designed according to the specific needs, level of experience, classroom types, and interests of the teachers. This information can involve assistance with assessment, individual programming, group activities ideas, and teaching station creation foundations. Some specific elements practitioners should be trained on are

learning motor milestones, fundamental movement skills, communication strategies, visual systems, and how to work with equipment.

The process and dissemination of information is a critical component to person-to-person PD. With teachers always left wanting ‘more,’ learning experiences must involve visual slides in a power point presentation, verbal instruction and dissemination of the information, a chance for the practitioners to see photos of children executing movement, and an opportunity to have written descriptions of the information and/or the power point presentation in hardcopy. This process also needs hands-on learning, experiential learning, an opportunity to create activities, develop stations, discuss ideas with colleagues or professionals, interact with equipment and other practitioners, and have a chance to problem-solve with guided or modeled practice.

Practitioners should work with resources such as equipment, written text, or lessons and collaborate with colleagues to foster imagination and creative activity development. Ideally, an in-service session should be held at a school (or the practitioner’s school) with students (or the practitioner’s students). Individuals with disabilities need to be involved for the practical and application element of the learning process for practitioners to attempt and witness success through problem solving during the experience.

It is also important that realistic spaces and locations are the host of these resources. Person-to-person resources should take place locally for practitioners at a school in their school board with access to the gymnasium and a classroom. A gymnasium is important for experiential learning and a classroom is important for relaying content in a more comfortable environment. Practitioners need the opportunity to

be interactive in the classroom and in the gymnasium with their colleagues and students in contexts they can relate to.

As an extension to the content provided, supplementary resources such as references to organizations/other resources, list or products for practitioners, and handouts should be provided to the practitioners. Leaving a PD session empty handed doesn't allow practitioners to reflect on or refer back to their learning. Having follow-up or consecutive opportunities for in-service learning is essential as it reinforces practitioners learning. PD cannot simply stop with one person-to-person experience; the description provided and consecutive sessions allow practitioners to discuss more, interact more, generate more ideas, and learn more strategies to operationalize and implement their learning from the person-to-person opportunity to put into practice.

Practitioner-to-Object Resource: Online/Hardcopy Materials.

Types of object resources could be websites, lessons, or written material but the "ideal" object is brief, has step-by-step instructions, and is easily accessible. Objects can be in the form of a handout or hardcopy material but it needs to include visuals and brief written content. The object resource is purposeful for practitioners so they have something to bring with them to the gymnasium or context they are working in to help them teach APA. The object resource has the ability to be used multiple times in a variety of contexts; it shouldn't be something that is put back on the shelf and never used again. The "ideal" object resource can be referenced multiple times and can help a practitioner's immediate practice or be implemented for teaching situations. The object needs to be "practical," which would be similar to providing ideas of different activities a practitioner can use to teach i.e. targeting games or equipment used to improve balance, in

conjunction with photos of children doing activities so the practitioner can understand what it might look like in action.

Object resources should consist of templates that have examples of assessment ideas, template lesson plans, activity ideas, or general information like a glossary. The information in object resources once again needs to be brief and have distinct objectives outlined. It is beneficial to include current research and first hand knowledge/experiences from practitioners in the field of APA, but this information needs to be in terms and language that is accepted by the teaching profession and geared towards practitioners.

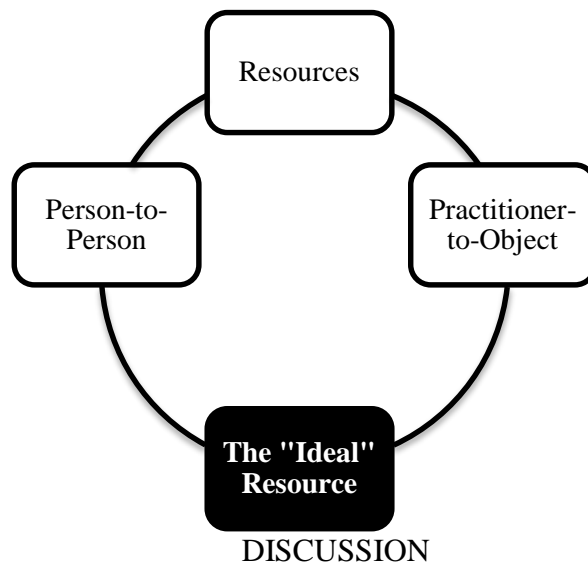
It is also important that object resources are linking the policies and curriculum of the region or discipline it is meant for and ensure they are consistent with the quality standards set in the proposed area. The content in object resources should bring practitioners back to the basics. If an object resource is developed for practitioners, the content should be about facilitating APA and the fundamental aspects needed to teach APA effectively. Some topics an object resources could include are: what is APA, what is movement, fundamental movement skills, types of appropriate equipment to order/use, how to use what you've got (space/time/equipment), how to schedule/time activities and plans, introduce visual systems, how to create quality programs, development or modifications of IEP's for APA, lists of instructional strategies/cues, outline safety guidelines & considerations, terminology such as accommodations, modifications, adaptations, what appropriate assessment for movement looks like, and whole class or individualized activity ideas. An object resource shouldn't have ALL of these topics, as it is too much to discuss everything, which would be creating a textbook. An object

resource should focus on one or two objectives and only concentrate on that topic so practitioners can utilize and choose what information they are looking for.

Finding object resources may be challenging for practitioners because terminology is inconsistent and some practitioners may not know what to look for to find resources to help them teach APA. The features for a “search” to find an object resource should include: multiple discourse or terminology indicators to be found via web-based searches or through libraries, easily accessible to obtain (readily available and can be printed or is already in hardcopy), and the object should be visually direct with minimal distractions so it is simple to navigate to find the information needed. These features make a good search possible and make object resources more relevant for practitioners to use.

The “ideal” resource includes both of these resources together.

Figure 4



Chapter V:

My experiences in teaching Adapted Physical Activity (APA) have shown me that it is easier said than done to use resources and to transfer knowledge in a practical setting.

In my research study, I chose to explore the challenges to operationalizing and implementing relevant resources for APA and to guide the development of a framework that informs how resources should be developed and implemented to foster appropriate APA. This chapter will discuss my major research findings that emerged from my data analysis. I will provide further insight into the products for teaching APA, the process of finding resources, and the problems practitioners experience operationalizing and implementing relevant resources for APA.

The strategies to find, implement, and operationalize relevant resources are similar to the strategies to win the game “Clue”. You need patience and time. You need to learn about the “game” and how to “play” i.e. about the benefits and how to teach APA. You need to explore different “rooms:” sites, books, or people. You need to communicate and listen to others’ suggestions. You need to use correct terminology. You need to use the information at your disposal to problem-solve and try different strategies. You need to visualize the environment and put yourself in the reality of the situations you could encounter. You need to ask yourself, “Am I willing to put forth the effort to do this?” I know it’s easier said than done... But if you don’t even try... where will that get you?

Finding Resources

In determining what relevant resources exist to teach APA, I have found the term “resource” is very broad. When I started to look for materials or “resources”, I had to make some decisions about what makes a resource relevant. A relevant resource is accessible to obtain or readily available for a practitioner, it can help a practitioner’s immediate practice or be implemented for teaching situations, the language used and

terms in the resource are relatable to the teaching profession, it needs to be consistent with accepted best practice, curricular guidelines, and ministry standards, and lastly, it has key words that determine whether it is meant for Adapted Physical Activity or not.

Starting data collection and searching for materials – documents, records, and literature – was one of the most challenging aspects of this research study. I anticipated resources existing on teaching on APA, but quickly I realized there aren't many. I also did not anticipate the access and navigation of these resources to be one of the biggest roadblocks and findings in my research. "The use of "resource" as a broad term makes it difficult for staff to determine which materials should be used" (Mrs. Peacock). The lack of access to resources and difficulty in navigating resources makes it challenging for practitioners to begin the process of finding, learning, understanding, operationalizing, or even getting near the stages of implementing APA resources to support their teaching. This is one of the main findings of the thesis.

Online and Hardcopy Resources

The most common or salient resources I found generally did not encompass each of the characteristics for the inclusion criteria I developed. I started looking for online and hardcopy resources. Online and hardcopy resources include: websites, textbooks, lesson plans, equipment sites, manuals/guides, organizations or associations, magazines, blogs, news articles, and videos/presentations. The salient materials were websites and textbooks. Most of the websites I came across were teacher websites that included their class schedule, information on the school, and a reference list suggesting resources to view. I called these websites "distributor resources" which means they are providing the individual viewing their resource with information, delivery of resources, or referrals

where/how to get other resources. Most websites were creating list after list on where to go to get resources and they repeatedly sent me to the same places. These lists evidently were referring individuals to irrelevant resources according to my criteria of relevance.

Websites. After constantly finding the same sources, I realized relevant resources were not easy to obtain. Some other challenging aspects to the websites were that many did not have inclusive or adaptive information; they did not cover the topic of APA only looked at physical activity or education as a broad topic. Good resources that met the criteria were easy to navigate. Visually, the reader could find what they were looking for and could access the information quickly. The relevant websites also included a wide range of information on different disabilities and were relative to the curricular guidelines and ministry standards for APA.

According to participants who engaged in professional development opportunities, practitioners preferred practical and interactive resources; websites that included discussion boards, search bars, and visuals of activities being executed by students demonstrated relevant attributes for a resource. Unfortunately, a common barrier with most websites was inappropriate language and content. This meant the information provided would be challenging to comprehend for practitioners who do not have much background knowledge on physical education. Websites are a great tool for practitioners and they are generally accessible but I have found that practitioners still require training on the information websites are providing to operationalize and implement the resource effectively.

Textbooks. Textbooks were another salient resource that was very common in searches through the Internet, databases, and in the library. I found they were typically

aimed at post-secondary institutions for education training or they were for educators to read to build a foundation of knowledge or develop their existing knowledge. These textbooks were mostly written content rather than practical ideas or strategies “ready to use” and be implemented in their practice. The salient textbooks found did, however, include authors that are prominent in research in the field of APA: Block, Hodge, Horvat, Kasser, Kelly, Lieberman, Lyte, Mastura, Rouse, Sherrill, Steadward, Watkinson, & Winnick.

Another issue with textbooks is the language used and the navigation of the information in the textbook. It’s a barrier to order or purchase a textbook because it leads to waiting time and adds extra time to have the textbook delivered, attained, and it once again costs money – most often that money comes out of the pockets of teachers rather than reimbursed by school administration. After viewing multiple textbooks on APA, I thought about the practicality of a textbook as a resource. The concept of a textbook appears to be beneficial as it can hold a lot of relevant information, but what I have found through my research is that this form of resource isn’t practical to use to support practitioners adaptations and their subsequent teaching. It is challenging and exhausting enough to navigate an entire textbook to find the information you’re looking for, but adding on the attainability of a text solidifies its lack of relevance according to my criteria. What happens when you’re done with finding the information you need in a textbook, if it’s even in there? The length of the book and depth of the content doesn’t make it appealing or easy to use often. Are textbooks simply put back on the shelf and rarely referred to again after using once? I believe it would be beneficial for textbooks to be re-used and re-formed into a manual that follows the characteristics of an “ideal”

resource. The text could have sections taken out of it for practitioners to draw from. It would be beneficial to create handbooks by taking the lengthy content and condensing it into a 2-5 pages that has visuals. Each guide can have its own topic and can range from ideas such as: the foundations of APA and movement, everything you need to know about equipment, how to modify for specific disabilities, strategies for instructing in APA, ideas for movement forms and games, etc. Practitioners should also share textbooks or information they have gathered to learn about APA with other practitioners so the information on the shelves is being disseminated to different people.

Google Books has a textbook indicator system that provides information to the individual searching Google. This indicator pulls out excerpts or fragments from the book if you're looking for terms or concepts. Some books have book reviews from individuals who have used the text as well. This strategy would be helpful for other distributor resources such as Human Kinetics, which produces many texts on APA, to make the textbook more relevant to operationalize and implement. Having online versions of textbooks and a textbook excerpt system would be more practical and accessible as a resource. This strategy is also helpful for a practitioner to utilize for time considerations during the navigating process of texts.

Organizations and Associations. Another online and hardcopy resource was organizations and associations. Organizations and associations also were “distributor resources,” but some contained relevant resources too. Most resources found through the organizations were professional development (PD) opportunities such as workshops, webinars, conferences, and trainings. The difficulty with these PD opportunities was accessibility in terms of location and cost. As I was searching for resources in the shoes

of a teacher, I found accessibility became a barrier for these training and learning opportunities. More specifically, time and travel to attend PD opportunities and the costs associated with attending were barriers. A practitioner or parent wouldn't traditionally have the time and money to attend one of these sessions with their regular work schedule. If they do overcome this barrier, a participant at a conference or workshop is not guaranteed that the material or topics covered will help them facilitate APA. Only a brief overview of the topics and sessions that will be present at PD events are normally given; from my research, not many PD events or topics on APA exist. There is also no assurance that the quality or information at each session will be relevant; many topics are misleading, there isn't much information on the presenters, and practitioners may not know what to look for when attempting to attend these opportunities.

Finding relevant resources through organizations had some additional challenges. As my initial attempts to find materials were through the lens of a teacher, I found it challenging to determine what to type into searches. I found out quickly that the words you type into search engines matters and has a large impact on the resources you find. The information that comes up in a search engines might not be what you are expecting to find. In particular, the Ontario Physical and Health Education Association (Ophea) is an organization that has a few relevant resources but it was not appearing in my Internet searches. Through my searches, I had changed discourse markers and terminology – adapted, physical education, physical activity, resources, inclusion etc. – and the only time it appeared was when using the term “Inclusion in PE”. Ophea is connected to the Ontario curriculum, it has workshops available for schools, and has a *Steps to Inclusion Handbook*, which makes it a relevant resource as they met the inclusion criteria.

Unfortunately, however, Ophea is not accessible. I view this finding as a barrier to finding, operationalizing, and implementing resources for practitioners. If practitioners can't access Ophea they are limited to the relevant resources that exist for teaching APA. Ophea is the "Ontario" Physical Health Education Association, which means many practitioners are suggested to utilize this organization; it becomes a problem for practitioners if it isn't accessible to them.

Terminology. I have also discovered that terminology is inconsistent and confusing across regions (local, provincial & national), disciplines, and fields of practice. If the only search that Ophea came up in was "Inclusion in PE," how many practitioners are finding it? If you are searching for: *physical education resources, adapted physical education, adapted physical activity, how to include students with disabilities in physical education, resources for inclusive physical education...* and many more, Ophea doesn't come up.

Some of the issues that rise with entering terms into search engines or databases are: terms with multiple meanings, practitioners understanding terminology, and knowing what terms to search when looking for resources? If someone is looking for "inclusion" resources the only information or resources emerging are textbooks rather than websites, lessons, or PD opportunities. If you don't enter "resource" in a search, literature appears or you're directly sent to school websites (university and teachers personal websites).

I found through data collection and analysis, the term "inclusion" is very classroom-oriented. Most information on "inclusion" in the field of education does not talk about physical activity environments, including students with disabilities to participate in physical education, or strategies for teaching APA. "Inclusion" is geared

towards how to create an inclusive classroom. Having an inclusive classroom is discussing differentiated instruction and accommodating students with special needs in mainstream classes. Inclusion is “the practice of educating all children in the same classroom, including children with physical, mental, and developmental disabilities” (A Lexacon of Learning, 2014, Definitions). My research findings are not determining that the term “inclusion” isn’t being embraced in physical education; what I am suggesting is that including students with disabilities *in* physical education programs is not occurring under the term “inclusion” *as much* as we are trying to accommodate their disabilities in the classroom setting.

I also believe that the term “inclusion” has many meanings, causing confusion for practitioners. In the Ontario Health and Physical Education Curriculum Grades 1-8 (2010) under *Equity and Inclusive Education in Health and Physical Education*: “equity and inclusive education strategy focuses on respecting diversity, promoting inclusive education, and identifying and eliminating the discriminatory biases, systematic barriers, and power dynamics that limit the ability of students to learn, grow, and contribute to society” (p. 56). The *Planning Health and Physical Education Programs for Students with Special Education Needs* section in the curriculum vaguely employs the responsibilities of the health and physical education teacher to decide the curriculum expectations in conjunction with accommodations or modifications needed for students with special needs. There is no connection to “inclusion” just to accommodate (instructional, environments, or assessment) or modify (curriculum expectations based on IEP’s) for the students with special needs. Miss Scarlett stated: “Many will likely confuse physical education and physical activity and the definition of inclusion but this is clearly

defined in the PE curriculum. Do teachers read this front matter? Probably they don't".

From my analysis of the health and physical education curriculum document in Ontario I don't believe it is explicit enough for teachers; in PEI (Miss Scarlett's location), it may be different. To have a working understanding of their responsibilities and strategies how to be inclusive or create a program that encompasses all individuals would be more beneficial than only stating policy. However, policy does exist in the curriculum, which is the first step to change, but it's up to the practitioner to incorporate and implement it in their practice.

I believe that expectations are set very low in many schools as to what inclusion in PE should be or what it can look like. This again may be lack of knowledge or understanding from the admin. Or the PE teacher. PE may not be termed or understood as one of the important subjects! Importance can be more in math or LA? (Miss Scarlett).

Physical education generally occurs in the gymnasium and outdoors, whereas the Daily Physical Activity initiative, kinesthetic learning, fit breaks, and interactive learning are more geared towards including physical activity into the classroom. Though the term "inclusion" is classroom-oriented and generally used in Canada, I found the term "adapted" is more gymnasium-focused and used more often in the United States of America. "Adapted" is meeting the needs of all students by accommodating and modifying activities or creating an environment that is promoting opportunities for everyone, with or without a disability (APENS, 2008). The problem here is both terms are being used for a similar purpose – providing every individual with appropriate opportunities in education – but when it comes to resources, the two terms are guiding

practitioners to different information. As such, if you are looking for “adapted” material you may be missing out on the “inclusion” material and vice versa. This may lead to some extremely useful and relevant material being overlooked, due to different terminology being employed.

How are “inclusion” and “adapted” being used? The Ophea (2012) conference had a topic: “Inclusivity in Ontario Schools – the missing piece of the puzzle”. This title is very open-ended and doesn’t have a clear indication of how inclusion is being used. I was hoping it would be discussing special needs, cohesive classes, or strategies to support practitioners but it actually focused on the sex education curriculum and mental health issues in schools today. Quite often inclusion refers to “culture, ethnicity, sex, physical or intellectual ability, race, religion, gender identity, sexual orientation, socio-economic status, or other similar factors” (Ontario Curriculum, 2010, p. 57). “Adapted” is being used in textbooks for adapted physical education or adapted physical activity and has been taken on by many organizations from the United States of America for physical education, activity, and recreation rather than “inclusion”. If there is all this confusion over what terms to look up or what applies to your practice, practitioners may have a difficult time finding relevant resources. Also, with an inconsistency with terminology, practitioners who attend training or learning opportunities might not be sure of what information they will be provided with or not know if the information will parallel what they need to improve to assist their teaching.

Other terms that contain some misunderstanding are “education” vs. “activity.” It is interesting that the “adapted” information and resources are under “physical activity and recreation” websites and resources NOT “physical education” and “sport”. I had

originally thought the terms physical education and physical activity would bring up similar information but when searching for resources, education comes up for schools where as activity is linked to recreation and the community. I have also found the disciplines such as recreation and education, have different ideas of what “inclusion” and “adapted” are and these divisions don’t appear to be working together as much as they should. “There definitely needs to be clear definitions that are shared with all organizations that service these students including recreation, education, health, parents. This will help align practices across sectors” (Professor Plum).

Even though terminology is a huge factor for finding resources, the resources or places school boards or other practitioners refer teachers also influences what resources are being used. Ophea is an organization strongly referred to by the Ontario Ministry of Education and is linked to the Ontario Curriculum. Though Ophea rarely comes up in searches, if you ask a librarian, the Ontario Ministry of Education, or consultants in many school boards, Ophea is the only thing suggested to practitioners and the only physical education website linked to the Ontario Ministry of Education. I often wonder if practitioners look elsewhere. Not that linking relevant resources to ministry sites is a negative thing – I actually suggest more education sites in different regions start doing this – but if practitioners in Ontario think that Ophea is the only resource available for physical education, then they may be missing other relevant (and perhaps better) resources to improve and assist their practice, especially in APA. Organizations, such as Ophea, should have a variety of resources available for practitioners, including referring practitioners to other resource providers. “Educators may have limited access to outside organizations and tend to rely on Ontario Curriculum and board resource staff” (Mrs.

Peacock). Practitioners may not be finding relevant resources or only searching one resource for information; this does not give practitioners the opportunities, depth, and breadth of knowledge they need to teach APA.

Another relevant organization is the Active Living Alliance for Canadians with Disabilities (ALACD). This organization provides practitioners with great information and has a relevant webinar for training practitioners in APA. “We are an alliance of individuals, agencies and national associations that facilitates and coordinated partnerships among the members of its network” (ALACD, 2005, About Us). This organization promotes hearing the voices of individuals with disabilities and examines the importance of their experiences (Fitzgerald, 2006). It is an organization that *supports* individuals with disabilities and works *with* individuals with disabilities to better programs and encourage living a healthy active lifestyle. Unfortunately, the ALACD is another resource that does not show up when searching for materials and resources to teach APA. In order to have the ALACD actually be a relevant resource, more practitioners should know that it exists and there should be ways to increase the likelihood to come across it when searching for resources. The ALACD’s website should be utilized for their services, resources, wide range of information, and expertise on disability and movement. The ALACD links individuals to representatives across Canada, however, Miss Scarlett said: “The Active Living Alliance is long gone in PEI”. This is a conflict because the ALACD website alludes to having services set in place across Canada but Miss Scarlett, who is involved in the school boards in PEI, thinks otherwise. Miss Scarlett described the following organizations to be leaders in APA in PEI: Parasport, Physical and Health Education Canada (PHE), English Language School

Board (ELSB), and the Department of Education and Early Childhood Education (DEECD). The ALACD may not be as common in other regions, but for Ontario and my research, it exists, but needs to be promoted and accessible. The ALACD should be utilized for its relevant resources and training/learning opportunities for practitioners; working through the terminology and accessibility issues that I have encountered searching for resources such as Ophea and ALACD will increase the number of relevant resources for practitioners to teach APA.

Professional Development. I have also found that only some organizations and associations provide workshops, webinars, or suggest other resources to go to (generally textbook or websites). If they happened to suggest a resource other than texts or websites, the opportunities weren't easily accessible for a practitioner to participate in. In viewing the itinerary for conferences and details for professional development (PD) opportunities such as workshop descriptions, I discovered most PD opportunities do not focus on APA. As a practitioner it is hard to get more experience and training if a variety of opportunities do not exist. It is also likely that practitioners might avoid improving their skills with PD because there is a major cost or travel associated with PD events. As stated above, participants are not guaranteed that the material and topics covered at PD opportunities will help practitioners' teaching and practice. PD opportunities do not always give enough information for interested practitioners. The overview of topics, breakdown of a schedule, and presenter information for practitioners is limited. An inexperienced and unknowledgeable practitioner in APA or physical education has an even harder time determining if the PD opportunity will be of a high quality or if it will help them implement more effective APA. The training for practitioners is already

lacking, but it will most likely not improve if practitioners can't access training opportunities, can't find what to look for to get trained, or have quality training available to them.

Lesson plans. Another resource category I examined was lesson plans, which I found while searching for resources to teach APA. Once I actually found and acquired online and hardcopy lessons from the Internet or from documents on teaching APA, they *appeared* to meet the relevant criteria and to be helpful to use. After more in-depth reading of the lesson plans, I realized a challenge to operationalizing and implementing this type of resource is the practitioner attempting to use them. Some of the lessons I encountered were very broad and seemed to be geared towards qualified health and physical educators. The lessons that didn't meet the relevant resource criteria were hard to navigate, often had incorrect information that didn't like to the curriculum, and the terminology was not clear or explained. These lessons included elimination games and required knowledge on sport specific skills, rules, and required specific equipment to use. Many practitioners do not have the training in APA or even physical education to facilitate individuals with disabilities (Cook, 2002; Kirk, 2006). If practitioners are not knowledgeable on appropriate APA, safety, fundamental movement skills, inclusion strategies, and so on, then they might have difficulty determining what an appropriate lessons is and to implement or understanding lesson plans.

Even knowledgeable practitioners teaching APA are limited with resources. Generally practitioners have a lack of equipment, inadequate space for physical education and have a lack of preparation time. If practitioners who are untrained in APA such as in-service teachers, pre-service teachers, and other multidisciplinary workers involved in

physical education programs, then effective and appropriate APA is unlikely. Now, add the barriers of resources, space, and time to the equation, effective and appropriate APA will probably not occur. Practitioners should be required and encouraged to keep up to date with adapted physical education training to facilitate effective and appropriate APA. Training more practitioners will help foster more effective resource operationalizing and hopefully lead to successful implementation of resources.

Equipment. In my search for resources, I came across equipment websites and determined that equipment could be a relevant resource for practitioners because it is an essential element to teaching APA. Practitioners have to learn how to find, operationalize, and implement equipment just as they would a textbook. The most beneficial equipment websites were those that had specific sections for APA equipment and listed a variety of equipment for different contexts (home, school, and community). This characteristic made the resource easily accessible to navigate, it also influences practitioners to determine what equipment might be appropriate to purchase, and it gives ideas for types of activities to implement for APA.

Magazines, blogs, news articles and manuals. I also viewed magazines, blogs, news articles, and manuals when I was searching for documents, records, and literature. I found these beneficial to consider because they provided practitioner commentary and user reviews; I was able to see who is viewing information on APA, disabilities, physical education, and other relevant information. Unfortunately, these materials did not meet the inclusion criteria for relevant resources. One key aspect to note is that the magazines, blogs, and news articles that were on topics such as special needs or were geared towards disabilities, did not discuss physical activity. Some of the more common topics they

discussed were differentiated instruction, how to get students motivated in class, and advocating for individuals with special needs; none of the information was in relation to movement, physical activity, or physical education class. Now, when looking at magazines, blogs, and news articles that were discussing physical education or were geared towards physical activity, they did not normally discuss special needs or disabilities. There is a disconnect between the two disciplines:

I believe that most PE teachers have limited background knowledge and expertise in the area of inclusive education and I think that inclusion, although required of them LOOKS much different than what the curriculum has stated. I think that PE teachers are not involved in IEP's and feel excluded in whole school or whole system discussions about children with any special needs of exception (Miss Scarlett).

There seems to be a need for communication and collaboration between stakeholders in the disabilities/special needs and physical education/physical activity disciplines. There also should be communication within the home, school, and community to know and understand what is being done to support individuals with disabilities in APA. Communication shouldn't stop there; it needs to be across these settings – home, school, and community – and they should work together to create a cohesive learning environment. These two fields could also transfer and collaborate across different sectors (local, provincial, and national) to encourage positive advocacy, appropriate & effective APA, and to instill consistency of standards for programs.

After viewing multiple online and hardcopy resources, I looked at literature as a resource. Literature came up often in my search for materials on APA. It was presented in

textbooks, research journals, and articles. Literature as a resource proposed many challenges with the relevant resource criteria. How do practitioners find and access literature to read? How do practitioners have the time to read articles? What are the practical aspects of literature? How does a practitioner implement literature? The language and terminology is very scholarly and can be confusing for practitioners with limited knowledge in APA. Literature should be translated and disseminated in more “practical” forms for practitioners so it can be relevant. Many practitioners are looking for direct, step-by-step strategies, and simple ideas to implement, not a book or article to read.

Some of the practitioner-based work I found was through Adapted Physical Activity Quarterly (APAQ), Physical and Health Education Canada (PHE), Ophea, and the European Physical Education Review. These practitioner-based articles and databases did have current research that would be great to share with practitioners, but once again, the language was scholarly and the amount of adapted or inclusive information was minimal. APAQ is very informative with the research in APA, but other literature distributors like PHE and Ophea had limited information on APA and mainly focused on general physical education. Overall, literature is not generally a resource that practitioners can operationalize and implement effectively.

Consequently, there tends to be limited relevant resources and limited opportunities for teachers to utilize relevant resources or gain access to learning about adapted physical education:

This is an underserved student group, as learning opportunities have been isolated to “academic” class supports. As with most physical education, this physical and

health domain is grossly misrepresented in education timetables for students.

Therefore, it is not surprising that resources and supports for teachers looking to be inclusive of physical literacy strategies have not been greatly explored or serviced (Professor Plum).

Nearing the end of my search for relevant resources, I went to a librarian to find any other materials to teach APA in areas I might have missed. Coincidentally, I was directed to the same websites, databases, organizations, and texts that I had been finding. When looking for resources to teach APA I established that the referrals to resources from websites, organizations, and libraries, seemed to display the same salient websites and resources: PE Central, Human Kinetics, Pelinks4U, Special Olympics, APENS, Adapt-talk, Project Inspire, SIRC Sport Research, SPARK & Wright's Law.

To further answer my research questions and in the effort to find more information from resources I encountered, I attempted to contact a few organizations to inquire about resources that were commonly ordered or requested for APA. Unfortunately, after multiple attempts, I did not hear back. Not only is it hard to find and gain access to resources, but also it is difficult to determine what resources to acquire if you don't know what to look for or if you have no basis of what other practitioners are using.

Teaching and learning are synergetic practices because learners' benefit from teachers' development and the efforts towards teaching (Kreber, 2002). Teachers create the learning environment, bring the curriculum to life, and motivate their students to learn. If teachers do not have opportunities or resources to understand appropriate and effective APA, their learners may not benefit as much as those who do have these

opportunities. From my findings it is my belief that practitioner development and the relationship between teaching and learning in APA are lacking. To teach with quality and use all of your knowledge as an educator one must engage in the different elements of ‘scholarship,’ which are discovery, integration, application, and teaching (Boyer, 1990). Scholarship entails: the pursuit of new knowledge, the application of knowledge in a practical way while incorporating theory into practice, and the connection of disciplines for a wider contextual understanding (Booth, 2004). According to Boyer (2000) the scholarship of discovery allows teachers and scholars to explore their passion for research. Engaging in research to learn new knowledge, to exemplify innovative thinking, and to uncover meaningful information allows teachers to foster their own learning and development (Boyer, 2000). If language and accessibility of research and resources aren’t appropriate or relevant for practitioners teaching APA, how is scholarship going to occur? Unfortunately, with lack of resources and training/learning opportunities in APA, practitioners do not have a chance to pursue new knowledge or apply it.

Operationalizing and Implementing Resources

What happens after you have all the information? What’s next? I have discovered that there is a disconnect from when practitioners have found relevant resources, to the process of operationalizing and implementing them. Once someone has found what he or she are looking for to help their subsequent teaching, what do they do with it? How do they use it?

First of all, I believe there is an assumption practitioners who are motivated, educated, and fully equipped with resources are teaching APA. From my experience, research, and literature on pre-service and in-service teaching in APA, this is not the case. Even if a practitioner is motivated to find resources, like myself during data collection, it still isn't easy to find and access them. I believe resources are developed under the assumption that physical education specialists are teaching APA. Resources seem to be created for the 'already educated practitioner' on APA or for those practitioners with experiences teaching multiple disabilities in many contexts. Unfortunately, in Ontario schools, a lot of teachers working with individuals with special needs are not physical education specialists (Chandler & Green, 1995). "If pre-service teachers do not possess the knowledge and skills to implement inclusion appropriately, the included students with disabilities in their future classes will certainly have diminished opportunities to attain desired outcomes regardless of teacher's attitudes toward inclusive reforms" (Cook, 2002, p. 263). From my research, practitioners seem to be having an even more challenging time finding, operationalizing, and implementing resources due to their lack of knowledge and experience in the field. I have found there is not a sufficient amount of opportunities available or accessible for practitioners to receive education and experience in APA. Not only are there limited training/learning opportunities for practitioners teaching APA, there are limited resources in general *and* facilitation on how to use relevant resources does not exist to the extent necessary.

With the lack of resources and training/learning opportunities for practitioners teaching APA, learning theories and teaching theories don't appear to be utilized in resources to support the learning process. Learning theories and teaching theories work

together to foster positive learning experiences for individuals engaging in the learning process. The literature reveals that teachers, learners, and our learning environment are all variables and key factors that influence the effectiveness of learning and influence change in teaching (Atkins, 1988). If there are limited opportunities to learn or implement learning there are no positive outcomes; resources for practitioners need to be developed and accessible to eliminate the challenges to findings, operationalizing, and implementing resource in APA. It is important that practitioners working in APA and with this population have the tools they need to be successful. Teaching “means not only transmitting knowledge, but *transforming* and *extending* it as well” (Boyer, 2000, p.24). Kreber & Cranton (2000) emphasize the importance of research on teaching, research on learning, and a teacher’s development of ways to instruct and collaborate in learning. If we provide these practitioners with more opportunities to be educated and collaborate with colleagues, their confidence can increase, programming might actually occur, and resources could be utilized to their full potential.

I found professional development opportunities were beneficial for most practitioners. They allowed teachers at the same school and from different schools to collaborate with the presenters, their colleagues, and other teachers to build their repertoire of ideas and learn from others. Encouraging dialogue allows individuals to be self-aware of how their interpretations and actions guide our learning experiences and help us improve understanding concepts and our actual teaching practice (Dirkx, 1998). Reflection along with dialogue also assist active engagement with experiences allowing learners to “explore and examine their own assumptions, values, beliefs, experiences, and worldviews” (Harris, Lowery-Moore & Farrow, 2008, p. 321). If practitioners are having

more productive learning experiences they should be able to transfer these types of experiences to their teaching, which creates positive learning experiences for their students.

Relevant resources need to be provided to practitioners and practitioners need to be facilitated on how to use them to increase their education and support their teaching in APA. These resources should address the challenges to implementing resources to teach APA, which will allow for more effective programming and resource use by practitioners.

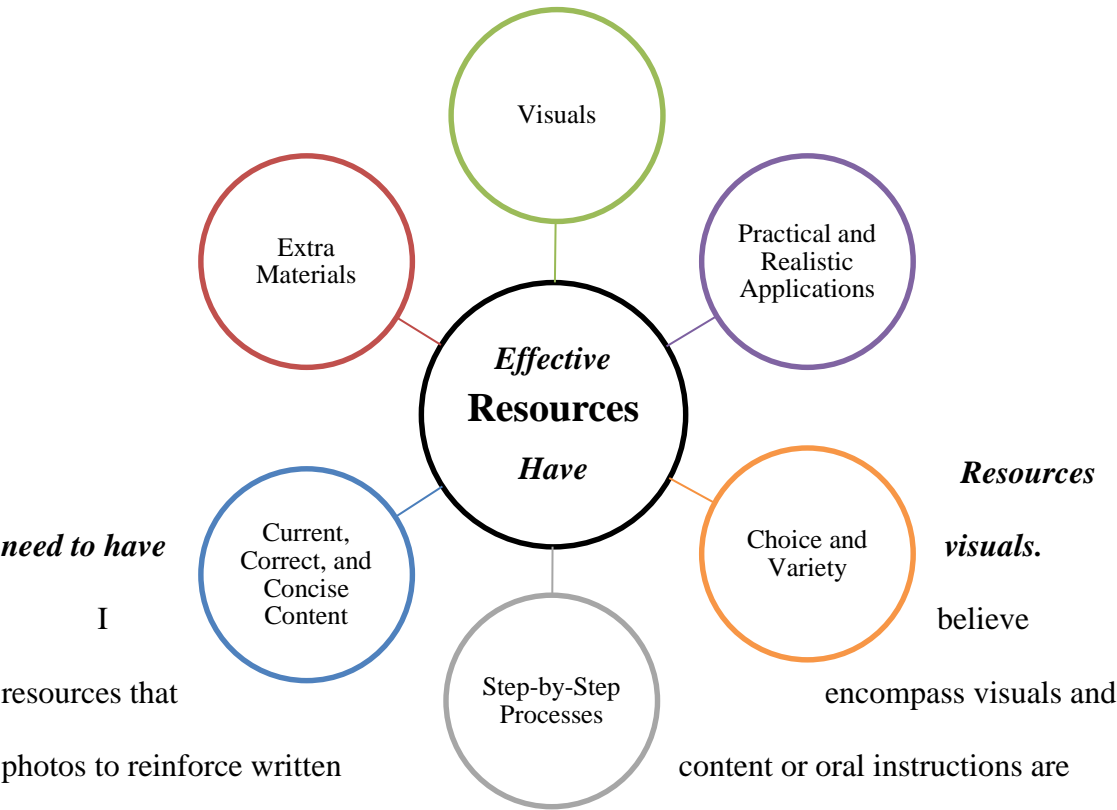
A Framework for Developing and Implementing Relevant Resources for APA

I have found that many practitioners are looking for “teacher friendly” resources. Even though “resource is a dynamic term” (Professor Plum), there are qualities that make a resource relevant to be implemented for teaching APA. There is still a notion of “fitting” students with disabilities into existing programs, but this is not adapting or including students with their dignity, development, and personal well-being at hand (DePaw & Doll-Tepper 2000; Goodwin & Watkinson, 2000). Mrs. Peacock agrees with saying: “Resources need to provide more specific information and step by step plans that suit the needs of the child(ren) rather than being presented as a “one size fits all” activity”. The following information has been compiled from my data analysis and addresses the challenges practitioners experience when implementing resources in APA. I have also used relevant literature (for example, Kreber, 2001, Cranton, 2000, Kolb, 1984, Boyer, 1990, Bandura, 1977, Schon, 1987, Freire, 1993, & Mezirow, 1997) – to support these findings in order to provide a framework for developing and implementing relevant resources.

Resource Framework.

Features needed for developing and analyzing resources to teach APA (refer to Appendix B for full framework):

Figure 5



effective. Many practitioners want to be able to visualize their students when they are learning and planning for physical activity. I believe that practitioners need to see activity

happen in-action so they can visualize how it is ‘supposed to look’. During the learning process, many practitioners have said they want the information to be directly related to their children or to fit their students’ needs specifically. Jonassen & Grabowski (1993) believe that acquisition of subject matter, constructing meanings to transfer knowledge and the ability to apply knowledge varies person-to-person. I have found that though there is no denying diversity in learning style amongst individuals and that learners perceive and process information differently, visuals are a necessary quality to support practitioners learning in APA. Using visuals is providing an opportunity to process information through multiple senses – auditory, visual, and tactile/kinesthetic – which supports practitioners or learners in the learning process and helps them use cognitive processes to complete tasks (Sarasin, 1999). Cognitive processing in learning relies on differentiation of instruction, which means thinking and rationalizing information must come in different forms for different learners. I also believe that differentiated instruction needs to occur more in the development of resources for APA because it will assist practitioners in gaining knowledge and understanding in a way that suits their learning needs. Therefore, including visuals to accompany written or oral resources is a well-rounded approach to teaching practitioners (Snyder, 2000).

Resources need to be practical and realistic.

I have discovered that a resource is practical and realistic if it includes: specific examples of children, hands-on learning, an opportunity for problem solving, and connects the curriculum and the resource content. A practical and realistic resource should be consistent with experiential learning theory and have qualities such as: being

interactive, having demonstrations, teacher modeling, engaging in activities, giving scenarios, providing strategies and creating new ideas. Through practical and realistic learning situations, experiential learning opportunities such as observing children in-action and reflecting with other practitioners about the experience will occur. This creates optimal opportunities for operationalizing and implementation of resources.

Adult learning theories encourage experiences that are practical or in real-life scenarios, contexts, and situational learning, as they enhance the relationship adult learners or practitioners will have with the learning process (Freedman, 2012). It is also evident that engaging in multiple experiences will influence assumptions, decision-making, and expectations people have (Bass, 2012). Resources need to be developed in realistic methods for positive learning outcomes such as professional development opportunities.

Professional development resources should encompass transformative learning, situated learning, and experiential learning for practitioners to engage in multiple experiences. Transformative learning theory involves discovering meanings and constructing new interpretations from our prior experiences (Bass, 2012). This means taking our experiences and transforming what we know to better understand the context and situations we engage in, which ultimately helps us learn and understand more effectively (Bass, 2012). Situated learning theory describes how a specific environment or real life scenarios can influence learning and instruction (Anderson, Reder & Simon, 1996; Light, 2011). Situated learning allows individuals to explore a variety of environments, both independent and group interactive tasks, and incorporated personal

active involvement in learning. This type of ‘situation’ should be developed for practitioners to transfer knowledge in practical ways through active learning.

Also, engaging in experiential learning promotes the application of knowledge. Kolb (1984) believed that “learning is the process whereby knowledge is created through the transformation of experience” (p. 38). Experiential learning allows individuals to implement what they know and what they have been taught in different environments. Experiential learning is actually having first hand experience and feelings, observing and reflecting, thinking about observations, and applying and planning through active experimentation in an on-going cycle (Chan, 2012). This approach supports practical application of resources, as application of knowledge can occur when a practitioner makes use of information in a context different from the one in which it was learned. The application of knowledge for practitioners should be transferring knowledge from a professional development opportunity to their own classroom teaching APA.

Resources should account for experiential learning opportunities, transformative learning and situational learning elements and should strive to facilitate more realistic, applicable, and transferable scenarios for APA. Unfortunately, not enough resources exist or meet these learning theories to be realistic and implemented for teaching APA.

Resources need to include choice.

A resource can be produced in many forms. Modes of delivery and types of resources vary from online and hardcopy resources, professional development opportunities, and literature. Though resources come in many forms, every learner is also

very different. Options for how resources can be taught, used or transferred are important. Practitioners who participated in professional development opportunities believed resources should be “practical – doable – affordable”. In education, teachers are often encouraged to use a variety of instructional and assessment strategies in their pedagogical practice to address how students learn. They are also encouraged to demonstrate learning through content, process, products and various learning environments (Ontario Ministry of Education, 2008). Teachers provide choice to students, but existing resources in APA do not often provide choice for practitioners.

Resources should be congruent with inclusive pedagogies and support the active involvement of practitioners as they are embedded in the learning process. This includes having interactions with students, colleagues, and the environment to provide everyone with equal opportunities at success (Byra, 2006). Having an emphasis on: independence, experience, integration of daily encounters, here and now problem solving, and motivational tactics are shown to influence the adult learner (Abela, 2009). Resources that demonstrate inclusive pedagogy and differentiated instruction are those that help knowledge transfer. I believe we need resources to educate and teach practitioners the same way we strive to educate and teach out students. “Differentiated instruction is not individualized instruction. It is responding to varying student needs by providing a balance of modeled, shared, guided and independent instructional strategies” (Ontario Ministry of Education, 2008, p.5). It’s about guiding and assisting the learner through their learning and engaging with experience to gain a better understanding of the content (Yardley, Teunissen & Dornan, 2012). Including choice in modes of delivery or types of

online and hardcopy forms of resources, provides more opportunity for practitioners to have support teaching APA.

Resources need to have variety.

I have found that practitioners were always left “wanting more” after their professional development training/learning opportunities and when discussing their experiences with resources. Individuals or organizations creating resources should consider including examples, strategies, demonstrations, scenarios, discussion, and interaction to help practitioners learn, plan, and understand APA more effectively. Including opportunities for questions, allowing more time if practitioners need it to discuss or process information, and incorporating ideas on how to adapt activities using equipment are all important characteristics for resources. Teachers should engage in the learning process while reflecting on experience, research, and gaining knowledge on instruction, pedagogy, and the curriculum to improve learning (Kreber & Cranton, 2000). Hedberg (2009) states, “Learning is acting *and* observing, doing *and* being, and telling *and* listening” (p. 10). All of these aspects as well as providing “more” practical elements in resources or training/learning opportunities help the experiences with resources become more meaningful for practitioners.

Resources need to have a step-by-step outline.

Many practitioners are looking for strategies on how to teach APA and I believe they want a progressive step-by-step process provided to them: “walk through the activities” (Practitioner from Context G) “outline the steps of the tasks” (Practitioner from Context B). There is a significant need for guidance, demonstrations, and assistance in getting creative or knowing where to start and what to do. Practitioners seem to want

everything “handed to them” in a neat and tidy manner; unfortunately, this isn’t the reality for teaching. Every day and every situation is different in teaching. There is a gap between what practitioners want, compared to what practitioners need to learn.

A pattern that became evident was how practitioners are searching for concrete objects to transfer and translate immediately for teaching situations. When reviewing pedagogy and instructional strategies, direct instruction is when a teacher has specific instructions, demonstrations and describes structured tasks around their learning objectives and they focus on a step-by-step process (Rink, 2010). This strategy is teacher-oriented in that information is controlled and provided directly to the learner. From my experiences, many practitioners still teach this way, without introducing other instructional methods in their practice. Direct instruction is teacher telling and students doing; students only actively take the content and demonstrate their learning if there is opportunity to do so (Byra, 2006; Rink, 2010). I believe practitioners are familiar with controlling the instruction and seeing results. They are looking for that control in resources to teach their students and they want to be walked through the learning process.

If resources are created so specific and only concrete, it can be limiting to the transferability to contexts, individuals, and the actual knowledge acquisition for the practitioner. APA isn’t about creating one activity that every student should be able to do at the exact same time; it isn’t trying to fit students in to a program or activity. APA it is about creating an environment and planning for individuals where they are able to participate in activity to develop their movement repertoire, experience success, and engage in individual, parallel, and cooperative play.

I believe resources and teaching/learning opportunities need to incorporate more experiential learning elements, which means practitioners will engage in concrete and abstract experiences, use prior experiences, engage in knowledge acquisition and reflect on the process (Chan, 2012). Kolb (1984) valued how concrete experience, observations and reflection, abstract conceptualization, and active experimentation would impact the learning process. Experiential learning opportunities are an ongoing cycle of learning where the individual experiences learning and application of learning through multiple step-by-step processes of feeling, watching, thinking, and doing (Kayes, Kayes & Kolb, 2005). Larrivee (2000) states “unless teachers engage in critical reflection and ongoing discovery, they stay trapped in unexamined judgments, interpretations, assumptions and expectations” (p. 294).

If resources are only in one form or “type”, then they will probably not be operationalized or implemented effectively by different practitioners. In order to have practitioners fully understand the content in resources and be able to implement resources, they need to go through the whole experiential learning cycle. Practitioners need to attend a professional development opportunity to learn, interact, observe, experience, and reflect for a resource to be utilized appropriately. I believe resources for teaching APA should incorporate both person-to-person and practitioner-to-object learning opportunities. Providing both of these resources to practitioners is giving the opportunity to experience the “ideal” resource that was developed from understanding practitioners challenges to operationalizing and implementing resources.

Resources need to have content that is current, correct, and concise.

Resources should be consistent with accepted best practice, curricular guidelines, and ministry standards. I have found that resources for APA should also distinctly link special needs/disabilities and physical education/physical activity. The information in resources should be brief, to the point, and provide objectives on the resource. It is beneficial when resources include current research and first hand knowledge or experiences from the field of APA to validate their relevance. They should include handouts or hardcopy material with visuals for practitioners to have something to take away or bring with them to assist their teaching; this reinforces diversity for different learning styles. It is important that resources are linking the policies and curriculum of that region or discipline and they are consistent with the quality standards set in the proposed area.

I think the content in resources should bring practitioners back to the basics; practitioners need more education on facilitating APA and I have found the resources relevant for practitioners don't have all the fundamental aspects needed to teach APA effectively. Research conducted in physical education indicated that "the lack of teacher training they receive in this area adversely affected their ability to deliver inclusive physical education effectively" (Fitzgerald, 2006, p. 760). Some topics resources should include are: foundations of APA, foundations of movement, fundamental movement skills, types of appropriate equipment to order/use, how to use what you've got (space/time/equipment), how to schedule/time activities and plans, introduce visual systems, how to create quality programs, development or modifications of IEPs for APA, observing students, instructional strategies/cues, safety guidelines and considerations, accommodations, modifications, adaptations, appropriate assessment for movement,

creating whole/part/individuals activities, progressions, include individuals with disabilities experiences with APA, and resources should have opportunity for practitioners to experience teaching APA.

Extra materials for resources.

Many practitioners favored having something to take away with them from PD opportunities. I believe resources need to have references or refer practitioners to other information if they choose to seek more information or other resources. It is helpful when resources include appendices, handouts, and examples that are practical and straight forward to use; this means providing templates for types of assessment, template lesson plans, activity ideas, observation sheets, and general information from power point slides or summaries of workshops.

Relevant Resource Checklist.

Table 5		
<i>Relevant Resource Checklist: Developing and Analyzing Resources in Adapted Physical Activity</i>		<input checked="" type="checkbox"/>
Visuals	The resource provides visuals to reinforce written content, it has an opportunity to see the activity or learning occur in-action, and it relates to practitioners students or work first-hand specifically with practitioners students	<input type="checkbox"/>
Practical and Realistic Applications	The resource uses examples of students and children doing specific activities and it provides an opportunity for hands-on learning and engagement with students in multiple scenarios. It also has elements of problem-solving, experiential learning, and transformative learning	<input type="checkbox"/>
Choice and Variety	The resource ensures differentiated instruction through the use of examples, different instructional strategies, demonstrations, scenarios, discussion, and interaction. It also includes more than one 'type of resource': online, hardcopy, and professional development	<input type="checkbox"/>
Step-by-Step Processes	The resource includes straightforward objectives and is guided by an expert or professional in the field of APA. There is an	<input type="checkbox"/>

	opportunity for demonstrations and assistance by the professional and the resource should ensure a cyclical process of experiential learning: learn, observe, interact, experience, reflect	
Current, Correct, and Concise Content	The resource should provide first-hand knowledge and experience from a professional or expert in the field of APA. Brief written content and concise verbal content is used in appropriate language for practitioners. The resource also follows accepted best practices, guidelines, and standards	<input type="checkbox"/>
Extra Materials	The resource provides handouts, blank templates, extra examples, and supplementary ideas and activities. It also uses appendices and a glossary to ensure clarity and take away information	<input type="checkbox"/>

Conclusion

My experiences in teaching Adapted Physical Activity (APA) have shown me that it is easier said than done to use resources and to transfer knowledge in a practical setting. I explored the challenges to operationalizing and implementing relevant resources for APA and developed a framework that informs how resources should be developed and implemented to foster appropriate APA. Resources need to be accessible for practitioners, easy to acquire, in terminology relatable to the teaching profession, consistent with accepted best practice, curricular guidelines, and ministry standards, and should help the practitioner's immediate practice or be implemented for teaching. Resources also need to align with the framework for developing and implementing relevant resources. The framework includes: having visuals, being practical and realistic, containing choice and variety embedded in the resource, displaying a step-by-step process for practitioners, having content that is current, correct, and concise, and providing extra materials for further learning. It is "easier said than done" to find, operationalize, and implement

resources in APA...BUT if resources were developed with relevance and the framework in mind, it wouldn't be anymore.

Recommendations for the Future

Connect practitioners to relevant resources: “I think it is an increasingly relevant area of concern in the school setting” (Mrs. Peacock). “If teachers are looking for strategies to assist their teaching they are not contacting me. They could be searching on their own or perhaps they are contacting the ELSB but that is not I have been told” (Miss Scarlett).

Requiring the Ministry of Education to display more relevant resources through their website, providing school board consultants and school boards with relevant resources to distribute, and creating more PD training opportunities in APA to practitioners can connect practitioners to resources. It would be beneficial for resources to be more accessible to obtain and navigate, which could include developing an indexing system for existing textbooks that have relevant information for implementation of APA. This could also include having more opportunities for PD sessions at specific schools in the board.

The salient organizations/websites and distributor resources should look at the relevance criteria for resources in APA and compare their existing resources. The salient and distributor resources can modify their ‘lists’ they are producing or recommending to encompass a variety of resources. They can create specific APA sections on their websites or in books, such as general knowledge on APA, advocacy & organizations to contact, resources for implementing APA, etc. so the search for resources to assist practitioners in teaching APA is distinctly present.

Create consistency for finding, operationalizing and implementing resources:

“PEI has trained specialist from K-12 and *it is hoped* that they have the skills, knowledge and attitudes to bring this standard and inclusion to each student” (Miss Scarlett).

We need to align the standards for what makes a relevant resource in APA, what makes a quality APA program, and what makes a quality practitioner teaching APA. There are clearly differences present from policy, curriculum, and opportunity locally, provincially, and nationally for APA programs and practitioners’ qualifications and teacher education programs. How can we align standards from different regions to create consistency across the discipline? Some generalized standards are already present through: APENS, OCT, Ontario Ministry of Education, IDEA, Wrights Law. These organizations need to collaborate and learn from the positive initiatives existing for resources and training/learning opportunities by other organizations to create higher standards for resources. Developing standards and creating higher standards will allow practitioners to gain knowledge, increase their experience, and hopefully gain confidence in teaching APA.

The fields of adapted physical activity, physical education, general education, recreation, health and special education need to come to a consensus and link terminology that is being used for multiple purposes. The terminology used in resources or as ‘search indicators/discourse markers’ should be considered by organizations and individuals developing resources to ensure that there are multiple avenues to find resources and understand the terminology being used.

Develop the “ideal” resource: “In my experience, teachers/instructors are now looking for more resources that go beyond knowledge/content based and have been moving to more practical, hands on resources” (Professor Plum).

Resources that address the challenges practitioners experience when attempting to use resources to support their adaptations and their subsequent teaching need to be developed. Resources should meet the relevance criteria for a resource and use the framework I have discussed that informs how resources should be developed and implemented to foster appropriate APA. I have described the “ideal” resource and I believe this description is what makes a resource “teacher friendly”. The “ideal” resource will foster more effective resource implementation and more effective teaching strategies for APA, which will ensure meaningful experiential learning opportunities for practitioners, and by extension their learners.

Implement and evaluate “ideal” resources:

To teach practitioners how to operationalize and implement resources, the “ideal” resource needs to be developed and provided to them. Future research could collect in-depth practitioners experiences with finding, operationalizing, and implementing the “ideal” resource to teach APA.

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Appendix A

Expert Name,

My name is Hayley Morrison, I am a Master of Arts candidate at Brock University in the Faculty of Applied Health Sciences. I am conducting my research under Dr. Lorne Adams' supervision in the field of Adapted Physical Education with a focus on teaching and learning. My research study is titled: Finding and Implementing Relevant, Realistic Resources in Adapted Physical Activity: Why is it so hard to do a good thing? Specifically, I am exploring the challenges of operationalizing and implementing relevant resources for adapted physical activity. I am also hoping to develop an experiential learning opportunity on how to effectively use these resources to teach adapted physical activity to support these challenges. Ultimately, I am emailing you because you have been identified as an expert in this field and I would appreciate your input regarding my findings thus far.

I have purposely engaged in unobtrusive data collection, researching relevant resources, to examine what already exists and what currently assists best practices in teaching adapted physical activity. By examining existing relevant resources, I hope to create a framework to further investigate the reality of resource use and use my findings as a context for this framework and next steps. During my data collection, I researched relevant resources including: documents, records, and literature. I also viewed professional development and training opportunities for teachers that would assist in their teaching adapted physical activity. This has led me to retrieve practitioner feedback from workshops, webinars, conferences, and training sessions as a second source of data. After analyzing the documents, records, literature, and feedback, I have come to some consolidated findings. I would appreciate your expert opinion, insight, and any related comments on the following data.

When analyzing document, records, literature, and feedback I have found the following:

Resources:

- The term “resource” is very broad and has many meanings; it is also important to note that inclusion criteria need to be set to determine what a relevant resource consists of.
- Also, when looking up resources there are many accessibility issues including: navigating to find resources or navigating the resource itself, cost, travel, and time, to name a few.

Standards:

- I have discovered that there is an inconsistency in standards for: quality adapted physical activity programs, teachers' qualifications, and resources in general.

The teachers, the content, and the teaching:

- Teachers need to be confident, collaborate with others, they need more education on adapted physical activity, and they are always left wanting more.
- Resources need to be realistic and practical. This includes specific examples of children, hands-on learning, an opportunity for problem solving, and link between the curriculum and the resource content.
- Teachers are looking for strategies and want a progressive step-by-step process. There is a significant need for visuals, demonstrations, and assistance in getting creative; there is demand (yet no articulated parameters) for “teacher friendly materials”.

Terminology & Language:

- I have discovered that advanced or scholarly language is prominent in resources and becomes a barrier for teachers learning new material. Hence, there is also confusion over terminology and concepts such as: the difference between adapted physical activity, adapted physical education, and inclusion.

Organizations:

- Active Living Alliance, Physical and Health Education Canada, Ontario Physical and Health Education Association, and American Alliance for Health Physical Education, Recreation and Dance discuss the need for inclusive physical education. But, there are limited resources and opportunities for teachers to utilize relevant resources or gain access to learning about adapted physical education.

Questions

Responses need not limited to:

1. What part(s) if any is/are consistent with your experiences in any or all of the identified areas?
2. Do you see any gaps or questions that should be further investigated unobtrusively?
3. Moving the field forward, what would you like to be asked to make the case for improvements and what evidences would be most persuasive in helping you “make your case”?

Comments

Generally:

Specifically:

Suggestions:

If you would like more details of my analysis so far, I would be happy to provide you with more thorough explanations to further describe the topics provided. Please do not hesitate to contact me with any questions or concerns.

Thank you,

Hayley Morrison
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Appendix B

