Professional development for inclusive physical education: Fostering educative experiences

by

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Abstract

Professional development (PD) opportunities on inclusive physical education (IPE) are limited and even more rare for teachers and educational assistants (EAs) to attend *together.* Additionally, exploring experiences of teachers and EAs who work together in the IPE environment is limited in the research. Therefore, the aims of the study were (a) to understand and learn about in-service teachers' and EAs' experiences with PD for IPE, (b) to explore how they envision PD and supports to teach IPE, and (c) to use this information along with my experiences and the literature to construct a framework for a collaborative IPE-PD experience. In this study I used Dewey's theory of experience as the theoretical framework. Using a Deweyan framework, I understand education and PD as a continual process of becoming; experience should lead to growth, be continuous, have active engagement, and incorporate reflection to reconstruct past experiences (Dewey, 1938). The study was a multiple/ collective case study design, using interpretive case studies (Merriam, 1998). The cases were three different schools, with one teacher and one EA as participants from each school (six participants; two male & four female). A hermeneutic methodology was also used in this study to interpret participants' stories holistically, and to better understand the culture, language, and context of their experiences (Smith, 1991). Data collection included one individual interview with each participant, a focus group interview with the participants from each case together, researcher observations and field notes, and researcher journal reflections. The analysis comprised of back and forth recursive interpretations via the hermeneutic circle to identify themes (Packer & Addison, 1989; Patterson & Williams, 2002). The following results have been determined: (a) the participants were unprepared for teaching and assisting IPE; (b) the participants' past experiences with physical education and current situations of IPE impact their teaching and assisting in IPE; (c) the participants' planning and choice of activities influence student participation in IPE; (d) the participants' school district did

not offer IPE-PD opportunities; (e) the participants maximized school district consultants as a form of IPE-PD; and (f) the participants desire collaborative IPE-PD to learn and plan. The findings indicate the practitioners desire teacher-EA collaborative PD that considers prior training/ education, past experiences, current context, students and activities for IPE. Collaborative IPE-PD experiences would allow for practitioners to reflect and unpack their experiences; for continuous learning opportunities; and to encourage practitioner growth in the ever-changing inclusive and dynamic PE environments. Researchers should bring teachers and EAs together in conversations to learn more about their working relationships and collaboration in IPE. Additionally, in IPE-PD we need more studies to explore practitioners' views on the type and processes of PD, including collaborative PD.

Key words: Physical Education, Paraeducators, Inclusion, Interpretive Case Study, Hermeneutics, Dewey, Professional Learning, Teacher Collaboration

Preface

This thesis is an original work by Hayley Morrison. The research project, of which this thesis is a part, received research ethics approval from the University of Alberta Research Ethics Board, Professional development for inclusive physical education: Fostering educative experiences, No. Pro00064508, January, 4, 2017.

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Dedication

To my participants. Thank you for sharing your stories with me and for your commitment to authentically including students with disabilities in your classes. You inspire me and make a profound difference in your students' lives.

To those students seeking a sense of belonging and eager for opportunities to participate in inclusive physical education. You encourage me to continue my path supporting practitioners to make your experiences educative and meaningful.

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Mom and Dad, it means the world to me that you have supported me through all the sanity that is my life and my educational journey. You have always encouraged me to follow my dreams even if they did lead me away from you to Edmonton. I want you to know that wherever you are will always be home. Thank you for everything and always being my positive role models.

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List of Abbreviations

APA	Adapted Physical Activity
ATA	Alberta Teachers Association
CoP	Communities of Practice
EA	Educational Assistants
IPE	Inclusive Physical Education
IPE-PD	Inclusive Physical Education Professional Development
PD	Professional Development
PE-PD	Physical Education Professional Development

Glossary of Terms

Adapted Physical Activity	A professional branch of kinesiology/physical education/sport & human movement sciences, which is directed toward persons who require adaptation for participation in the context of physical activity (International Federation of Adapted Physical Activity, 2016).
Alternative Program	Knowledge and skill expectations through courses not represented in the regular curriculum (Ontario Ministry of Education, 2004).
Disability & Students with Disabilities **note about language*	*According to the American Psychological Association (2016), "person-first" language is to be used as respectful language to avoid focusing on individual's conditions or diagnosis. This language helps represent individuals as whole human beings, maintain individuals integrity, and avoid objectifying individuals/labeling individuals based on a condition. With this language taken in this work, *disability* is then viewed as "an attribute of a person" but the environment is recognized as a factor that might limit an individual's accessibility (American Psychological Association, 2016). To contextualize this work and language in Alberta, students with disabilities are referred to as students with special needs: "a student being in need of special education programming because of their behavioural, communicational, intellectual, learning or physical characteristics or a combination of those characteristics" (Alberta Education, 2004, p. 5). In this work I continue to use person-first language (students with disabilities) recognizing disability as secondary to the individual.
Educational Assistants	Aids in the classroom and school context that are instructional or support staff that often work with students with disabilities (Fisher & Pleasants, 2012). Sometimes referred to as paraeducators, paraprofessionals, or learning support assistants.
Generalist Teachers	Often an elementary or middle school teacher who are educated to teach all of the required core subject areas but do not have a major or specialist subject area.
General Education Classes *or* Core Subject Areas	English language arts, fine arts, health/career life management, mathematics, physical education, science, and social studies (Government of Alberta, 2018b).

Inclusion	An attitude and approach that embraces diversity and learner differences and promotes equal opportunities for all learners (Alberta Education, 2016). Alberta Learning (2004) also describes inclusion as "instruction and support for students with special education needs in regular classrooms and neighbourhood schools" (p. 3). Inclusion involves opportunities for all students to participate in the class alongside same aged peers.
Inclusive Education	Addresses and responds to the diversity of needs of all children (UNESCO, 2009).
In-Service Teachers of Physical Education	Teachers who are currently certified and practicing in schools. Generalist teachers instructing physical education classes or those teachers with physical education as a teaching subject in their curriculum teaching load.
In-Service Sessions	Applied professional development geared towards practicing teachers that occurs within the school both during and after school hours.
Mainstream Classrooms	Placing individuals with disabilities in general education classes with same-aged peers (Block, 2007).
Practitioners	In-service generalist or specialist teachers and educational assistants. When used it is referring to both in-service generalist or specialist teachers and educational assistants.
Professional Development	A provision method used to combat challenges practitioners face while teaching and assists practitioners' development in understanding about specific processes, concepts, or subject matter (Darling-Hammond & McLaughlin, 1996; Jean Chen, Sinelnikov, & Hastie, 2013)
Special Education	Is often used to describe elementary and secondary school programs that students with disabilities are in. Alberta Education (2016) describes special education as "…the education of students with mild, moderate, or severe disabilities and those who are gifted and talented. It is founded on the belief that all children can learn and reach their full potential given opportunity, effective teaching and appropriate resources" (n.p.)

Chapter 1: Introduction

Introduction to the Study: Experience and Curiosity

> *"Everyday events can often be moments of invitation to think of their rich complicities in this earthy life."* (Jardine, 2000, p.108)

My research interests have come from my experiences teaching, consulting, and mentoring undergraduate students. While working as an inclusive movement education consultant in Ontario, Canada, I was at a school that had 9 teachers, a range of 4-10 students per class, and 15 educational assistants[1] (EAs). The school was termed a 'special school', Kindergarten to Grade 12 for students with disabilities only. I was contracted to provide workshops and in-service[2] sessions with teachers and EAs on physical education (PE). I quickly realized that the teachers and EAs had very different conceptions of what PE was. Some thought it was taking students to the playground for 30 minutes a day, some believed a full year of bowling, baseball, and bocce was PE, and others assumed activities like walking around the school for 15 minutes a day was PE. Kilborn, Lorusso and Francis (2015) describe that the primary aim of PE curriculum across provinces in Canada is "acquiring the knowledge, skills, and attitudes for healthy active living (or lifestyle, or for life) through physical activity" (p. 7). Sullivan (2007) believes that, "The 'new' physical education teaches the fundamental motor skills and patterns through enjoyable, all-inclusive and cooperative games and physical activities" (p. 89). To me, PE is engaging students in movement experiences and social activities that are meaningful, joyful, and developmentally appropriate through the dimensions of dance, gymnastics, games, individual activities, and alternative environments. I believe students'

[1] Educational Assistants: Aides in the classroom and school context that are instructional or support staff who often work with students with disabilities (Fisher & Pleasants, 2012).
[2] In-service Sessions: Sessions within the specific school both during and after school hours.

experiences in PE should foster enthusiasm for movement and educate them to be confident and competent to participate in physical activity and lead healthy active lives.

The school I was consulting at was very unique. All of the students received alternative programs[3], which were individual plans that outlined specific learning goals for each student. There wasn't a traditional provincial curriculum being used for many of the core subject areas (English language arts, fine arts, health/career life management, mathematics, PE, science, and social studies), and goals were not being set for students in PE. Some examples of the goals that were being set for students included: 'with minimal support, student will be able to sort/classify different coloured items'; 'by the end of December, student will make eye contact followed by saying hello to peers and staff in the school'; and 'student will be able to regulate behaviour most of the time, including removing themselves to a quiet area if feeling anxious'. As well, the teachers and EAs were not sure where to start or what to teach in PE. In general, there was little actual PE taking place in the whole school and the teachers and EAs had minimal knowledge and experience with PE. Another thing that shocked me when I began to implement sessions was that the teachers came to the workshops but the EAs didn't. I found this striking because there were more EAs working with students than there were teachers in the school. I began to wonder why the teachers and EAs weren't attending together, when I could see how essential their collaboration was for their teaching.

The in-service sessions began to open up a lot of conversations and teachers started to tell me what was really going on at the school. The gymnasium was used for staff meetings and special events only. PE was basically exercises given by the school occupational therapist and done in a classroom with mats. These teachers and EAs were starving for resources and ideas in

[3] Alternative Program: Knowledge and skill expectations through courses not represented in the regular curriculum (Ontario Ministry of Education, 2004).

any form to help their teaching of PE. They knew physical activity was important for their students but they didn't know how to approach teaching PE. I began to contemplate the types of information and practical experiences that might be most beneficial to share in the limited amount of time I had with them. The complexities in the school context, the backgrounds of the teachers and EAs, and the diverse needs and abilities of the students made it difficult to narrow down one or two particular things to teach and implement.

Because this school and experience was so distinctive, I was encouraged to seek out other schools in the board to find out what PE was like for teachers, EAs, and students in the mainstream[4] or 'regular' school environments. Staff in elementary and secondary schools believed they were *inclusive* because students with disabilities were provided the opportunity to participate in PE and they believed they were "addressing and responding to the diversity of needs of all children" (UNESCO, 2009, p. 8). What really was occurring was 'integration' rather than inclusion; integration means all students are in the PE class environment, but students with disabilities do not necessarily engage and participate with same aged peers as valued members of the class. The integration I saw, was students being 'fit' into the teachers' existing programs, by being placed on the sidelines or in the hall with the EA - their ability, skill and comprehension to engage in physical activity was being underestimated. It was evident that the teachers and staff in these schools were also struggling with inclusive physical education (IPE). IPE is the participation for *all* individuals, specifically students with disabilities, in PE programs; it is the "inclusion of students with disabilities within the PE curricula or contexts" (Qi & Ha, 2012, p. 259). The teachers and EAs also struggled with knowing what content to teach in PE, using teaching strategies for IPE, and getting all students participate together at the same time alongside each other. The workshops and in-service sessions I proceeded to deliver to five

[4] Mainstream Classrooms: Placing individuals with disabilities in general education classes with same-aged peers (Block, 2007).

different schools appeared to be helpful. Yet, the issues I witnessed in my observations were much larger than a one-hour, after school workshop or a one-hour tutorial in their class could address. It wasn't just about what content to teach or the desire to learn teaching strategies for PE. Each practitioner[5] (teacher/EA) had different questions, concerns, students, and education backgrounds. Practitioners needed support through practical professional development[6] (PD) that occurred in their school, with their students, during class time, focused on their (teachers, EAs, and students) particular needs and contexts. Based on these experiences, I believe that for IPE to be implemented successfully, practitioners need to be brought *together*, not separated, to collaborate and learn. This belief has led me to this work researching practitioners' experiences with IPE and PD.

Research problem. Many teachers and EAs have expressed having difficulty teaching PE to students with disabilities because they haven't had education specific to PE programming (Davis, Kotecki, Harvey, & Oliver, 2007; Maher, 2016; Pan & Frey, 2006; Pederson, Cooley, & Rottier, 2014). Additionally, it is quite common for teachers and EAs to experience a lack of support (education, resources, and personnel) in addition to feeling untrained and unprepared from their backgrounds to implement PE conducive to including *all* children (Ayers & Housner, 2008; Hersman & Hodge, 2010; Ko & Boswell, 2013; Lirgg, Gorman, Merrie, & Shewmake, 2017; Rust & Sinelnikov, 2010). The lack of support for teaching IPE was troubling to me and therefore, as a Master's thesis I decided to explore what resources existed for practitioners to support instruction in IPE. I found that there were limited relevant resources and PD opportunities for practitioners around IPE (Morrison, 2014). As a result of my Masters study and my previously mentioned experiences as a consultant, it became evident that my students were

[5] Practitioners: When used it is referring to both teachers and educational assistants together.
[6] Professional Development: A provision method used to combat challenges practitioners face in their teaching and assist practitioners' development in understanding about specific processes, concepts, or subject matter (Darling-Hammond & McLaughlin, 1996; Jean Chen et al., 2013).

being ‘fit’ into unsuitable IPE programs. Students with disabilities continue to be shoved to the sideline of activities in PE, sent off away from the class to work with the EA, and underestimated by teachers and EAs in PE (Fitzgerald & Stride, 2012; Riddle, 2012).

Across Canada, inclusive education is the recommended and encouraged approach for school authorities (boards, districts, divisions, etc.) (Lyons, Thompson, & Timmons, 2016). Initiatives to support inclusive practice are on the rise with many school boards creating policy documents and practical strategies to support implementation for teachers (Thompson, Lyons, & Timmons, 2015). The increase in inclusive programming (policy and practice) means that teachers in all areas have students with disabilities in their classes (Hodge et al., 2009). Even though there is an increase of awareness and policy documents being developed, there is still a lack of clear support, such as resources and PD, for in-service teachers of PE[7] and EAs in Canada (Morrison, 2014). As well, the limited knowledge on the relationship between teachers and EAs has a negative effect on the learning environment (Jones, Ratcliff, Sheehan & Hunt, 2012). The barriers for teachers *and* EAs to implement quality IPE are numerous, systematic, and varied.

PD has been critical in providing teachers with curricular knowledge and understanding (Avalos, 2010), contributing to improvement of instructional practices and student learning (Borko, 2004; Fisherman, Marx, Best, & Tal, 2003), as well as shifting beliefs and practice towards curricular areas and expectations of student achievement (Timperly & Phillips, 2003). Unfortunately, PD initiatives for PE are rare for teachers and EAs and what opportunities are available are not set up for them to attend together or to collaborate. Jones et al., (2012) suggest that teachers and EAs “…have planned, joint training sessions that focus on the skills needed to

[7] In-service Teachers of PE: Generalist teachers instructing physical education classes or with physical education as a teaching subject in their curriculum teaching load

work effectively as members of an instructional team" (p. 23). Teacher and EA collaboration seems limited in practice based on my observations and research specific to PD on IPE for these practitioners is missing. To strive towards developing collaborative teaching for IPE, IPE-PD[8] needs to be a priority. IPE-PD and research focused on teachers and EAs collaboration in IPE *and* in PD could impact the working relationship in IPE but also the success of teaching and learning in IPE.

Research purpose. The objectives of this study were:

a) to understand and learn about in-service teachers' and EAs' previous experiences with PD for IPE,
b) to explore how they envision PD and supports to teach IPE, and
c) to use this information along with my experiences and the literature to construct a framework for a collaborative IPE-PD experience.

Research questions. The main question that guided the research was: What are in-service teachers' of PE and EAs' experiences with PD on IPE? The sub questions were: What type of supports and resources (including content and modes of delivery) do in-service teachers of PE and EAs need in an IPE-PD experience? And relatedly, what additional supports do in-service teachers of PE and EAs need in a PD experience to support collaboration for teaching IPE?

Significance and rationale. The research is both relevant and timely as provinces across Canada continue to enact policies in schools to ensure inclusion, equality and accessibility for individuals with disabilities (Thompson et al., 2015). It is therefore vital to equip practitioners, through intentional PD, with the essential knowledge and tools necessary for teaching IPE. Not only can research in this area contribute to the lack of current research but it could improve practitioner education and help support positive professional learning communities in

[8] IPE-PD: Inclusive Physical Education Professional Development

schools/classrooms to ultimately benefit students with disabilities in PE and beyond (Park, Koh, & Block, 2014). Teachers and EAs need quality PD and collaboration for successful IPE to occur (Bryan, McCubbin, & van der Mars, 2013).

The current state of insufficient education and resources for IPE presents barriers for practitioners who are motivated to improve inclusive teaching and learning (Ko & Boswell, 2013; Morley, Bailey, Tan, & Cooke, 2005; Morrison, 2014; Vickerman & Blundell, 2012). Berry (2011) suggests, "Allowing general education teachers, those most directly responsible for establishing and maintaining effective inclusion classrooms, to speak in their own voices…may provide added value in terms of a richer understanding of teacher thinking" (p. 629). Fisher and Pleasants (2012) also advise that EA's voices are often not sought out, however, their participation is important in inclusive settings and conversations should occur with them to improve teacher-EA collaboration and instruction for students. Maher (2016) explains that EAs' experiences and stories in PE can be unique to explore, as research with EAs is limited. Furthermore, given the absence of research on teachers and EAs experiences with PD in IPE and minimal discussion about their working relationship in combined/collaborative PD, this research informs the field in the following ways.

a) It helps decision makers understand the experiences of in-service teachers of PE and EAs in PD for IPE.
b) The research contributes to the literature on how to help create collaboration and authentic communities of practice[9] (CoP) (Armour & Yelling, 2004/2007; Keay, 2006; Park et al., 2014; Parker, Patton, & Tannehill, 2012).
c) It informs PD practices for IPE (both related to CoP's and PD in general).

[9] Communities of Practice (CoP): Groups of people informally bound together whose passion for a topic energizes the community and collaboration (Lave & Wenger, 1991).

It is time to bring teachers and EAs together for PD. Collaborative PD can support and enhance the learning experiences of teachers, EAs, and ultimately (most importantly), students with disabilities in PE.

Theoretical Framework

> *"We always live at the time we live and not at some other time, and only by extracting at each present time the full meaning of each present experience are we prepared for doing the same thing in the future."* (Dewey, 1938, p. 49)

Dewey and experience. John Dewey's theory of experiential education was used as a guiding framework for this study. Dewey places learning and context at the centre of experiential education and encourages a practical approach for effective PD (Armour, Quennerstedt, Chambers, & Makopoulou, 2015). Armour et al., (2015) believe that in order to achieve effective PD a different framework must be used to shift previous notions of teachers as learners; the shift should focus on realistic learning experiences in teachers' contexts to help foster educative experiences in PD. Dewey's theory connects to the current work in effective PD (Armour et al., 2015) including his conceptions of experience, learning, continuity, interaction, situation, and reflection. These concepts are pivotal to help inform and transform the nature of teachers' and EAs' experience and to further help the understanding of practitioners' growth in education. Dewey's theory of experiential education and concept of education as growth can act as a catalyst to enhance PD and are central to my understanding of experience in PD for this research. In the following sections, key understandings from Dewey's theory are brought forward to demonstrate how a Deweyan lens can help us to further understand teachers' and EAs' experiences with IPE and IPE-PD.

The nature of experience. Dewey (1938) states, "The belief that all genuine education comes about through experience does not mean that all experiences are genuinely or equally

educative" (p. 25). He suggests that educators cannot simply advocate for experience or activities of experience, because we cannot assume that all experiences will be beneficial, but that "Everything depends upon the *quality* of the experience which is had" (Dewey, 1938, p. 27). The quality of an experience is either *educative* or *mis-educative*. Educative experiences are those that lead to further growth. Conversely, mis-educative experiences do not promote growth, rather they have "…the effect of arresting or distorting the growth of further experience" (Dewey, 1938, p. 25). To understand the nature of experience then, we must ask, 'Will the influence of this experience on future experiences be educative, enjoyable and foster a desire for future experiences, or will the influence be mis-educative and repel learners from future experiences?' Presently, PD experiences for IPE are limited and the experiences of teachers and EAs are absent in the literature. A Deweyan lens allows for the exploration of the nature of educative and mis-educative PD and IPE experiences, ultimately to help inform the types of supports, resources, and learning opportunities needed in IPE-PD for practitioners' continuation of growth.

Quality experiences are reinforced by two principles that frame Dewey's theory: *continuity* and *interaction* (1938). These principles hold the conception that a learner's *growth* is related to their experiential *situation*. Continuity and interaction embrace the value and necessity of quality experiences for learners and demonstrate the importance of reflecting on experiences that impact future learning and growth in experience.

The principle of continuity. Dewey (1938) illustrates that experience is on a continuum and "Every experience is a moving force" (p. 38). He describes "…every experience both takes up something from those which have gone before and modifies in some way the quality of those which come after" (Dewey, 1938, p. 35). Evaluating past experiences, understanding current situations, and considering what experience and learning are moving towards, allows an

individual to discriminate between the value and quality of different experiences (Dewey, 1938). Continuity of experience can limit or spark growth and curiosity for future experiences (Dewey, 1938). Continuity is an essential element in PD for teachers and EAs because it prefaces the concept of *education as growth*: the promotion of active and transformative experiences that influence an educator's continual process of becoming.

Education as growth. Growth is not a 'finite achievement'; it is an on-going and continuous process of learning (Armour et al., 2015). Dewey (1916/1990) argued, "The educational process has no end beyond itself; it is its own end; and that (ii) the educational process is one of continual reorganizing, reconstructing, transforming" (p. 38). Armour et al., (2015), illustrate that underlying Dewey's idea of growth, "…ideas are not fixed but are formed and reformed through experience" (p. 8). Therefore, we must understand that growth is about constantly reconstructing experiences. Practitioners are perpetually in a state of becoming as part of their continuous learning process – this is why PD is so vital. A state of becoming impacts the growth and continuity of future experiences.

> Since growth is the characteristic of life, education is all one with growing; it has no end beyond itself. The criterion of the value of school education is the extent in which it creates a desire for continued growth and supplies means for making the desire effective in fact. (Dewey, 1916/1990, p. 40-41)

Additionally, it is important to understand the conditions that lead to growth and educative experiences. The principle of interaction informs the objective and internal conditions, situation, and particular relations that influence experience and growth. Experiences are dynamic; they are living happenings that occur in the entire environment both within and outside a person (Dewey, 1938).

The principle of interaction. Interactions are the connections an individual has with objects and people that influence their experiences. These interactions make up the physical and social environment, influence the physical and social surroundings and impact whether or not an experience is worthwhile and leads to growth. The principle of interaction is made up of two key elements: objective conditions outside a person and internal conditions inside a person. The outside conditions that impact an experience are often controlled by an educator such as things like "…equipment, books, apparatus, toys, games played…" (Dewey, 1938, p. 45). What happens within an individual internally - thinking, feeling, etc. - during an experience makes up the internal conditions. Dewey (1938) states, "The principle of interaction makes it clear that failure of adaptations of material to needs and capacities of individuals may cause an experience to be non-educative quite as much as failure of an individual to adapt himself to the material" (pp. 46-47). Educative experiences are dependent on both objective and internal conditions; these conditions combine to create the *situation*.

Situation. The concept of the situation helps signify the unity between the person and their environment. Dewey (1938) claims,

> An experience is always what it is because of a transaction taking place between an individual and what, at the time, constitutes his [or her] environment…the environment, in other words, is whatever conditions interact with personal needs, desires, purposes, and capacities to create the experience which is had. (pp. 43-44)

Therefore, experience is an active, on-going, and dynamic process occurring around and within an individual. It involves the interactions between the objective and internal conditions that create the situation, which influences the continuity and growth of an experience.

Dewey's (1938) principles of continuity and interaction are united, "…their active union with each other provide the measure of the educative significance and value of an experience" (pp. 44-45). It is assumed in this research that teachers and EAs need educative, interactive PD opportunities to truly delve into the continuum of their growth as practitioners as well as their ongoing experiences with IPE. Growth can only be attained through PD if the experience is in situations that will spark the desire to further learning and allow practitioners to reconstruct their past experiences (Dewey, 1938). In this study, Dewey's theory of experiential education and understanding of the nature of experience, interaction, and growth, is the foundation for understanding past and current experiences teachers and EAs have with IPE and IPE-PD.

Methodology

> *"Within every spoken environment there is always something secret, hidden, unspoken waiting in the wings to be heard."* (David Smith, personal communication, October 4th, 2015)

Constructivist paradigm and qualitative research. Human beings are actively constructing their own reality. The constructivist paradigm recognizes that reality is created and understood by people differently (Guba & Lincoln, 1994). Constructivists aim to understand and reconstruct "the constructions that people (including inquirer) initially hold, aiming toward consensus but still open to new interpretation as information and sophistication improve" (Guba & Lincoln, 1994, p. 113). Ontologically, this paradigm is relativist, which means one studies multiple realities of individuals and takes into consideration an individuals' interactions and context. Therefore, this qualitative research study is an exploration through the constructivist paradigm to understand the socially constructed nature of PD and IPE experiences informed by the researcher and the participants.

The knowledge in this study is created through interactions and constructed between the researcher and the researched (Guba & Lincoln, 1994). Therefore, epistemologically, constructivists are transactional/subjectivists (Guba & Lincoln, 1994) meaning the researcher, participants, and contexts cannot be separated. The hermeneutical and dialectical process is what guides knowledge accumulation, which refers to the researcher interpreting and reconstructing meanings from participants or the data (Guba & Lincoln, 1994). What we know and how we know what we know, are an interactive process involving the researcher, objects, participants, environment and the phenomenon interrelating with one another (Smith, 1991). Qualitative research and constructivism embrace "…the intimate relationship between the researcher and what is studied, and the situational constraints that shape inquiry" (Denzin & Lincoln, 1994, p. 4). The different realities and experiences of in-service teachers of PE and EAs are dependent on *each* teacher or EA particularly with the researcher also being an integral piece. The researcher is *"interested in understanding the meaning people have constructed,* that is, how they make sense of their world and the experiences they have in the world" (Merriam, 1998, p. 6). As the researcher, I believe it is important to understand the unique and varied experiences of the participants in this study and to capture the wholeness of their experiences.

Hermeneutics. The methodological framework of this study is hermeneutics. Carson (1989) suggests, "Hermeneutic interpretation begins not with direct research into the problem, but with an uncovering of the question to which the problem statement is an answer" (p. 76). In trying to understand teachers' and EAs' experiences with PD for IPE, the uncoverings to that question will help inform new understanding into the problems associated with practitioners' experiences in IPE and PD and outline suggestions for sufficient and quality IPE-PD. Therefore, hermeneutics is about engaging in methods such as conversation, observation, and interviews to

gain a deeper understanding of the research questions. Hermeneutics is an on-going conversation; the dialogue begins with the researchers projections or 'prejudices' that become the starting point for inquiry - outlined in the introduction - (Gadamer, 1975). The researcher then takes time to make sense of the information gathered with multiple projections, interpretations and by reframing questions to continue the dialectical conversation (Ellis, 1998).

Schleiermacher (1819 as cited by Smith, 2002) describes that the hermeneutic process requires the researcher to follow three themes: interpret data holistically as the 'creative character of interpretation,' move back and forth to understand part-whole relationships in the research, and recognize the role language plays for understanding the experiences interpreted. First, working holistically means the interpreter or researcher must view the data and participant experiences for meaning and understanding, not classifications (Ellis, 1998). The approach in hermeneutics refrains from reducing participants' experiences into categories, it is about the wholeness and complexity of participants' experiences in the fullness of themselves and the stories present (Ellis, 2006). Ellis (1998) describes this is "in an effort to discern the intent or meaning behind another's expression (p. 15). Each participant is their own individual (Smith, 1991) and the researcher must make sense of their words fully to have meaning and understanding of their experiences.

The second theme is about making sense of the parts and the whole in the research; "To understand a part, one must understand the whole, and to understand the whole, one must understand the individual parts" (Ellis, 1998, p. 16). Interpreting the part-whole relationships is done through a back and forth movement that has a natural starting point (the inquiry into collaborative teacher-EA PD described in the introduction) and end point (Ellis, 1998). This movement is called the *hermeneutic circle* (Figure 1), a metaphor that is used to describe the

circular manner with "the interplay of parts and wholes in the process of interpretation" (Smith, 1991, p. 190). Patterson and Williams (2002) emphasize, the hermeneutic circle can describe the data analysis process (further emphasized in the *data analysis and interpretation* section). "Broadly speaking, the hermeneutic circle refers to the inter-relationship between the part and the whole. Phenomena are seen as parts depending on a larger whole… The hermeneutic circle is also intended as a reference to the dialogical encounter between enabling prejudices (forestructres of understanding) and the phenomenon researchers are trying to understand" (Bernstein, 1986 as cited in Patterson & Williams, 2002, pp. 26-27). Further description of the circle and the interplay of the parts and whole are outlined in the *hermeneutic circle* section.

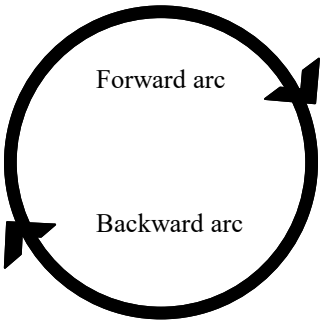
The third theme is, in order to gain an understanding of humans and their experiences it is essential to understand the relationship between language and interpretation (Ellis, 2006). Language - spoken or written - reflects or has developed from an individuals' history, traditions, and community, which are important as the researcher needs to understand how language (and all of its embedded concepts) influences, limits, or enables the interpretations and understandings that are possible (Ellis, 2006; Smith, 1991). Ellis (1998) describes, "…there can be no fixed or final language to express our understanding. Understanding is always temporal, since, as our prejudices change and our language changes, so do the interpretations we can make" (p. 9). In this case, language refers to paying close attention to dialogue, which can help the inquirer better understand the discourses, everyday life and communities, and meanings to the stories shared (Ellis, 2006). The researcher cannot assume that the participant has a "shared meaning for words or concepts that are central to their research questions" (Ellis, 2006, p. 117). They must work with the participant by asking questions to evoke stories related to the phenomenon to understand their meaning and their lived discourses.

Ellis (2006) summarizes “these ideas alert us to the need to work holistically to ascertain meaning, to examine part-whole relationships to clarify significance, and to appreciate how interpretations - the researcher’s and the participant’s - arise from the language and history of a person’s community” (p. 115). These three themes therefore, support the researchers methodological approach and interactions with the data.

Hermeneutic circle. The hermeneutic circle as previously described, is the interplay between the parts and the whole in the interpretation, analysis, and understanding of the research. The hermeneutic circle is made up of a series of loops that represent specific activities of data collection and interpretation (Ellis, 1998). These loops can be seen as a spiral. “When a study is viewed as a series of loops in a spiral, each loop represents a different attempt to get closer to what one hopes to understand. One enters each loop, or separate inquiry, with a question.” (Ellis, 1998, p. 20). Initially, to enter the circle, the researcher has an entry question focused on the phenomenon. Packer and Addison also call this projection, where “one uses ‘forestructure’ to make some initial sense of the research participant, text or data” (Ellis, 1998, p. 26). Ellis (1998) further explains, “What one learns in the loop provides direction to a reframing of the question for the next loop.” (Ellis, 1998, p. 20). The hermeneutic circle is an interpretive process continuously reframing an initial inquiry question and going back to the data to ask new questions. It is a journey to uncoverings and new findings. An uncovering is an unexpected finding, which leads the researcher to new thinking, understanding, and questioning for the next inquiry (Ellis, 1998). Uncoverings help the researcher ask new questions as they continue the inquiry process to understand the part-whole relationships in the data and phenomenon in greater detail (Ellis, 1998).

Figure 1 highlights the movement of a forward arc and a backward arc in a circular pattern. Specifically, entering in the loop is also known as the projection or *forward arc*. It is the researcher making sense of the participants, data, and situations. The researcher accomplished this by "drawing on one's forestructure, which is the current product of one's autobiography (beliefs, values, interests, interpretive framework) and one's relationship to the question or problem (pre-understandings and concerned engagement)" (Ellis, 1998, p. 27).

Figure 1: The Hermeneutic Circle



Following the forward arc comes the *backward arc* or the evaluation. This process encourages the researcher to evaluate "the initial interpretation [resulting from the forward arc projections] and [then] attempts to see what went unseen before" (Ellis, 1998, p. 26). The backward arc is a purposeful re-examination enabling the researcher to engage with the data constantly. The data is re-examined for "contradictions, gaps, omissions, or confirmations of the initial interpretations" (Ellis, 1998, p. 27). In the re-examination phase, the researcher can use visual aides such as a chart or table to help uncover the patterns and to loop for the relationships from the information (see Table 1.1 in the *Data analysis and interpretation* section). Ellis (2006) suggests, "Without reading individual stories in the larger stories of which they are a part, researchers are not likely to interpret critically the conditions contributing to the individual stories they have uncovered"

(p. 116). The wholeness of experiences that are learned through the hermeneutic circle are illustrated and uncovered in the stories derived by the circle.

Interpretive inquiry. Interpretive research is focused on understanding individuals meanings and intentions in relation to a research question. It seeks to provide clarity of those research questions under study and helps a researcher to gain a comprehensive understanding of the whole situation or interpretive account (Packer & Addison, 1989). Packer and Addison (1989) have identified three possible outcomes of interpretive inquiries: ideas for helpful action are identified; new questions or concerns come to the researcher's attention; and the researcher is changed by the research – that is, the researcher discovers inadequacies in their initial pre-understandings.

The use of both hermeneutics and interpretive inquiry in a study establishes that the researcher continuously engages with the data through the hermeneutic circle, which enables the perpetual review and reexamination of the data and research questions. Thus, through data collection and interpretation, I have actively and constantly been involved in the hermeneutic circle process trying to understand teachers' and EAs' experiences with PD for IPE and their situations of IPE for a holistic understanding of each participants stories as well as ideas for supports and resources needed for a IPE-PD experience.

Qualitative case studies. Qualitative case study research is about understanding the context, situation, and people involved in a *case* (Merriam, 1998). A case is "…a thing, a single entity, a unit around which there are boundaries" (Merriam, 1998, p. 27). The purpose of case study is to explore the bounded system or multiple-bounded systems; Stake (2005) describes a bounded system as a specific or unique functioning unit. Case studies focus on examining a phenomenon, where in particular the case context is explored over time, in an authentic setting

with the purpose of gathering rich, detailed descriptions (Merriam, 1998; Merriam & Tisdell, 2016). The case study design was chosen specifically to discover new insights into teachers' and EAs' experiences with PD for IPE rather than testing a hypothesis. Qualitative case studies help develop new understandings or meanings about the case and include the researcher as a primary tool of data collection and analysis (Merriam, 1998).

Using a multiple case study method or collective case studies allows for detailed exploration into the research questions and also permits descriptions and explanations of teachers' and EAs' experiences with PD for IPE. Stake (2005) describes that using multiple case studies (collective case studies) allows the researcher to investigate a phenomenon concurrently or consecutively with various groups. Therefore, in this research study, multiple case studies have been used to highlight the uniqueness of three schools - three bound cases - by providing detail about the context and situations and to illuminate the participant's individual perspectives and experiences within and across each case.

Interpretive case studies. When considering the overall intent of the study, I chose to use interpretive case studies. Interpretive case studies are different from descriptive and evaluative case studies because they are meant to gather as much rich, detailed information to ultimately analyze, interpret, and theorize about a phenomenon (Merriam, 1998). Descriptive case studies set out to simply detail the account and phenomenon and evaluative case studies incorporate description, evaluation, and judgment (Merriam, 1998). Interpretive case studies "are used to develop conceptual categories or to illustrate, support, or challenge theoretical assumptions held prior to data collection" (Merriam, 1998, p. 38). They also provide rich and thick description and also serve to inform theories or lack of theory. According to Peshkin (1993), "…interpretation not only *engenders new concepts* but also *elaborated existing ones*" (p. 26). The interpretive case

studies have allowed me to uncover of experiences of teachers and EAs with IPE and IPE-PD in their particular context while informing current ideas and theory on PD for teachers and EAs.

Research Design

> *"[Engaging in interpretive inquiry] is like finding a soul mate, a companion who helps clarify the confusion, who helps figure out the complexities, and who sometimes insists that we linger in the messiness of the issues so that we are receptive and open to learning something new"* (Mayers, 2001, p. 14)

Case studies provide flexibility to use multiple methods and data sources (Chadderton & Torrance, 2011). Commonly used research methods for case study research are interviews, document analysis, and observations (Chadderton & Torrance, 2011). The following section outlines the research sites, participants and contexts, and data collection sources.

Research sites. The qualitative case studies and data collection took place at three different schools all located in a Western Canadian province: Cobain Junior High, Cash Elementary, and Drake Elementary and Junior High[10]. Observations for each case were taken across the whole school environment including the practitioner's classroom spaces, the gymnasium and outdoor spaces used in PE. The participants were also asked to discuss their experiences with IPE, PD and IPE-PD separately through individual interviews and a small focus group interview, which occurred in either an empty classroom or space at the school, or a coffee shop that was convenient and accessible for the participants. The participants in the study were teachers (Mr. D, Ms. B and Mrs. H) and EAs (Mr. O, Mrs. L and Mrs. M). The criteria for involvement was threefold: being a teacher or EA, engaged in instructing students with disabilities in PE class and, have participation in any form of PD in their career. No fixed age limit or years of experience were set for the participants in the study.

[10] Pseudonyms: An alias/factious name has been given to the schools, participants, and any reference to students or colleagues of the research for anonymity.

Case contexts and participant portraits. The following section describes the school contexts and portraits of the participants within each case; this section is used to highlight the three distinct schools or bounded systems in order to examine the phenomenon of IPE in each particular context (Merriam & Tisdell, 2016). Patterson and Williams (2002) describe, "the 'self' is not a context-free phenomenon, it is a transactional product of individuals and the situations they find themselves in" (p. 16). The contexts and portraits crafted emphasize the experiences occurring at each case and are used as an analytical tool to better understand the phenomenon of IPE in diverse environments. The following school contexts provide detail on: the type of school, school characteristics, student information, and relevant school dynamics. The participant portraits include: teaching/assisting experience, personal characteristics and details on the participants' role, outlook, or approach to IPE and inclusion.

Case 1, Cobain Junior High. Cobain Junior High is a grade seven to nine school (250 students) with 50% of the youth receiving specialized or individualized learning supports. Participants in this case included a PE teacher (Mr. D) and an EA (Mr. O). Cobain Junior High is a tightknit school with a lot of character. The walls in the entranceway of the school were marked by student drawings, photos of international leaders, and looked to have years of wear and tear on them. It is an older building but everyone was proud of it, even if they didn't have much equipment or space in the school. Whenever I went to the school, students and teachers were moving about the halls, laughing and chatting. There was something special about the school that gave me a sense of ease. The staff and students were friendly, they inquired about my presence, and they were eager to help me with anything I needed. The school dynamics, schedule, and the student-teacher interactions that I observed were laid-back and flexible. There was a lot of school spirit at Cobain Junior High; the students and teachers dressed up for school

events, spirit days, and cheered each other on at school sport events. I felt part of the team from day one. It was if anyone who walked through those doors was welcome there. My participants told me that Cobain Junior High was a culturally diverse school with a spectrum of students who have high needs and complex situations. The participants also explained that the students with disabilities at Cobain Junior High were generally included full-time in the PE class. Depending on the student behaviours, they might sometimes leave class to go and do a fitness program in other PE room or outside instead.

My observations of the PE classes had students with disabilities leaving the whole group to do separate activities more often than was alluded to. They didn't have *all* students included full-time in PE; it was dependent on the type of activity, teacher-EA decisions, and student behaviour. Although participation in the classes wasn't often apparent and those students with "severe"[11] and complex needs had different activities, Mr. D the PE teacher tried to make everyone feel like they belonged in the class when they were present. Some of the students in the school also had separate homerooms and I noticed that there was little consistency in their schedules. I also felt that the EAs often took on the role of the main teacher of many subject areas for the students with special needs at Cobain Junior High. For instance, the EAs would often sit off to the side with math worksheets or a book during class time to work one-on-one with the student while the teacher worked with the rest of the class.

Mr. D. Mr. D has been a junior high teacher for approximately 20 years with the same school board. He is a confident, direct and passionate teacher of PE. He wants everyone to enjoy his classes and he likes to get kids involved in as many different kinds of activities as possible. His breadth of experience has made him very conscious of student behaviour and student

[11] The double quotations in the case context and participant portrait sections refer to the specific language used by the participants in the study.

learning needs/difficulties. He values respect and has high expectations for his students' attention. He actively tries to model positive behaviour to teach students what is and is not acceptable. Mr. D's approach and structure to PE has changed over the years from being skill driven and success oriented, where he used to expect students to be at a certain skill or fitness level. If they weren't, that would affect their mark directly, and negatively. He now has a program that is more about participation, cooperation, and leadership.

Mr. O. Mr. O is a new EA in his first year at Cobain Junior High. He shared that his family and the many people he has encountered over the years have shaped his life and his personality. Who he is today is a testament to his family and his faith. He values his childhood home as it was there that he was taught how to play, how to get along with others, how to express emotions, and how to be a moral person. At Cobain Junior High, Mr. O is enthusiastic about his role as an EA and works one-to-one with a student named Trevor. Mr. O puts his heart into his job and focuses on what he can teach, assist and create for Trevor to learn. Mr. O described himself as "not an athletic guy," although when he was younger he said he was pretty good at badminton and running, but when it comes to "ball handling skills" and PE he is not sure what to do. He enjoys music and the dance unit in PE but he would like to learn more about pedagogy and content for PE. His main focus in his job is to get Trevor to be part of the class and to interact with other students more. Mr. O wants to feel that he and Trevor are part of the school and all of the classes. At this stage Mr. O is still learning how to get through the day with Trevor and at times gets frustrated. He is still not sure what Trevor can do or what he should expect him to be able to do. Mr. O describes his profession as a never-ending learning opportunity and he truly appreciates the support he receives from his colleagues and the school board consultants as he navigates his course day-to-day as a new EA.

Case 2, Cash Elementary. Cash Elementary is a small Kindergarten to grade six school (120 students) in a low socioeconomic area of the city. The participants in the research from Cash Elementary included an elementary teacher who taught PE half day and grade four half day (Ms. B) and an EA (Mrs. L). My time spent at Cash Elementary reminded me of why I became a teacher in the first place - for the students. The school was quaint; there was a lot of green space surrounding the one-story building and kids were always buzzing around. There were many facets of Cash that gave me the sense of community and that the teachers who worked here truly were striving to support the children to be the best citizens they could be. The library was colourful and open, it had a board that said, 'I got caught reading at home' where students signed their names around it. The science room was vibrant, it was filled with plants and hanging planets from the ceiling. The social studies curriculum including maps of provinces and Canadian trivia was scattered on the walls in the hallways. And lastly, the gym had the alphabet and animal pictures posted on the walls. Even though the gym was the size of a small volleyball court, the students used every inch of it during PE class and it was the perfect space for them. The school had a morning breakfast program and the teachers seemed invested in the students lives; many times teachers told me about the difficult home lives these students had and that they wanted their school to be a safe place. The principal was thrilled to have me doing my research and supporting the staff in PE at Cash Elementary. He is an advocate for PE and physical literacy. He said to me on my first day at the school that one of his goals for the students at Cash, and why he made Ms. B the PE teacher half day for the whole school, was that he wanted these students to have a chance to make the sports teams when they head off to junior high.

Ms. B. Ms. B is a very poised and positive teacher in her first five years of teaching in elementary schools. At university, she decided to put her focus on health and wellness because

when she was growing up, she realized how taken for granted movement and play was. She wanted all children to experience play and the outdoors. Ms. B appreciates being able to move every day and truly practices what she preaches. Running is her form of meditation; she describes running as an intrinsic way of thinking and meditating for your own self and seeing where your mind can go. She is an active learner and new to her role at Cash Elementary teaching half-day PE to the whole school along with grade four social/math. Though she explained that she thought having a specific/specialized PE teacher in elementary school is more beneficial than having homeroom teachers do their own PE, at times the role makes her feel isolated and alone. Her dedication to supporting her student's lives, inside and outside the classroom, is what drives her passion for teaching. She wants her students to move out of their comfort zones, get outside and transfer their learning in PE to recess and afterschool – just be involved in physical activity! Ms. B feels that her mood, transitions, and organization are critical factors to her students having good experiences in PE. She describes that her involvement, cheering, monitoring, and positivity are important to creating positive experiences in PE.

Mrs. L. Mrs. L is a longtime EA with 23 years of experience in the school board. She has had a plethora of different assignments in elementary, junior high, and high school: working one-on-one with students, moving class to class with a group of students, or doing "whatever the new thing is that the board is following." She enjoys her role as an EA because it's constantly changing and there is something different every day. Her active lifestyle - biking, walking the dogs, yard work - all help her to get "right in there" with the student in PE. Mrs. L is a lifelong learner and appreciates opportunities for EAs to further their knowledge in different areas. Though she feels like it has been a struggle to have a voice as an EA in some of the schools and situations she's worked in, she feels like she is part of a great team at Cash Elementary. Further,

Mrs. L's values are clear. She sees being treated as an equal essential and she feels that "years of experience" should be regarded equally important in school settings as someone having a specified degree. She describes that her focus as an EA is to read her students moods, make sure they are safe and try to get them as involved in the class as often as possible.

Case 3, Drake Elementary and Junior High. Drake Elementary and Junior High is a Kindergarten to grade nine school (700 students) that has all of the equipment and resources imaginable for teaching physical education. The participants in the research included an elementary generalist and PE teacher (Mrs. H) and an EA (Mrs. M) in a grade two class. Drake Elementary and Junior High reminded me of a school in a 'textbook' - it had space, furniture, equipment, technology, and money. Driving up to the school I could see green fields, a large open park with benches, playgrounds around the school and ample tarmac space. Walking in, the main foyer was always filled with students both tall and small engaged in an activity, class or school event. It smelled new inside. The walls looked like they just had a fresh coat of paint and the high ceilings gave the school a superior vibe. Mrs. H's room had an orderly design to it with a place for everything and everything in its place. The classroom looked similar to the one next door, with students' work taking up the walls, a mix of oddly shaped tables and chairs throughout, a reading area with pillows, a large 'carpet map' of Canada and a plethora of books and bins in the shelves at my hip level bordering the classroom. There was always so much going on at the school but whenever I was there, we tended to keep to ourselves following a clear routine. I didn't get a sense of big school culture, but rather grade level teachers would intermingle and some of the older students would come help out in the division one classes. The students were behaved and always interested in talking to me or having me help them with the activities. Both Mrs. H and Mrs. M expressed how inclusion is an area they both feel passionate

about but over the course of the year they have struggled to include one their students (Gisele) in PE because she is in a wheelchair and has limited mobility. Mrs. H and Mrs. M expressed that the students in the class were always willing to help Gisele out like pushing her chair to the next station. Within the busy curriculum schedule created by Mrs. H, PE was scheduled three-to-four times a week. It took place in the classroom, gym, front foyer, and outside. From my observations, some students were more eager than others to participate in the activities but everyone was involved and worked together. It was clear that stations and small group work helped Mrs. H and Mrs. M focus on supporting the students who needed a bit of extra help physically or with the verbal instructions. They worked together to set up, clean up, manage the students, and both participated in the activities alongside the students. There was a good vibe in this grade two class - everyone was helping everyone.

Mrs. H. Mrs. H is in her fifth year teaching with experience in division one and two. One of the best things she loves about teaching is change; she has never taught the same grade twice. She said her own education was one of the most important events that has changed things in her life. As a child, education wasn't valued in her home. Even though she did well as a student and was involved in sports it was never like "hey we are going to go see your teachers and talk to them." She described her background growing up to be pretty rough. She lost her parents at a young age and outsiders looking in on her life assumed she probably was not going to go far in life. However, her educational values, support from her friends and teachers, and her strength and love in herself, helped her overcome the adversity and hurdles in the way of a B.Ed. Mrs. H struggles with boundaries. It has taken her a long time to learn to set boundaries with parents of her students so as to not get walked all over. She describes herself as a pretty loving person but admits that she does not like conflict. Besides travelling, fashion, being active and spending time

with her husband, her passion for teaching keeps her going because she loves what she does. She desires to be good at sports and feels confident teaching PE. Her students' interests help her guide her year and her focus is on getting her students to grow, progress, and come out of their shell. She is passionate about PE because she feels it's not just something that the kids need here and now, but it's a subject that has a life-long impact on their lives.

Mrs. M. Mrs. M was a stay at home mom for many years before she started her career as an EA a year ago. She's never really considered herself having a career until now. Becoming an EA has been a complete shift in her life from "just being a mom". Now, when she's in her kids' school working and sees her "mom friends" she says they always wonder if she is there just helping out or if she is subbing/working there. She's proud and excited to have taken on this new adventure in her life but relies on her "mom sense" as she has limited education in the area of being an EA. She decided to become an EA for the kids that need the help and because it makes her feel good. Her passion for caring and nurturing keep her going and each day she learns something new. Her approach to being an EA is "get in there and have fun." She has grown up playing sports so she is fairly comfortable in "a gym." Being eager to learn, with a positive attitude towards her job, the students, and PE, she's always on board to try new or different things. When Mrs. M reflects on her own experiences in elementary school and PE, she says that she prefers more freedom and less structure - free for all days are more her style. Her approach is "footloose and fancy free" but she is always ready to just do it, what ever she's told, and get everyone involved.

Data collection. Data was gathered through observations and field notes taken at the participants' schools/classrooms, interviews with each participant, small focus groups with the teachers and EAs from the same school, and retrospective notes and conversations about PD and

supports that followed the interviews and focus groups. The overall data collection period took place over three and a half months.

Observations and field notes. Observations were imperative to view the environment, context, and other individuals who may be associated with the participants' experiences first-hand at the schools. Observing in the IPE class and school settings helped me to understand the surroundings of the school as the participants related to their environment in the interviews and focus groups. Observations helped me build rapport with the teachers and EAs in the study. Sharing the purpose of the research and being present for multiple occasions ensured that the participants felt comfortable with me and understood that my observations were not evaluations but a learning opportunity for me to familiarize myself with the context to be able to understand it at a deeper level. I did not try to change the environment or influence the experiences in the classroom during my observations, as I took notes during the classes when I felt it was not distracting and participated in the classes when requested to make the students and participants felt at ease.

Observing was a growing and emerging process for me. Boostrom (1994) notes that researchers going into the classroom to observe can have a change in perspective as to what they pay attention to and what they learn in the environment. Through my observations I experienced many of the changes in perspective such as being a video camera, playgoer, evaluator, subjective inquirer, insider, and reflective interpreter (Boostrom, 1994) (*Appendix C*). Referring to these observation phases allowed me to move beyond surface level observations to in-depth contextual reflections. During the observations I kept field notes on the context, encounters/social interactions, actions, and feelings for data collection. Regular researcher journal reflections were completed throughout the research process (fifteen reflections). Reflections were guided by the

hermeneutic circle and involved asking questions about the culture, language, and context being observed and Dewey's idea of reflective thinking by reflecting on each observation unpacking the following: presence to experience, description of experience, analysis of experience, intelligent action and summary of process (Dewey, 1910; Frost & Connolly, 2015; Standal & Rugseth, 2014). My observations began with a half-day school visit as a meet and greet; following the meet and greet was the individual interviews. I then completed four full day observations, per case; I also completed two extra a half-day observations at Cobain Junior High with Mr. O the EA and Trevor the student he worked one-on-one with to get to know their schedule and routines at the school. IPE was scheduled during most of the observation days at each case. Due Drake Elementary and Junior High's classroom schedules and some poor weather conditions, two of the four observation days occurred only occurred in the classroom and school setting when IPE was not scheduled or could not take place as planned because of the weather.

Pre-interview activities. Before the individual interviews, participants were asked to complete pre-interview activities (Ellis, 2006; Ellis et al., 2013). Pre-interview activities are a tool used to help the researcher get to know the participant, engage in open conversation where the participant can teach the researcher information about the context, and it is an "…opportunity [for the participant] to recall and select memories to share…" (Ellis, 2006, p. 118). Four of the six participants chose to complete the pre-interview activities based on their time available to commit to the research and personal preference. The pre-interview activities (*Appendix D*) asked the participant to answer open-ended questions by creating a drawing, selecting an artifact, or writing a list or timeline and to share their responses at the beginning of the interview. These activities helped participants relate to their experiences, opened up memories, and "enable[d] them to express or depict feelings and perspectives" (Ellis, 2006, pp. 113-114). These activities

were used at the beginning of the interview. Ellis et al., (2013) describe that participants select pre-interview activities that allows them to discuss topics that are both salient and meaningful to them. In Ellis et al., (2013) research, when the participants completed the pre-interview activities, "…they highlighted wholes and parts that were important elements for understanding their experience or perspectives" (p. 505). The pre-interview activities were therefore particularly helpful in my understanding of participants' context, what was important to them, and for setting an open dialogue at the beginning of the interviews that the participants were guiding the conversation.

Interviews. Prior to running the case interviews, the general interview guide was piloted with an elementary teacher to 'test out' the questions in advance to ensure they were open, not prying and appropriate for exploring participant's experiences with PD and IPE. Additionally, each participant filled out a 'Life, Education, and Work Overview' chart and a 'Timeline for Teaching PE and IPE' (*Appendix E*) for general demographic information, as well as to help ensure the interview guides were appropriate for each participant, taking into account their diverse experiences and years of teaching/assisting experience. Furthermore, before the interviews, each participant provided written and oral consent (*Appendix B*). The University Research Ethics Board and School Board Ethics Committee approved the consent forms and the research project as a whole (*Appendix A*). Details about the interview format, including that it would be face-to-face, audio recorded, information on the study purpose and the amount of questions, was shared at the beginning of the interview. As it was important to create a welcoming environment for the interviews, the participants chose the time and location so it was comfortable and convenient for them. Therefore, each participant was interviewed once,

independently, in the middle of the observation and data collection process. After the first initial school observation, future observation dates and a time was scheduled for the interview.

The interviews were semi-structured and lasted approximately 60-90 minutes. The interviews were made up of open-ended questions (*Appendix F*) that first focused on getting to know the participant generally and gaining insight holistically on their experiences with IPE and PD then, followed by more specific questions on the research topic. The open-ended questions allowed the participants "…to recall significant experiences, analyze them, and reflect on their meaning" (Ellis, 2006, p. 113). Individual interviews were helpful to "learn the stories as they are happening and invite both immediate and later reflection on their significance" (Ellis, 2006, p. 113). Therefore, these interviews were important to allow each participant to share their own experiences as they envision them and to allow the participants to speak freely about their personal meanings, understandings, and experiences. Using a number of open-ended questions as prompts to facilitate recall and reflection was helpful throughout the interviews for the participants to share what experiences/was meaningful to them, rather than specific demanding or prying questions that could have forced the participant to answer in a specific way (Ellis, 2006). A follow-up option for a second interview was offered to each participant if they wanted to clarify any questions or thoughts after the interview, but each participant felt it was unnecessary to have a follow up because they would be participating in a focus group interview where they had a chance to talk to me a second time formally and informally through my observation days. Once the interviews were completed, they were personally transcribed. The participants were offered a chance to review a copy of the transcript to ensure the information reflected what they wanted to say and mean. In case one and two, the participants scanned the interview transcripts prior to the focus group but did not make any changes. In case three the

participants were asked to contact me for any changes after they were provided with a copy of their transcript, but likewise they did not have any additions or rejections.

Focus groups. Following the individual interviews I used focus groups to allow the participants working in the same school an opportunity to share insights on their personal experiences with PD to their teaching/assisting partner. The focus group interviews allowed participants to expand on thoughts and reflections from their independent interviews and to share further stories with the other participant(s) from their school, which highlighted the complexity of the teaching environment in IPE. Previously, research has not had teachers and EAs discuss *together* what they envision for supports and PD for IPE. Conducting focus groups has helped me understand both common/shared views and distinct differences among participants (Patton, 2002). Patton (2002) explains, "…in a focus group participants get to hear each other's responses and to make additional comments beyond their own original responses as they hear what other people have to say" (p. 386). Though the dynamics of the teacher-EA work relationship are complex, having a focus group allowed practitioners to discuss their context, students, and potential PD opportunities that would support them in their teaching and learning process.

Each focus group was approximately 60 minutes long and took place after the observations and individual interviews. The questions (*Appendix F*) were created from common topics that were brought forward in the interviews and were in relation to the main research questions. As well, space was left in the focus group for the participants to share their further thoughts on IPE-PD. The focus groups provided me with the opportunity to hear and see teachers and EAs interact in conversation about IPE-PD and share their ideas for an IPE-PD experience that would occur together. The cases in this study did not believe a follow up focus group was necessary.

Data analysis and interpretation. As per the hermeneutic and interpretive frames, data analysis and interpretation occurred constantly during the study to gain a deeper, more comprehensive and clear understanding of the interpretive account - participants' experiences of IPE and PD (Ellis, 2010; Patterson & Williams, 2002). Each data set was distinct and played a critical role in understanding in-service teachers' of PE and EAs' experiences with PD for IPE. Using the hermeneutic circle and by asking questions as I interpreted the data, my analysis happened constantly. The hermeneutic analysis centers around the back and forth interactions with the data, which can be understood more concretely by outlining the use of an organizing system. "The purpose of an organizing system is to identify predominant themes through which narrative accounts (interviews) can be meaningfully organized, interpreted, and presented. The process of developing an organizing system *is* the "analysis," while the final organizing system is the product of the analysis" (Patterson & Williams, 2002, p. 45). An organizing system "promotes a more holistic understanding of the phenomenon by showing the inter-relationships among themes and by retaining a rich characterization of individual themes" (Patterson & Williams, 2002, p. 46). In order to identify themes, a process of grouping 'meaning units' occurs. Patterson and William (2002) describe that meaning units are groups of sentences or complete ideas that relate to the phenomenon under study. "Meaning units are segments of the interview that are comprehensible on their own [within context]" (Patterson & Williams, 2002, p. 47). From reading and re-reading the transcripts, I identified individual meaning units into a visual organizer in a chart/table format (Table 1.1) (Friesen & Ellis, 2016; Patterson & Williams, 2002).

Table 1.1

Analysis Chart

Person	Context: Interview Question	The story (with some ellipses)	Key ideas expressed (motivations, beliefs, values, preoccupations)	Possible themes or topics that these key ideas might fit into
Mrs. H	Group 3, Question 1: Overtime, do you recall any big changes in your approaches to teaching PE?	"Originally I just taught my own PE which was easy for me because I was coming right out of university and finished PE all my classes were in PE. I was pretty passionate about PE and not every teacher was passionate about PE and doesn't see it as importance right so they would be 'what you have a check list? You mark? You have a rubric? You video tape?' it so was easy for me."	Values: passion She expressed passion about teaching PE when she first started teaching	Possible theme: Background education in PE Topics: PE uni courses Passionate about PE Importance of PE
Mrs. L	Group 4, Question 3: Each day, when you start working with a student with disabilities in IPE, what are some of the things you think about a lot or pay attention to?	"Mainly her safety. Safety would be the first thing. Especially her, other kids maybe not so much but for her and her neck issues she can't be hit so that's very dangerous so right off the bat I have to asses what the activity is to see how safe it is."	Beliefs & concern: planning Values: she cares about students' safety	Possible theme: Student Safety IPE activities Topics: Safety related to students' disability Safe PE activities Classmates impact on student safety

Mr. D	Group 3, Question 3: On a day when things are going well in the classroom what [else] would you say is usually contributing to that good experience?	"Choosing good activities that the kids enjoy. If I ask kids "what would you like to do today," or give them choices, usually that lesson goes better. Where as if I come in with a "I'm doing this, this, and this" if they don't like it, you're going to have a tough day. So trying to find what the kids like to do and balance it."	Values motivation: she wants students to enjoy Beliefs: important to give choices to support enjoyment	Possible theme: IPE activities Topics: Choice Student input Balanced program

(Friesen and Ellis 2016)

Once individual meaning units were identified, thematic labels were used to highlight my analysis of the meaning units. Understanding and making sense of the participants' experiences, means the researcher must identify the part-whole relationships by working through the hermeneutic circle. Exploring the part-whole relationships provides new insights about the interpretive account. "Seeing, understanding, and explaining the interrelationships among themes is one of the key features of hermeneutic analysis that offers the possibility of a holistic and insightful interpretation" (Patterson & Williams, 2002, p. 48). The organizing system and using visual aides has shown to help organize themes and their inter-relationships; it helps with interpreting the data rather than just presenting findings (Patterson & Williams, 2002). Ellis (2006) describes the interpreter is actively constructing meaning from what they have heard and seen from the participants. "It is the researcher's work to make sense of what the participant says or shows in the light of everything else the participant has said or shown" (Ellis, 2006, p. 116). The researchers analysis *is* the 'interpretation' of the meaning units in relation to the phenomenon under study (Patterson & Williams, 2002). The meaning units themselves are the

evidence to highlight the analysis connects and illuminates the interpretations (Patterson & Williams, 2002).

Observations and field notes. The observations of the school and classroom context supported me through the process of growing and understanding the research context. Boostrom (1994) describes that the researcher will change over time. Going through the process (shifting from video camera, playgoer, evaluator, subjective inquirer, insider, and reflective interpreter) helped me understand the uniqueness of each context and to describe not only the contextual elements observed at each case but the different situations of IPE in each case. The observations and field notes also helped me connect my thoughts and the context to the participants' experience that they shared. After engaging in the observations at each school, I was able to move beyond simply noting what was on the walls or the types of activities that were being taught in the classes to really detail what was being experienced, participants' language, students' stories, and the interactions in the classroom. In the observation process, I constantly asked myself 'what is going on and what is the meaning behind it.' The more time I spent in each school and the more each participant shared with me, the more I moved towards "being perceptually interactive, consciously responding to and shaping perceptions" (Boostrom, 1994, p. 53). All of the observations helped me to better understand each participant, to describe the context in an in-depth manner, which is outlines in the case contexts, and to look at the people and place together to ask more questions about the situations - going through the hermeneutic circle.

Interviews and focus groups. In the interviews, I focused on the conversations with my participants to listen to their stories but I also made notes during the interview to highlight particular stories or key ideas. I personally transcribed the interviews and focus groups in order

to have the opportunity to re-live the interviews. According to Ellis (2010), it is also important to note context, which means "the specific sites in which experiences occurred and to a more holistic appreciation of how participants experience themselves or their lives more generally" (p. 484). The context was understood through the observations, pre-interview activities, and in the interviews.

While I analyzed and interpreted the transcripts and observation notes, I also developed narratives. As a unit of analysis for the research, these narratives allowed me to consider everything in the interviews as I sought out the whole part relationships. Mishler (1986) advises the researcher to be open to the many stories told in the interview process as they shape a narrative path. The researcher shouldn't eliminate information in the analysis but rather create narratives to understand whole and parts to the 'plot'. Crafting narratives can help facilitate the analysis for the researcher as they can see the experience as a 'storied understanding'. Ellis (2010) notes that as the researcher works through the transcripts and field notes to write the narrative analyses, the story of the participants' experiences become clear to them. Therefore, narrative analysis has become influential to understand the social meanings of the interviews, the potential complex discourse discussed, and for the whole part relationships in the research (Mishler, 1986).

Evaluating the quality and goodness of a study. Qualitative research studies use criteria of trustworthiness to evaluate the quality of research. Guba and Lincoln (1994) suggest four criteria: credibility, dependability, transferability, and confirmability. These criteria have been noted as comparative measures, weak imitations, to quantitative criteria (e.g., validity, reliability) (Guba & Lincoln, 1994). These criteria do not account for the wholeness of an interpretive study, under a constructivist and interpretive lens, and the specifics related to

'evaluating an interpretive account.' Taking this into consideration and the diverse qualitative measures of trustworthiness that have been discussed in the literature, to evaluate the quality of this research I have outlined criteria from both the hermeneutic paradigm as well as details on rigor and trustworthiness.

Evaluating an interpretive account. Ellis (1998) describes "one should avoid confusing an evaluation of an interpretive account with the sort of objective validation traditional approaches seek" (p. 30). Instead, evaluating an interpretive account requires one to ask: "whether the concern which motivated the inquiry has been advanced" (Ellis, 1998, p. 30). In particular, Packer and Addison (1989) have identified three possible outcomes, advancements, of interpretive inquiries: ideas for helpful action are identified; new questions or concerns come to the researcher's attention; and the researcher is changed by the research – that is, the researcher discovers inadequacies in their initial pre-understandings. Patterson and Williams (2002) also discuss three criteria for evaluating hermeneutical research: persuasiveness, insightfulness, and practical utility. It is important therefore, to ask/ determine if the inquirer has presented clear dialogue from the research process; identified new questions from the research findings; established inconsistencies or confirmations of past understandings from the inquiry; and recognized practical considerations for action (Ellis, 1998). Moreover, Ellis (1998) outlined questions to ask in order to assist in understanding if the interpretive inquiry has uncovered an answer or a solution to a practical problem: (a) Is it plausible, convincing? (b) Does it fit with other material we know? (c) Does it have the power to change practice? (d) Has the researcher's understanding been transformed? (e) Has a solution been uncovered? (f) Have new possibilities been opened up for the researcher, research participants, and the structure of the context? (pp.

30-31). These criteria and questions for evaluating an interpretive account have been identified in the *Researcher Reflections* and *Discussion* section of this research.

Trustworthiness. After reviewing multiple sources discussing trustworthiness of qualitative research (Burke, 2016; Guba & Lincoln, 1994; Peshkin, 1993; Shenton, 2004; Smith & McGannon, 2017; Sparkes & Smith, 2009; Tracey, 2010; Zitomer & Goodwin, 2014) and based on the overall intent of this study, I have chosen to outline the particular tools used in this study to account for credibility, dependability, transferability and resonance, confirmability, and transparency and reflexivity.

Credibility is identified as how the research findings are corresponding with reality or "ensuring that the researcher's interpretations of the data accurately represent the constructed realities of the participants" (Burke, 2016, p. 331). Some of the techniques I used for credibility in this research were triangulation, member checking, and peer debriefing (Merriam & Tisdell, 2016; Shenton, 2004). First, triangulation was accomplished in this study by using multiple sources of data collection (observations/field notes, interviews, and focus groups) to confirm emerging themes. Additionally, three case studies were chosen to research in order to gain insight from diverse perspectives participant perspectives and various contexts. Second, member checking was completed. Participants were provided with transcripts to determine if they felt that their voice and statements were accurate, to provide an opportunity for participants to add additional information, and to provide a chance for participants to correct any misinterpretations (Zitomer & Goodwin, 2014). Smith and McGannon (2017) emphasize that member checking is a way to confirm accuracy of results/findings. The participants were provided this chance after the focus groups; they discussed their thoughts on the initial findings of the individual interview transcripts. In this study, emerging big ideas became discussion topics in the focus groups with

participants, which allowed them to further elaborate and share their insight on these ideas (Shenton, 2004).

Dependability refers to defining the details of the research process to ensure consistency (Guba and Lincoln, 1994). Burke (2016) discuss that it is imperative to outline the researchers decision-making steps and the research process in a study for dependability. Another technique is for researchers to provide in-depth coverage of the research process (planning and execution of the research, data gathering, and reflection) (Shenton, 2004). In the *Methods* section of this research, I have outlined the choices, intent of the study, data collection procedures, and process of data analysis. Further reflection on these areas has been outlined in the *Discussion* section of this work.

Transferability is focused on the application of the findings of a study elsewhere. The intent of this research was not to generalize the experiences of practitioners, but rather to provide thick description of process, people, relationships, experiences, contexts/settings, and situations (Peshkin, 1993) to allow readers to understand holistic nature of the study and the experiences for their own learning. To achieve thick description, highlighting contextual information, I have developed case and participant portraits. I have also outlined assumptions in relation to the research questions in the *Introduction* section of this research. Burke (2016) explains, "The responsibility of transferring the findings to a different context then falls on the shoulder of the reader who makes the judgment of how sensible the transfer is" (p. 332). To support readers in understanding the experiences learned in this study, all three cases and all of the participants have been detailed for readers to compare their experiences and relate their own realities to the situations and findings in this study. Resonance is also closely aligned with transferability. Tracy (2010) explains that resonance refers to the impact that a study may have upon readers. Research

should contribute in meaningful ways to either expand or clarify a question or existing research so new information can be applied to other contexts. Therefore, by describing the cases, participants, and providing detailed quotes from the paper results sections, this research has been set up to allow readers to take what they feel is appropriate away from the overall study.

Confirmability is identifying that the experiences of the participants are clear and not those of the researchers or of a researchers bias. One of the confirmability strategies is providing a clear audit-trail. An audit-trail is tracing the details of the research process, which is outlined in the data collection section. The data analysis table has been included in this work to identify my interpretations and development of themes in the research. Reflexive journaling is also critical to confirmability. Throughout the research I was actively journaling to identify my own background, thoughts, interests, and perspectives in order to identify those assumptions and biases brought to the research study. These measures have been outlined in the study introduction and are part of the interpretive and hermeneutical process.

Transparency and reflexivity ensure research has been made clear from the beginning through to the writing of the research. Some of the elements used to keep transparent in this study were having an audit trail and using a critical friend to scrutinize elements such as the interview guide, theory, and data analysis process (Tracy, 2010; Zitomer & Goodwin, 2014). As outline in this chapter, I believe I have been transparent by detailing my thought process and how I came to this research, my personal background, and study interests, along with a clear methodological approach and collection procedures to the study. I have additionally used my supervisor and supervisory committee in the following ways: (a) to challenge the research process in my research proposal during candidacy, (b) as a sounding board and support to craft interview guides and focus group outlines, and (c) as critical friends during data analysis and

writing to ensure interpretations are consistent with the participants experiences determined from the transcripts. Lastly, I have chosen to submit the research papers in the following sections that have been crafted with the results from this study to different peer-reviewed journals for scrutiny and feedback from scholars in the field on the research.

Ethical considerations. The study was reviewed and approved by the University of Alberta Research Ethics Office (*Appendix A*) and the School Authorities ethics. To ensure I was being ethical within this study, I informed my participants about the research process as well as my purpose and the intent behind the dissemination of the research at the end of the study. It was important for me to demonstrate respect to my participants and to be open to their stories and personal experiences rather than focus on judging their practice. Initial school visits and conversations began rapport building and getting to know the participants, which ultimately helped with mutual respect. I took a 'neutral' approach to my ethical position as the researcher, which meant that I did not intervene during classroom and school observations, however I did participant when asked. Additionally, I acted as a facilitator to conversations in the focus group interviews but concentrated on probing with open-ended questions and directing questions so each participant had time to share their thoughts and opinions; I wanted to let scenarios unravel in the natural environment and did not want to take over conversation with my participants. Furthermore, I discussed with the participants and abided by the following ethical strategies: receiving informed consent from each participant, ensuring anonymity of the participants and schools by providing pseudonyms, representing the data with authentic interpretations and member checks with each participant for insight on the analysis and findings. I kept an open line of communication via email and school visits for the participants to contact me with any inquiries or concerns.

The Structure of the Dissertation: Chapters and Paper-Based Overview

The dissertation follows a 'paper-based'[12] format and is organized into a series of articles that present the findings of the study. Since the research study involved exploring complex topics with various experiences from multiple participants, a paper-based dissertation allows for the creation of scholarly papers that are written for different audiences and disseminated through specific types of journals. Distinct papers make the dissertation's theoretical and practical elements accessible to different sources and I have been able to establish clear findings derived from the research to write in-depth for different journals. The paper topics and potential journals for publication for this dissertation are listed in Table 1.2.

Table 1.2

Proposed Dissertation Papers

Chapter	Audience	Journal (submitted, in press, etc.)
Interpretive case studies of inclusive physical education: Shared experiences in diverse school settings	Researchers: PETE, PE, IPE, Inclusion, Special Education	International Journal of Inclusive Education (IJIE) (Accepted - Published)
In-service teachers' and EAs' professional development experiences for inclusive physical education.	Researchers: PETE, PE, IPE, PD, Inclusion	Journal of Teaching in Physical Education (JTPE) (Accepted)
Playing on the same team: Collaboration between teachers and educational assistants for inclusive physical education	Practitioners: Teachers and EAs working in schools	Journal of Physical Education, Recreation, and Dance (Accepted)

[12] Elementary Education currently does not have specific guidelines set out for how a paper-based dissertation should be formatted. After reviewing various Faculties protocol across the University of Alberta, a common description of the format is: "A multi-paper thesis has emerged as a common alternative to the traditional thesis, in which multiple papers, each of which approximates a journal submission, are used. The papers are sandwiched between an introduction and conclusion. The papers will typically address a unique objective or question and will form a coherent and integrated set of projects and outputs that have been outlined in the thesis proposal" (Faculty of Kinesiology, Sport, and Recreation, Thesis Guidelines, 2018). https://cloudfront.ualberta.ca/-/media/physed/graduate/forms/2018/ksrthesisguidelinesapprovedmarch232016revisedapril2017ksrletterhead.pdf

Chapter overviews and content. The following section describes the content in the following chapters including details about the three papers that were written to emphasize the research results, concluding with a discussion chapter. Please note that there is some content overlap in the chapters due to the nature of paper-based dissertation.

Chapter 2 - Literature review. The literature review chapter provides detail into key research and literature in the areas of inclusive/special education, teacher education, inclusion in physical education, educational assistants in physical education, and professional development. Additional literature is also embedded in each of the three papers.

Chapter 3 - Paper 1: Interpretive case studies of inclusive physical education: Shared experiences in diverse school settings. The first paper is a representation of the unique and diverse cases in the study. The paper has been accepted for publication in the *International Journal of Inclusive Education* (IJIE). The purpose of this paper was to share what I learned and came to understand about in-service teachers' and EAs' experiences with IPE in their specific cases and to determine if there were any shared experiences of teaching and assisting IPE across the cases. The findings highlight how teachers and EAs' training and background education, along with their practical experiences and support from EAs contributes to their implementation of IPE; teachers and EAs' past physical education experiences and current engagement with physical activity impact their teaching/assisting in IPE; and the planning and choice of activities influences student participation in IPE. The major insights derived from this study include: experiences of IPE are dependent on practitioners' past experiences, education/training, and current situations with IPE. Practitioners need contextual PD that considers their situations, students, and prior knowledge and experiences to support their challenges and implementation of IPE. This paper has been written using Chicago format as per the IJIE requirements.

Chapter 4 - Paper 2: In-service teachers' and educational assistants' professional development experiences for inclusive physical education. This paper is an overview paper highlighting common themes/results from across the three cases in the study. The paper was revised for a resubmission to the *Journal of Teaching in Physical Education* (JTPE). The purpose of this paper was to focus in on practitioners' experiences with PD for IPE. The paper shares the following results: (a) It's just not there: IPE-PD is rare, (b) Taking initiative: Maximizing consultants as IPE-PD, (c) Together we're better: Desire for collaborative IPE-PD. The major insights derived from this study include PD for IPE needs to be developed and implemented for teachers and EAs working as an instructional team *together.* Engaging these practitioners in collaborative IPE-PD can support their learning and teaching of IPE and acts as a starting point to form communities of practice in IPE.

Chapter 5 - Paper 3: Playing on the same team: Collaboration between teachers and educational assistants for inclusive physical education. This paper is a paper directed towards in-service practitioners working in collaborative IPE settings. The paper was revised for re-submission to the *Journal of Physical Education, Recreation, and Dance* (JOPERD). The purpose of this paper was to share the experiences of the participants in the study with practitioners who might resonate with their experiences and provide insight into topics for collaborative conversations between teachers and EAs working or establish a team approach to IPE. The paper is focused on the finding that teachers and EAs are not always on the same page. The paper provides some practical strategies for teachers and EAs to work together in IPE. The strategic plan with practical stories and strategies described are in the following sections: (a) starting the conversation; (b) unpacking experiences; (c) setting expectations; (d) discussing students; (e) planning or success; (f) pursuing professional development; and (g) engaging in

collaborative reflection. Overall, teacher-EA collaboration opens up the possibilities of unique instruction opportunities, knowledge sharing, curriculum adaptations, and most importantly, student support to foster successful participation in the physical, social, and cognitive areas of IPE.

Chapter 6 - Discussion. The final chapter in this dissertation provides and overview of the main research findings using Dewey's theory of experience as a framework. The chapter also outlines researcher reflections and future directions for research in this area.

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Chapter 2: Review of the Literature

> *"It is not about reproducing the world so that there is a finite, obdurate, static truth that can be measured against some other truth… it is about engaging in the dialectic and multilayered conversation that is continually in flux, changing, evolving, and shifting"* (Mayers, 2001, p. 3)

The following section provides detail into key research and literature in the areas of inclusive/special education, teacher education, inclusion in physical education, educational assistants in physical education, and professional development.

Inclusion in Education

The Canadian Charter of Rights and Freedom (1982) states that by law, no discrimination to an individual with a disability or discrimination imposed because of disability is permitted; all individuals have the right to equal treatment. Additional support for individuals with disabilities has been warranted by the United Nations (2006) and specifies that individuals with disabilities must have the right, access, and equal opportunity to an inclusive education system. Segregation or discrimination from general education classes and limiting access to supports does not abide by the current laws (United Nations, 2006). In Alberta, the education system encourages a values-based approach to include all learners, requiring school boards to enroll and support the needs and rights of all learners in the province (Alberta Education, 2016). Inclusion is not just access, appropriateness, and accountability, but "…it is an attitude and approach that embraces diversity and learner differences and promotes equal opportunities for all learners" (Alberta Education, 2016, n.p.). Therefore, inclusion of individuals with disabilities in Alberta should be in full swing.

With inclusion policies in place, it is likely that there will be an increase of inclusion of students with disabilities in general education classes and all core subject areas, including PE (Hersman & Hodge, 2010). For instance, Berry (2011) describes that it is common that generalist

teachers have students with disabilities in their classes part-time or for the majority of the day with their peers. However, some students are removed during certain subject areas for additional support (Berry, 2011). Specifically, in Canadian schools, inclusion has been described as being on a 'continuum' (Lyons, Thompson, & Timmons, 2016). There are classrooms where students with disabilities "…are authentically engaged and learn together with the requisite supports, to separate classes for students with disabilities and/or behaviour disorders, to separate schools for students with intellectual and multiple disabilities" (Lyons, Thompson, & Timmons, 2016, p. 891). Therefore, inclusion seems to range on a case-to-case or school-to-school basis. Inclusive education should: (a) address and responds to the diversity of needs of all children (UNESCO, 2009); (b) embrace diversity and learner differences and promotes equal opportunities for all learners (Alberta Education, 2016); (c) provide access to and supports for to general education and learning including accommodations for individual difference in curriculum and instruction (Lyons, Thompson, & Timmons, 2016); (d) create an environment and activities that support students to feel acceptance, belonging, and valued members of the class (Spencer-Cavaliere & Watkinson, 2010); and (e) have opportunities for meaningful and skillful participation for *all* students (Goodwin & Watkinson, 2000). Whether all of these elements are happening in schools or not, for the knowledgeable future, we can only assume inclusion will continue in schools.

Thompson, Lyons, and Timmons (2015) acknowledge that it is difficult to understand the outcomes of inclusive education as its effectiveness is varied. It is also apparent that there are discrepancies in knowing if the relationship of policy and practice for inclusive education is symbiotic (Thompson et al., 2015). Though it may be difficult to know exactly what the outcomes of inclusion initiatives are in schools, it is understood that "Classroom teachers create the context for learning and have been regarded as the key to successful inclusive education and

the drivers of change" (Thompson et al., 2015, p. 123). Teachers support the adaptations in content, approaches, structures and strategies. They are the managers and facilitators for inclusive environments (Morley et al., 2005). Likewise, UNESCO (2015) highlights that teachers and support staff play an important role with the implementation of an inclusive learning environment for quality PE to take place, which is a planned, progressive, inclusive, and developmentally appropriate program for all individuals to lead a healthy active lifestyle. Overall, teachers are essential agents for the implementation and creation of inclusive experiences in schools.

Teacher Education

In Canada, individuals aspiring to teach (pre-service teachers) must receive a bachelor of education and a teaching certificate in order to be provincially qualified. Although in-service teachers continue their growth through PD, their experiences in pre-service degree programs continue to be critical to their foundational knowledge of teaching. Teacher development and education at both pre-service and in-service levels is essential to increase educational standards in schools (Armour & Yelling, 2004) and to support the growth and challenges teachers face while enacting quality teaching and learning practices (Jean Chen et al., 2013). The following section outlines a broad overview of teacher education programs specific to special education, elementary education and physical education teacher education. It also highlights the background education, or lack thereof, that EAs receive for their position in school districts. Furthermore, this section will explore the lack of connection between the areas of teacher education and on-going PD for educators. The disconnection contributes to the struggles most teachers, trained through special education, elementary education, or physical education, have when implementing IPE that ultimately impacts inclusion of students with disabilities in PE.

Special education teacher education. Alberta Learning (2004) describes special education as "…the education of students with mild, moderate, or severe disabilities and those who are gifted and talented. It is founded on the belief that all children can learn and reach their full potential given opportunity, effective teaching and appropriate resources" (n.p.). Most universities that grant education degrees have at least one course in the program geared towards special education (Dworet & Bennett, 2002). McCrimmon (2015) reviewed required courses in Canadian teacher preparation programs and believed universities fail to provide the knowledge and experience for pre-service teachers regarding inclusive practices. McCrimmon (2015) states "…a review of the individual course descriptions and/or outlines, indicated a paucity of required courses on the topic of IE [Inclusive Education] within their BEd programs" (p. 235). The lack of teacher preparation in special education, including inclusive education that addresses and responds to the diversity of needs of all children (UNESCO, 2009), impacts the preparedness of teachers to work with students with disabilities (McCrimmon, 2015; Rust & Sinelnikov, 2010).

In-service generalist teachers frequently seek support to implement effective inclusion in their classes. Thompson et al., (2015) found that the type of support teachers need to implement inclusive and special education programs involves acquiring knowledge of inclusion policies, receiving funding and classroom supports, and gaining additional personnel such as EAs. As well, teachers say that on-going PD that includes receiving new information on inclusion, engaging in classroom observations, discussing strategies and ideas, and being exposed to new situations with children is useful and effective for them to support students with disabilities in the classroom (Berry, 2011). It is apparent that discussion of special education and inclusive education needs to be a key part of both pre-service teacher preparation programs and practical PD opportunities for in-service teachers. Teachers need to learn content and have experiences

related to inclusion in order to implement policy and practical strategies for inclusion (Loreman, 2010; Thompson et al., 2015).

Though some certificate programs in special education exist for in-service teachers to learn more about inclusion after they have received their teaching degree (Dworet & Bennett, 2002), there is limited research and evidence about what is being taught in these programs. To better understand how teachers were being supported and educated to work with students with disabilities in schools, I first reviewed university programs in special education including pre-service teacher education programs, certificate courses, and undergraduate courses (Morrison, 2014). Then I reviewed PD opportunities, which included conference proceedings and workshops available for in-service teachers that focused on special education and inclusive education (Morrison, 2014). I found that special education programs and PD/conferences specific to special education and inclusion were focused on (a) teaching literacy and numeracy skills to students with disabilities and, (b) understanding disability traits and characteristics (Morrison, 2014). There is little evidence that these pre-service programs, certificate programs, PD or conferences cover content related to physical activity and/or teaching students with disabilities in PE.

Elementary education teacher education. For elementary school teachers or generalist teachers to receive their education degree, they take a variety of university courses that prepare them for the diverse curriculum and pedagogy in all core subject matter: English language arts, fine arts, health/career life management, mathematics, physical education, science, and social studies (Alberta Education, 2016). As previously noted with special education, there is a similar absence of focus and training on PE in elementary generalist teacher education (DeCorby et al., 2005; Hersman & Hodge, 2010). Many teachers coming from generalist education backgrounds

and instructing in elementary education, feel unprepared to implement PE programs (Ayers & Housner, 2008; Hersman & Hodge, 2010; Ko & Boswell, 2013; Rust & Sinelnikov, 2010). Generalist teachers are often only required (or have the course option as an elective) to take one undergraduate level course that focuses on PE. Many classroom teachers recognize their lack of knowledge in PE because of a lack of specialist training, which has ultimately constrained their implementation of quality PE programs (DeCorby et al., 2005).

Additionally, in-service generalist teachers instructing PE have expressed their limited confidence to teach PE, because their teacher education programs lacked specific training to teaching students with disabilities in PE (Ko & Boswell, 2013; Vickerman & Coates, 2009). Unfortunately, due to inclusive policies and schools that do not have PE specialist teachers, generalist teachers are responsible to teach PE and modify their programs for students with disabilities with no formal training. Hersman and Hodge (2010) state "…there will be increased opportunities for teachers to teach differently abled students...determining, analyzing, and theorizing on the beliefs of GPE [General Physical Education] teachers is critical to the preparation of future teachers and the professional development of current teachers" (p. 732). The literature does not reveal the level that undergraduate pre-service elementary PE courses discuss and provide information on inclusion in PE. However, we can assume by the lack of training for PE in general (DeCorby et al., 2005; Hersman & Hodge, 2010), that there is an associated lack of training for IPE.

Physical education teacher education (PETE). In respect to PETE programs, which refer to programs that teach PE specialists most often in secondary education, the emphasis on inclusion in courses and overall degree programs is similarly deficient to generalist or elementary teacher education programs. PETE pre-service teachers are typically only required to

take one course toward adapted or IPE (Ayers & Housner, 2008). Jin, Yun, and Wegis (2013) warn, "Future physical educators' competencies for teaching students with disabilities depend on how well physical education teacher education (PETE) programs provide disability related knowledge and experiences" (p. 373). PETE programs vary in the methods (lectures, practical application, practicums, etc.) and course offerings for pre-service teachers to learn and practice inclusion (Jin et al., 2013). For example, programs are limited in the amount of practical experiences and content knowledge for teaching students with disabilities in PE (Morley et al., 2005; Vickerman, 2007). Jin et al., (2013) state, "It is critical that PETE curriculum need to be partially or entirely restructured to systematically integrate knowledge, skills, and experiences on inclusion issues. Ultimately, this integration will provide sufficient training to future physical educators for inclusion" (p. 374). It seems as though both generalist and specialist teachers of PE are limited to the exposure of content and practical experiences related to IPE.

Hodge et al., (2009) explored in-service PE teachers' beliefs about inclusion and teaching students with disabilities. They noted that teachers who had a lack of focus on inclusion in their teacher preparation programs were hindered in their ability to teach students with disabilities. Those teachers, who had sufficient training in their teacher preparation programs, were more able to teach students with disabilities. In-service teachers clearly stated that they needed better and more preparation for inclusion as part of PETE programs (Hodge et al., 2009). Jin et al., (2013) describe that pre-service programs need to shift to incorporate more opportunities to learn about inclusion in PE. As well, it is clear from my review of PD opportunities for in-service generalist or specialist teachers of PE, PD and support are also necessary to improve their teaching of IPE (Morrison, 2014).

Educational assistants background education and training in physical education.

Specific to the Alberta context, EAs are not required to have a formal degree to work in a school district, but employers recommend a high school diploma (Government of Alberta, 2018a). Many EA programs do not require courses on interacting with specific curriculum and pedagogy in subject areas such as IPE. Maher (2016) administered a survey to EAs inquiring about their educational training and qualifications; the majority of the participants did not receive training on IPE during their education. Similarly, Vickerman and Blundell (2012) found EAs had a lack of IPE specific training in their degree programs, but those individuals who sought out additional in-service training on IPE, had increased their competence and confidence to assist in IPE. It is evident that EAs lack training to support students in IPE and therefore, their current participation may contribute negatively or be insufficient to the environment and student learning opportunities (Haycock & Smith, 2011).

Inclusion in Physical Education

To successfully educate, promote, and provide experiences on healthy active living for *all* students, PE programs must be inclusive. The contexts, content, teaching and planning in PE programs have considerable implications for students with disabilities (Morley et al., 2005). As described in the inclusive education section, IPE programs should provide students with disabilities with a sense of belonging, opportunities for skillful participation, and incorporate shared benefits and goals for all participants (Goodwin & Watkinson, 2000). Inclusive programs seek to increase the learning experiences and participation of students with disabilities (DePauw & Doll-Tepper, 2000) while eliminating discrimination in class (Qi & Ha, 2012).

Research on IPE has broadly ranged within the topics of: pedagogical strategies towards IPE such as utilizing peer tutors and curriculum modifications (Cervantes, Lieberman, Magnesio,

& Wood, 2013; Jin et al., 2013; Lieberman, Lytle, & Clarcq, 2008; Park et al., 2014; Smith & Thomas, 2006; Vickerman, 2012), teachers' attitudes/ beliefs/ perspectives towards IPE and students with disabilities (Berry, 2011; Hersman & Hodge, 2010; Hodge et al., 2009; Morley et al., 2005; Block & Obrusnikova, 2007), students with disabilities experiences in PE (Bredhal, 2013; Coates, 2011; Fitzgerald & Stride, 2012; Fitzgerald, 2012; Goodwin & Watkinson, 2000; Hodge & Runswick-Cole, 2013; Spencer-Cavaliere & Rintoul, 2012) and pre-service teacher training, practicum experiences, and perspectives on IPE/adapted PE (Coates, 2012; Perlman & Piletic, 2012; Roper & Santiago, 2014; Rust & Sinelnikov, 2010; Sato & Haegele, 2016; Smith, 2013; Vickerman, 2007; Vickerman & Coates, 2009). The following sections briefly discuss areas that stem from this research and influence my understanding of IPE currently in schools, as well as information that is essential to the creation and implementation of PD for teachers and EAs instructing IPE.

In-service teachers experiences with inclusive physical education. Qi and Ha (2012) reviewed literature on inclusion in PE from 1990-2009 and determined that research on stakeholder perspectives (including teachers, parents, students, and administrators) accounted for over half of the research studies examined in this time frame. It is apparent that teachers' perspectives, in-service and pre-service, are a growing area of research in IPE (Qi & Ha, 2012). Previously, there has been a wide-range of research on PE teachers' attitudes about teaching students with disabilities in North America (Hodge et al., 2009). However, research focused on inclusion programming in schools, specific pedagogy, PD and issues with teacher preparation programs have declined over the last 10 years; new insights to these matters are currently limited (Haegele, Lee, & Poretta, 2015). Qi and Ha (2012) advise that "more qualitative research is needed to examine teachers' perceptions and their influencing factors relevant to effective

inclusive practices" (p. 267); they specifically suggest to review inhibiting factors to in-service training, pre-service teacher preparation, and information specific to students disabilities. Therefore, research exploring teacher supports, PD and in-service teachers' experience with IPE-PD is relevant and timely. Additionally, An and Meany (2015) describe that research attention has been minimal on "…listening to teachers' experiences in preparing and teaching inclusive physical education" (p. 144). They highlight, in-service teachers actual planning process and strategies for inclusion is limited and it would be valuable to hear stories about this process of planning to teach inclusion (An & Meany, 2015). Deepening the understanding of teachers' experiences of inclusion by listening to their stories can facilitate new insights into the supports that are needed to develop PD (An & Meany, 2015).

Educational assistants in inclusive physical education. EAs play an important role in both the classroom and gymnasium environments for students with disabilities. In the classroom, Broer, Doyle and Giangreco (2005) found that students viewed EAs as a mother, friend, protector from bullying, and a primary teacher. This view demonstrates that the EAs' role is critical to educating students with disabilities because they impact the social environment, personal relationships, students' identity, student support, networking with peers, instructional variables, and potentially stigmatization (Broer et al., 2005). EAs are helpful 'supports' to teachers and students (Broer et al., 2005; Whitburn, 2013). They have been known to support with: behaviour management, student safety, student transitions, keeping students organized and on task, facilitating relationships/friendships and communication, record keeping for goals, supporting instruction for students, and collaborating with teachers (Bryan et al., 2013; Davis et al., 2007; Fisher & Pleasants, 2012; Haycock & Smith, 2011; Whitburn, 2013).

EAs also play a vital role in IPE. Pederson, Cooley, and Rottier (2014) found that inexperienced teachers of IPE who struggled teaching students with disabilities relied heavily on EAs to assist them in providing support to specific students for quality learning experience. Haycock and Smith (2011) describe that EAs presence in the gymnasium and IPE class has an impact on the learning environment (Haycock & Smith, 2011). When they have a positive attitude, enthusiasm, knowledge, experience in IPE, and the ability to work as a team member, their contributions are beneficial (Haycock & Smith, 2011). EAs support is also effective when they aid with one-to-one teaching, integrate curriculum, and accompany students with multiple diverse needs (Haycock & Smith, 2011; Lieberman & Conroy, 2013). However, EAs roles and responsibilities in IPE are not always clear (Bryan et al., 2013).

Despite the positive impact EAs can have in IPE, numerous barriers remain. Teachers' have voiced skepticism about EAs contributions in IPE and they have noted that some EAs lack the desire to work in IPE and knowledge in the subject area (Haycock & Smith, 2011). It is also difficult for EAs to know their roles and responsibilities in PE because of department separation, which inhibits communication between them and teachers of PE (Haycock & Smith, 2011). Morley et al., (2005) found that some teachers rarely had EAs in the IPE class because of their lack of training. Teachers felt EAs would be better off elsewhere because their participation wasn't essential in IPE if they didn't know what to do or how to help (Morley et al., 2005).

Davis et al., (2007) suggest that if PE is within a student's individual program plan, which it should be, EAs "…should serve to support that instruction as well regardless of instructional setting" (p. 73). Additionally, EAs "…spend more time with their students than anyone else in the school…and have a wealth of knowledge pertaining to their specific child" (Haegele & Kozub, 2010, p. 3). EA's expertise regarding students with disabilities becomes

fundamental for successful IPE. However, their limited education and training in IPE presents many barriers that emerge with their participation, attitude, and knowledge in IPE (Davis et al., 2007; Maher, 2016; Morley et al., 2005).

Recently in the IPE literature, the topic of utilizing EAs to help teachers improve learning outcomes in IPE is growing (Bryan et al., 2013; Haegele & Kozub, 2010; Lieberman & Conroy, 2013; Maher, 2016; Pederson et al., 2014; Vickerman & Blundell, 2012). The roles of teachers and EAs in IPE are constantly changing; teachers and EAs together are imperative to IPE but still under studied (Maher, 2016). EAs need to be educated in and involved with their students in IPE. Maher (2016) states that EAs desire training in IPE, which can help foster a more inclusive environment for children in IPE. Furthermore, EAs need to collaborate with teachers to enhance the IPE environment and successfully support students with disabilities (Bryan et al., 2013; Piletic, Davis, & Aschemeir, 2005). Qi and Ha (2012) suggest that research studies should take into account EAs' previous educational and personal experiences, as these elements have an influence on the future training necessary to support their development in PE. Successful inclusion is dependent on teachers and EAs working *together*. Bryan et al., (2013) suggests "In order for the successful inclusion of students to take place, more training and collaboration is needed within teacher teams and roles need to be unambiguous" (p. 182). If we want more successful IPE programs then EAs need to, "…become familiar with inclusive practice in a PE context, and PE teachers need to be aware of the potential for using support staff [EAs] to enhance learning" (Morley et al., 2005, p. 103).

Professional Development

Formal and informal learning are both recognized as influential elements to support teaching and professional practice. Teachers engage with learning activities that increase their

knowledge, skills, and contribute to personal growth (Desimone, 2009). These activities are considered PD or supportive measures that enhance teachers' instructional practice and ongoing learning (Borko, 2004). PD experiences can range from workshops, conferences, formal structured sessions, or in-service days (Desimone, 2009). As well, PD can be informal discussions and collaborations with colleagues or self-driven discovery of resources online to support for their knowledge and practice (Desimone, 2009).

PD can be separated into 'traditional' PD or 'reform' PD (Garet, Porter, Desimone, Birman, & Yoon, 2001). Traditional PD is a set time that occurs off-site from a school and has little practical/integrative support (Garet et al., 2001). Reform PD is during a school day and includes integrated practice with other professionals that help connect new learning to existing practice (Garet et al., 2001). In current educational practices, there is a shift away from the traditional type of PD - implemented by outsiders intruding in the classroom practice to impose provincial or board initiatives that do not align with teachers wants and needs are viewed to be ineffective (Armour & Yelling, 2004). Instead, PD should be geared towards listening to the voices of teachers in order to collaborate at the ground level and provide valuable, relevant PD for their particular situations (Armour & Yelling, 2004). Casey (2013) suggests, PD "…should be about the assimilation of knowledge rather than merely its gathering" (p. 79). Betchtel and O'Sullivan (2006) describe,

> Providing quality PD is a complicated process…There are few systems in place to allow teachers to build a coherent set of PD experiences. In reality, teachers patch together a diverse curriculum of PD…Some pursue any opportunity to learn with passion whereas others attend workshops when mandated by the school principal. (p. 377)

Instead of trying to infiltrate a complex school setting with one-time PD opportunities telling teachers how to do their jobs, PD programs for teacher development should be focused in teachers' classrooms to support practices, attitudes, and the learning outcomes of students (Guskey, 2002). With the increased complexity of teachers' lives and additional responsibilities, it makes it challenging for in-service teachers to seek support to improve the quality of instruction and planning for every one of their subject areas (Armour & Yelling, 2004). There are many pieces to the puzzle of PD to consider. Teachers have different views on what is effective, efficient, and desired when it comes to PD. It is evident that teachers want to make a difference in their students' lives; however, they are more focused on developing their own practice and strategies to support their students rather than outside initiatives (Armour & Yelling, 2004). Therefore, teachers should be more involved in determining what knowledge is of most worth to them for PD with communication of outside initiatives being clear, not overbearing (Armour & Yelling, 2004).

Professional development in Alberta. In Alberta, The Alberta Teachers Association (2015a) holds teachers who are certified with the board to certain PD standards. Teachers are required to meet and commit to the demands of both individual and district PD plans. Tensions may rise when it comes to teacher PD initiatives because both personal growth plans and school jurisdiction plans need to be fulfilled to adhere to ATA guidelines (The Alberta Teachers Association, 2015a). The system for PD in the Alberta's education system is as follows: the Alberta government mandates the curriculum but not PD; school jurisdictions mandate district priorities and PD, such as local PD days and school based training; the ATA encourages professional growth through professional growth plans and sponsors teachers conventions along with outside PD initiatives (The Alberta Teachers Association, 2015a). The Alberta Teachers

Association (2015a) views PD to be the effective measure for both teacher personal development *and* to introduce external tasks to teachers. All of these measures are helpful approaches to teachers on-going development, however, Armour & Yelling (2007) describe teachers should be central to the topics and support provided as PD.

Additionally, EAs are not mandated to participate in PD like teachers who are ATA members. EAs are part of the Educational Services Industry: National Occupational Classification 4413: Elementary and secondary school teacher assistants (The Alberta Teachers Association, 2015b). However, "school boards simply invite support staff to participate in professional development activities that have already been organized for teachers rather than arrange staff development activities specifically tailored to the needs of support staff" (The Alberta Teachers Association, 2015b, p. 7). There is no guarantee that EAs and teachers are attending PD together and knowledge on EAs opportunities and willingness to participate in PD is not explained in the literature (Maher, 2016).

Professional development in physical education. In-service teacher training has not always been widely accepted or provided in PE (Armour & Yelling, 2004). PE teachers have also been labeled as having little engagement or being passive with PD (Armour & Yelling, 2004; Hastie, MacPhail, Calderon, & Sinelnikov, 2014). The current body of research on PD in PE (PE-PD) focuses on teachers' challenges and experiences with PD programs. An emphasis has been placed on discussing ways to support PE teachers career-long PD (Jess & McEvilly, 2015; Makopoulou & Armour, 2011) and reviewing literature on learning practices for professional growth and effective measures for PD programming (Armour, 2006). Other research studies have been focusing on teachers' perceptions of PE-PD (Elliot, Atencio, Campbell, & Jess, 2013; Elliot & Campbell, 2015; Harris, Cale, & Musson, 2011).

Sometimes, the goals of PE-PD are perhaps over-ambitious as they include not only improving teaching and planning in PE but also to impact broader educational goals such as raising standards, improving the whole school, and advancing health and physical activity programs (Armour & Duncombe, 2004; Armour & Yelling, 2007). Common themes in PE-PD research also relate to improving pedagogy/PE instruction and content specific areas in PE such as gymnastics training or sports certification programs (Patton, Parker, & Pratt, 2013). Teachers of PE have expressed having challenges with instruction, knowledge on the various PE dimensions, and skills to implement the full curriculum (Rink, 2010; Tsangaridou, 2012).

Most research in the area of PE-PD comes from Europe and the United States and has been geared towards implementing PD programs focused on new curriculum mandates in PE or introducing curriculum models. According to Coulter and Woods (2012), PE-PD "is now seeing a shift in interest towards PD that is aligned with classroom conditions, school contexts and teachers' daily experiences" (p. 330). Their study involved implementation of a 6-week PD program to a whole school in Ireland based on the belief that high-quality, sustained PD with supplementary resources could influence positive change in teaching (Coulter & Woods, 2012). Coulter and Woods (2012) found that their PE-PD program supported teachers and students knowledge development in PE, resources were sought to be a good starting point for teacher learning in PE, and a collaborative, on-going process was necessary for sustainability. McCaughtry et al., (2006) also looked at what 'successful PD' might be like for teachers and what success might mean for those teachers' instructional practices. Their findings showed that teachers recognized the importance of resources to accompany and support the curriculum change endeavours in their schools (McCaughtry et al., 2006). They also suggest resources be

tailored to the specific context and various environments for teaching PE (McCaughtry et al., 2006).

Another key area emerging in the PE-PD research community is elementary and middle school teachers' experiences with PE-PD. Sears, Edgington, and Hynes (2014) explored the degree to which middle school teachers' education and experiences in PD influenced the application of: state or national standards, choice of curriculum, and participation in current initiatives as they relate to PE. The authors found that few opportunities *still* exist; coaching responsibilities interfere with participation in PD; and PE teachers face conditions that challenge curriculum implementation (Sears et al., 2014). A study on primary school teachers' experiences of PE during initial teacher training (ITT) identified that there was a limited knowledge in the subject and teachers also lacked confidence when instructing PE (Harris et al., 2012). Both of these studies advise that more middle school teachers and primary teachers need to be recruited for PD opportunities (Harris et al., 2012; Sears et al., 2014). Unfortunately, PE-PD opportunities seem to fall short for elementary and middle school generalist teachers (Sears et al., 2014). Therefore, there are greater chances that generalist teachers who are teaching PE have even less education, confidence, and opportunities to instruct effective PE for students (Hastie et al., 2014). Elementary and middle school teachers training for PE is diverse based on their degree program and previous experiences, higher standards and compulsory qualification for teachers need to be considered (Harris et al., 2012; Sears et al., 2014). In addition to increasing the standard of education for teachers in PE, more time must be dedicated to teaching, learning, and developing PE programs in schools (Harris et al., 2012; Sears et al., 2014).

Professional development for inclusive physical education. Over the last 10 years, researchers have been advising from the future directions of their research that school

boards/districts implement PD programs and make PD opportunities on IPE readily and regularly available for practitioners (Bryan et al., 2013; Hodge et al., 2009; Maher, 2016; Qi & Ha, 2012; Vickerman, 2007; Vickerman & Blundell, 2012). There are minimal supports for teachers, including situation-specific provisions and "…personnel, such as classroom assistants, opportunities for collaboration, additional training and administrative support, with regard to planning time, class loads, teacher workload and school-wide support of inclusion" (Berry, 2011, p. 629). Hersman and Hodge (2010) state, "Effective professional development is no less important for teaching differently abled students in physical education" (p. 753). Morley et al., (2005) found that teachers had some inclusion PD but it did not focus on PE. A teacher described their PD inclusion stating, "It was on general classroom lessons…not relevant to what we do down here [in PE]" (Morley et al., 2005, p. 100). Hodge and Akuffo (2007) also found teachers had some opportunities for PD in PE however, the workshops they attended were focused on general PE programming not adaptive or IPE.

Generalist IPE teachers need PD to "…help them shift their thinking and their practice to ensure better-quality physical education teaching and programming for the children and youth they serve" (Bechtel & O'Sullivan, 2006, p. 378). Vickerman and Blundell (2012) suggest that in order for IPE to improve, IPE specific training needs to be addressed for EAs and for teachers and EAs to have training together would be a beneficial multi-disciplinary approach to IPE. As for the focus within IPE-PD, Davis et al., (2007) describe that the training for EAs in IPE "…needs to include skills that promote activity implementation and game modification, and not issues related to assessment or IEP development" (p. 82). In a survey to generalist IPE teachers on PD *needs* for IPE, Rosenfeld (2011) found that the focus should be on the following: inclusion techniques, knowledge of disabilities, and teaching and instructional strategies. He also

determined that the IPE specialists and generalist IPE teachers did not have much difference in the needs they were seeking through PD. Therefore, supporting instruction, ideas, strategies, and content knowledge is essential to provide for all practitioners in IPE-PD (Morrison, 2014; Rosenfeld, 2011).

From the recent literature, we know that practitioners continue to desire PD in this field, such as the Haegele, Hodge, Filho and de Rezende (2016) study investigating how Brazilian PE teachers' attitudes were influenced by a two-day PD workshop on inclusion and teaching students with disabilities. They found that practitioners expressed agreement and desire for more PD opportunities "…such as the APA [adapted physical activity] workshop, with a focus on strategies for teaching students with various disabilities" (p. 34). Additionally, Sato and Haegele (2017) examined in-service teachers' PD experiences during and after and online adapted PE graduate learning experience and determined PD communities began to form via their PD implementation, which allowed practitioners to become mentors to colleagues. Therefore, it is necessary to evaluate these PD programs and determine IPE qualities of PD to be disseminating wider to both teachers and EAs working in IPE. Additionally, it would be of interest to see teachers and EAs PD experiences together, to determine how best to support these professional learning communities and mentorship for IPE.

Efficacy of professional development for inclusive physical education. Exploring effective IPE practices is also essential to strengthen programs and teachers pedagogy for students learning. Teachers, who have discussed having a lack of education and support for IPE, displayed a lack of confidence and efficacy towards teaching students with disabilities in their IPE class (Hodge et al., 2009). Unfortunately, planning for students with disabilities, strategies on how to include all students, practitioner patience, time for instruction, safety considerations,

and managing the learning environment in IPE are all difficulties for teachers enacting IPE programs and practices (Hodge et al., 2009; Ko & Boswell, 2013).

The experiences of teachers to instruct IPE can be transformed with PD (Ko & Boswell, 2013; Morley et al., 2005). Martin et al., (2008) found that PD for PE teachers could support their efficacy when teaching motor skills, physical activity and fitness, and personal/social development for students. Fishman et al., (2003) implemented PD initiatives in science education and discovered that teachers frequently used material and strategies learned in the PD sessions in their practice. Providing opportunities for PD can help practitioners gain the competence and confidence they need to teach IPE. Garet et al., (2001) suggests specific content to curriculum, hands-on active learning, and integration of PD into daily life of schools can produce and enhance knowledge and skills of participating teachers. Therefore, specific strategies, workshops, and PD geared towards teaching students with disabilities in IPE are necessary as they can improve teachers' attitudes, perceptions, and practice in IPE (Hodge et al., 2009). IPE requires teachers to be open-mind and have a positive attitude, however teachers are not necessarily displaying these qualities and therefore are struggling to meet the needs of all students (Vickerman & Hayes, 2013). Teachers need to be ready to adapt, modify, simplify, and extend their instructional practice for all students in IPE (Vickerman & Hayes, 2013). Proper support needs to be given to teachers, so they can use these skills and provide students with disabilities the proper support in IPE to be successful (Block & Obrusnikova, 2007).

Communities of practice and professional development. In PE specific PD, communities of practice are an emerging concept and supportive tool for PD as they are a way to allow teachers to learn together while they also support each other in the process (Armour et al., 2015). They are groups of people informally bound together whose passion for a topic energizes

the community and collaboration (Lave & Wenger, 1991). When a group of people interacts, in the physical environment and social environment, they create a learning space - or a community. The community then becomes a collaborative process where practitioners make the effort to share and provide intellectual and social leadership to one-another (Lave & Wenger, 1991). Communities of practice can be influential to support teachers working relationships and collaboration for teaching in schools (Armour & Yelling, 2004). They "…generate knowledge and understanding that are different in kind from that produced by individuals alone" (Armour & Yelling, 2004, p. 109). Communities of practice should not be forced upon teachers but rather, come from shared interests between colleagues who are willing to collaborate. Communities of practice influence learning; they are "…a way of being in the social world, not a way of coming to know about it" (Lave & Wenger, 1991, n.p.).

The evidence of collaborative learning and generating professional/teacher networks is critical to PD (Keay, 2006). Armour and Yelling (2007) suggest research in PE-PD should explore the "importance of recognizing and finding ways to build upon teachers' tentative but highly valued professional learning networks or communities" (p. 193). The networks and communities should also involve a team approach or multi-disciplinary team (Vickerman & Blundell, 2012), often taken in IPE. Communities of practice are essential to my research as the in-service teachers of IPE and EAs in my study will hopefully form a community around their interest and need for support in IPE. Communities of practice can facilitate EAs to work as part of a team with teachers (Fisher & Pleasants, 2012). Informal learning communities with practical implications are more effective for practitioner learning in PE and a team approach can benefit the learning environment (Park et al., 2014). Doing so, can bring forward the social, professional,

and discourse communities within and amongst schools to utilize and support teachers through PD (Armour & Yelling, 2007).

Darling-Hammond and McLaughlin (1995) indicate, “Teachers need opportunities to share what they know, discuss what they want to learn, and connect new concepts and strategies to their own unique contexts” (p. 1). Communities of practice could promote online interactions and sustainability of collaboration of colleagues (Berry, 2011). Communities of practice should be established in the PD agenda to reinforce learning in practitioners’ context, based on their collaborative assessments and the learning needs of their students (Armour & Yelling, 2007). Parker et al., (2010) describe, communities of practice are “meaningful, purposeful, and revolve around authentic tasks” (p. 338). Parker et al. (2012) also highlight that communities of practice in PD promote a supportive and safe environment for all. Parker, Patton, Madden and Sinclair (2010) explored the development and maintenance of a community of practice among elementary PE teachers implementing curriculum. They found that communities of practice were able to be created and maintained because of facilitation to three main areas: a domain of shared interest, social interactions to build personal and professional relationships in community, and sharing resources and developing a shared practice together (Parker et al., 2010). Communities of practice, if facilitated and planned properly (Parker et al., 2010) can be an effective means to engage colleagues in critical discussion and planning. Practitioners working collaboratively need to come together with a shared interest - student goals and teacher perhaps - to discover the questions they have about their practice; to share and seek out supports for learning and teaching; and to discuss their experiences to support their collaborative practices to implement IPE effectively.

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Chapter 3: Paper 1 - Interpretive case studies of inclusive physical education: Shared experiences in diverse school settings

Abstract

To the authors' knowledge, the research reported in inclusive physical education (IPE) literature is limited to exploring teachers' and educational assistants' (EAs) experiences working together in a joint classroom environment. Teachers' and EAs' experiences can be misunderstood when their stories are not heard in context, together, or compared to other stories and situations. The hermeneutical and interpretive research in this article involved learning about IPE experiences from three diverse cases, which involved three in-service teachers and three EAs. Data gathered included class observations, formal (interviews and focus groups) and informal dialogue with participants, and crafting case/participant portraits. The information learned through these processes was analyzed to develop themes. The themes provided thick descriptions of participants' stories and situations to shed light on the question "what can we learn from practitioners' experiences with IPE?" The findings highlight three issues: how teachers' and EAs' training and background education, along with their practical experiences and support from other EAs, contribute to the implementation of IPE; how teachers' and EAs' past physical education experiences and current engagement with physical activity impact their teaching/assisting in IPE; and how the planning and choice of activities influences student participation in IPE. Overall, experiences of IPE are dependent on an individual's past experiences, education/training, and current IPE situations. To improve IPE implementation, teachers and EAs need practical and contextual professional development (PD) that considers activities that are appropriate for their prior knowledge and experience and for their students.

Keywords: inclusive education, physical education, educational assistants, in-service teachers, case study, professional development

Introduction

Education in Canada is governed by the provinces and territories; hence, school districts may have different approaches and procedures. One common theme and approach that has been flourishing uniformly across the country is inclusive education (Lyons, Thompson, and Timmons 2016), meaning educational strategies designed to address and respond to the diverse needs of all children in schools (United Nations Educational, Scientific Cultural Organization (UNESCO) 2009). In Alberta, the education system encourages a values-based approach to include all learners, which requires school boards to enroll and support the needs and rights of all learners in the province (Alberta Education 2018). Inclusion in this context means not only access, appropriateness, and accountability. It is also an approach and an attitude that focuses on equal opportunities for all learners (Alberta Education 2018). Schools have their own unique characteristics. Consequently, inclusive education can differ from one school setting to the next. Lyons, Thompson, and Timmons emphasize this diversity of school inclusion by stating that in their province, inclusion is on a 'continuum,' which includes

> [having] classrooms in which all students are authentically engaged and learn together with the requisite supports, to separate classes for students with disabilities and/or behaviour disorders, to separate schools for students with intellectual and multiple disabilities. (Lyons, Thompson, and Timmons 2016, 891)

Since curriculum is a provincial responsibility, the physical education curriculum across Canada differs from province to province. Kilborn, Lorusso, and Francis analyzed the curriculum aim statements from Canadian curricula and determined that 'acquiring the knowledge, skills, and attitudes for healthy active living (or lifestyle, or for life) through physical activity is the primary stated aim of physical education programmes' (2015, 7). In Alberta, Kindergarten to

grade 12 physical education programs clearly align with the Kilborn et al. parameters. The aim in Alberta 'is to enable individuals to develop the knowledge, skills and attitudes necessary to lead an active, healthy lifestyle' (Alberta Learning 2000, 1). Bringing inclusion and physical education together (what is referred to as 'inclusive physical education' (IPE) in this study) means achieving the participation of students with disabilities in physical education programs, curricula, and contexts (Qi and Ha 2012). IPE supports having students with and without disabilities participate in class together (Block 2007). Goodwin and Watkinson (2000) support moving IPE beyond simply having students with disabilities present in the environment to providing students with a sense of belonging and opportunities for skillful participation. They also support incorporating shared benefits and goals for all students in the class. IPE is an environment, attitude, and approach that seeks to eliminate discrimination in class while providing positive learning experiences that are engaging for all (Qi and Ha 2012). It is critical to provide all students in IPE with a program that includes a breadth and depth of movement experiences[i] and social activities that are meaningful, joyful, and developmentally appropriate. But given the uniqueness and diversity of inclusive education and the dynamic nature of physical education, what do we really know about what IPE could or should look like?

Research has explored teachers' attitudes, beliefs, and perspectives regarding IPE and students with disabilities (Berry 2011; Hodge et al. 2009; Morley et al., 2005; Block and Obrusnikova 2007) and has investigated educational assistants' (EAs) experiences and the utilization of EAs in IPE (Bryan et al. 2013; Haegele and Kozub 2010; Haycock and Smith 2011; Maher 2016; Vickerman and Blundell 2012). To our knowledge, however, little is known about the IPE experiences of teachers and EAs who work in the *same* classroom environment. The main purpose of this study, therefore, was to explore the IPE experiences of in-service teachers

and EAs who work in the same classroom environment. Understanding the experiences of practitioners working in the same environment can provide insight into their collaboration and situations of IPE. Having experiences from both teachers and EAs contributes to a holistic perspective on the various IPE environments.

Literature Review

Research indicates that contexts, content, teaching, and planning in IPE programs have considerable implications for students with disabilities (Morley et al. 2005). Haegele, Lee, and Poretta (2015), note that research focused on inclusion programming in schools, specific pedagogy, professional development, and issues with teacher preparation programs have declined over the last several years. An and Meany (2015) found that little is known about in-service teachers' actual planning process and their strategies for inclusion. It would therefore be valuable to hear more stories from teachers about this process of planning to teach inclusion (An and Meany 2015). Overton, Wrench, and Garrett (2017) recently explored pedagogical practices for IPE and found that 'building positive supportive relationships, adapting equipment, activities and environments and negotiating differentiated learning experiences' are supportive pedagogical strategies (423). It seems there is increasing research and inquiry regarding pedagogical and inclusive programming in IPE, but we still know very little about the collaborative instructional relationship between teachers and EAs involved in IPE. Bryan et al. (2013) write that 'in order for the successful inclusion of students to take place, more training and collaboration is needed within teacher teams and roles need to be unambiguous' (p. 182).

In Alberta, EAs are not required to have a formal degree to work in a school district, though employers recommend a high school diploma (Government of Alberta 2018). Many EA programs do not require courses on interacting with specific curricula and pedagogy in subject areas such as IPE. EAs have expressed having a lack of knowledge in the area of physical

education and training for teaching students with disabilities in IPE (Maher 2016; Vickerman and Coates 2009). Yet EAs play a critical role in educating students with disabilities because they impact the social environment, personal relationships, student identity, student support, student networking, instructional variables, and levels of stigmatization (Broer et al. 2005).

EAs' responsibilities in IPE include aiding with instructional support; curriculum integration, behaviour management, and safety; relationship/friendship and communication facilitation; record keeping for goals; and collaboration with teachers (Bryan et al. 2013; Fisher and Pleasants 2012; Haycock and Smith 2011; Lieberman and Conroy 2013; Whitburn 2013). Because EAs spend countless hours working with students with disabilities, their knowledge and experience are invaluable (Haegele and Kozub 2010). Pocock and Miyahara (2018) found through their meta-analysis of qualitative research on IPE that IPE

> is a process of dynamic collaboration with a comprehensive network of support personnel… not only do PE [physical education] teachers contribute to the development of effective inclusive environments, but the support of the SWD [students with disabilities], their parents and teacher aides [EAs] is essential. (761)

Both teachers and EAs play critical roles in IPE. Fisher and Pleasants (2012) found that in order to understand the collaborative efforts of teachers and EAs in inclusive classrooms, EAs' voices must be heard. It is imperative to hear stories from all practitioners[ii]—teachers and EAs—immersed together in the planning, maintenance, and teaching of inclusive classrooms (An and Meany 2015; Berry 2011). Therefore, to reiterate, the main purpose of this study was to explore the IPE experiences of in-service teachers and EAs who work in the same classroom environment. Inquiry into these practitioners' experiences can provide a holistic perspective on the various IPE environments and collaboration between teachers and EAs in IPE.

Theoretical Framework

Dewey's theory of experience was used as a theoretical framework in this study to help inform the participants' conceptions and researchers' interpretations of IPE experiences. An experience can be either educative or mis-educative. Educative experiences are those that lead to further growth (Dewey 1938). Mis-educative experiences do not promote growth; rather they have '…the effect of arresting or distorting the growth of further experience' (Dewey 1938, 25). Practitioners in this study were encouraged to examine their past and current experiences to determine the quality of those experiences—educative or mis-educative. Through narrative inquiry, Schaefer (2013) used Dewey's theory of experience to examine his past and determine to what extent it was connected to his identity and lived pedagogical practices in physical education. Gleddie and Schaefer (2014) also used Dewey's theory to inform how their past 'educative' experiences shaped their pedagogical practices as physical education teacher educators. Dewey's theory was chosen for the present study because it draws attention to the relationship and qualities between past, present, and future experiences and it allows practitioners to reflect upon those experiences (Dewey 1938).

Dewey's theory of experience also provided a lens to help us understand how the participants felt about and describe their current situations with IPE. Dewey explains that, 'an experience is always what it is because of a transaction taking place between an individual and what, at the time, constitutes his [or her] environment…' (Dewey 1938, 43-44). The transaction that takes place is known as the *situation*—the unity between the person and their environment (Dewey 1938).

Quennersted, Öhman and Öhman's (2011) use a Deweyan lens in their research on learning in physical education, as it informs the transactions that take place between human

beings, their actions and the places in which the experiences occur. One of the criterion of interaction in Dewey's 1938 theory, is that we connect with objects and people in both our physical and social surroundings, and that this connection influences whether or not an experience is worthwhile and has led to growth. Experiences are living happenings that occur in the entire environment (i.e., both within and outside a person) (Dewey 1938). The experiences in this study were deductively analyzed to determine external and internal factors that contribute to the practitioners' experiences of IPE. The theory grounds the participants' experiences in local contexts to help readers understand the nature of experiences in the practitioners' dynamic environments and help inform the reconstruction of future educative IPE experiences.

Research Design

Methodology: Hermeneutics and Interpretive Case Studies

To investigate the participants' experiences with IPE, a hermeneutic methodology and an interpretive case study design were chosen. Hermeneutic research seeks to capture the wholeness of experiences within context (Patterson and Williams 2002). A hermeneutic methodology encourages a dialectical conversation between the researcher, participants, and specific cases during the research process (Ellis 1998). What we know and how we know what we know, are elements of an interactive process involving the researcher, participants, environment, and the phenomenon of interrelating with one another (Smith 1991). To the authors' knowledge, hermeneutics is not widely used in physical education or inclusive education research; we chose it for this research as it embraces researchers as primary instruments in the interpretative process (Patterson and Williams 2002). Hermeneutics encourages researchers to outline their self-awareness in their role of the research to understand how they are interpreting participants' meanings and experiences. Hermeneutics also entails an ongoing and systematic analysis to

generate knowledge about situations (Packer and Addison 1989; Patterson and Williams 2002). This inquiry into in-service teachers' and EAs' experiences with IPE followed three key tenets of hermeneutic research: (a) interpreting the data holistically for meaning, not classification; (b) uncovering part-whole relationships by engaging in the hermeneutic circle analysis and reading individual case stories as parts of the larger conceptions of IPE experiences; and (c) recognizing the role that language played to understand the discourses that participants used in relation to their everyday lives (Schleiermacher 1819 as quoted in Smith 2002). More detail on the analysis and interaction with data is included in the analysis section.

Patterson and Williams (2002) write that 'hermeneutic research encourages a strong focus on individual cases and specific occurrences of a phenomenon' (25). Case studies are widely used in numerous disciplines because they make it possible to investigate complex units with multiple variables (Hodge and Sharp 2016), as well as compare cases or personal experiences (Armour and Griffiths 2012). Case studies offer a comprehensive and holistic view of a person, place, or group (Merriam 1998). Interpretive case studies provide rich detail about contexts, current situations, and participants' perspectives within and across the cases—this is found in most qualitative case studies (Stake 2005). However uniquely, interpretive case studies are meant to gather as much rich, detailed information to ultimately theorize about and analyze and interpret a phenomenon (Merriam 1998); this is in contrast with qualitative case studies that are simply descriptive (they present a phenomenon) or evaluative (they include judgment) (Stake 2005). Interpretive case design was chosen for this research because it is more appropriate. Interpretive case studies 'are used to develop conceptual categories or to illustrate, support, or challenge theoretical assumptions held prior to data collection' (Merriam 1998, 38). Interpretive

case studies encourage interpretation of the participants' experiences in order to illustrate and challenge theoretical assumptions within cases, across cases, and in relation to IPE.

Data Collection

The case studies took place at three urban schools located in a Western Canadian province. Participants were purposefully selected (Patton 2002) and included three IPE teachers and three EAs who worked alongside the teachers. The inclusion criteria for participant selection were that the participants were interested in sharing their experiences with IPE and were currently in a teaching or EA position working with students with disabilities in an IPE class. Participant demographic information will be provided in the case context and participant portrait section. The institutional ethics review board approved collection procedures and informed consent was received from each participant. For anonymity purposes, pseudonyms have been given to the schools, students, and participants.

Hermeneutic research supports methods of data collection such as observation and interviews to gain a deeper understanding of the research questions (Patterson and Williams 2002). 'Hermeneutic researchers use qualitative methods to establish context and meaning' (Patton 2002, 115). Qualitative research exploring experiences and perceptions in IPE use interviews as a primary data source (Haycock and Smith 2011; Hodge et al. 2009; Maher 2016; Morley et al. 2005). We have chosen to use observation methods, individual interviews, and focus group interviews for data triangulation and for an opportunity to gain a deeper understanding of the participants' experiences from their contexts, situations, and stories. Engaging in focus groups that bring together teachers and EAs is unique to this study. To our knowledge, most IPE studies have completed separate interviews with teachers and EAs rather

than bringing these practitioners together in conversation. The focus groups provided a chance to explore IPE situations from two perspectives in the same classroom environment.

Data collection spanned over three-and-a-half months beginning with observations of each case to understand the whole school environment including classroom spaces, gymnasium, and outdoor spaces used in IPE (four full school days per case). Next, the participants in each case were individually asked to discuss their experiences with IPE in one semi-structured interview that lasted approximately 60-90 minutes. Additional classroom environment and IPE practices were observed at each case following the interviews. Lastly, we conducted a small focus group interview for each case. We met with the teacher and EA from the same school in a collaborative conversation for approximately 60-90 minutes. The subject of the focus group interview was a discussion about the participants' perspectives and experiences of IPE in their context together.

Data Analysis

The hermeneutic analysis involved crafting narratives about each participant. These narratives were designed to help identify themes in the data by looking for social meanings from the interviews, the potential complex discourse discussed, and the part-whole relationships in the research (Mishler 1986; Packer and Addison 1989). The hermeneutic circle was used throughout the study to understand the interplay between the interpretations, analysis, and understanding of the research (Ellis 1998). The hermeneutic circle is an interpretive process continuously reframing an initial inquiry question and going back to the data to ask new questions. It is a journey to uncoverings and new findings. An uncovering is an unexpected finding, which leads the researcher to new thinking, understanding, and questioning for the next inquiry (Ellis 1998) We looked at our own preoccupations, assumptions, motivations, beliefs, and interests followed

by evaluating our initial interpretations to uncover gaps, surprises, and themes from the big ideas that were found (Ellis 1998). Specifically, following a transcription of the interview data and reading the data holistically, we wrote narratives to create portraits for a holistic sense of each participant and to capture the participants' experiences from their stories (Ellis 1998). We also created portraits for each case context for insight into the site culture in which the research took place. After creating the portraits, we continued to review the narratives and data (transcripts, observation and researcher journal notes) to separately identify individual meaning units (stories) into a chart/table format (Table 3.1) for each data set (Friesen and Ellis 2016; Patterson and Williams 2002). We then grouped the meaning units into common topic areas and stories to identify themes for each individual participant as well as the inter-relationships within each case. Lastly, we interpreted and compared the themes across the three cases to determine if there were any shared experiences with IPE.

Table 3.1 Sample Analysis Chart

Person	Context: Interview Question	The story and meaning units (with some ellipses)	Key ideas expressed: motivations, beliefs, values, preoccupations	Possible themes or topics that these key ideas might fit into
Mrs. H	Group 3, Question 1: Overtime, do you recall any big changes in your approaches to teaching physical education?	'Originally I just taught my own PE which was easy for me because I was coming right out of university and finished PE all my classes were in PE. I was pretty passionate about PE and not every teacher was passionate about PE and doesn't see it as importance right so they would be 'what you have a check list? You mark? You have a rubric? You video tape?' it so was easy for me.'	Values: passion She expressed passion about teaching PE when she first started teaching	Possible theme: Background education in PE Topics: PE uni courses Passionate about PE Importance of PE
Mrs. L	Group 4, Question 3: Each day, when you start working with a student with disabilities in IPE, what are some of the things you think about a lot or pay attention to?	'Mainly her safety. Safety would be the first thing. Especially her, other kids maybe not so much but for her and her neck issues she can't be hit so that's very dangerous so right off the bat I have to asses what the activity is to see how safe it is.'	Beliefs & concern: planning Values: she cares about students' safety	Possible theme: Student Safety IPE activities Topics: Safety related to students' disability Safe PE activities Classmates impact on student safety

(Adapted from Friesen and Ellis 2016)

Case Contexts & Participant Portraits

The following section describes the school contexts and portraits of the participants within each case. Patterson and Williams (2002, 16) write that 'the "self" is not a context-free phenomenon, it is a transactional product of individuals and the situations they find themselves in'. The contexts and portraits crafted emphasize the experiences that occurred in each case and were used as an analytical tool to understand the phenomenon of IPE in the diverse environments. The following brief school contexts provide detail on the type of school and student information. The participant portraits (narratives) provide details about each participant. The portraits include teaching/assisting experience, personal characteristics and details about the participants' role, outlook, or approach to IPE and the participants' ideas/philosophies about inclusion.

Case 1, Cobain Junior High

Cobain Junior High is a grade seven to nine school (250 students) with 50% of the youth receiving specialized or individualized learning supports. Participants in this case included a junior high IPE teacher (Mr. D) and an EA (Mr. O).

Mr. D. Mr. D teaches grade seven, eight, and nine boys physical education at Cobain Junior High and has been a junior high teacher for approximately 20 years. In his teaching, he is focused on his students' futures and understanding what will benefit them on their life path. Mr. D's approach to and structure of physical education has changed over the years. His program used to be skill-driven and success-oriented; he expected students to be at a certain skill/fitness levels, which would affect their mark. He now has a program that is more about participation, cooperation, and leadership. The following quote highlights Mr. D's idea of inclusion, which involved having support from EAs to help teach IPE skills to the students:

> Most of the kids need the one-on-one. And when you're in a phys. ed. class and you have to watch 30 or 40 bodies sometimes it's hard to give the kids who need the extra attention what they need. A lot of times IPE is providing the EA tasks or having the equipment to give the kids something to do, for example tactile balls, letter balls, lighter sticks, shorter rackets… I really rely on that EA to basically help teach the skill…

Mr. O. Mr. O is a new EA in his first year at Cobain Junior High. At Cobain Junior High, he works one-on-one with a student named Trevor. During observations, Mr. O was always enthusiastic about his role and he put his heart into his job. Mr. O had never worked with a student with autism before Trevor; at times he felt frustrated in his position because he was not sure what Trevor could do. The following quote highlights Mr. O's idea of inclusion, which involves having students feel accepted and included like everyone else:

> The [students with disabilities] are students like everybody else… I would like all students to be included. That was a good move by Mr. D to go 'Mr. O! Would you like to play with our team?' I'd like to get that from not only Mr. D but from the other teachers. That makes us [Trevor and I] feel like we're actually part of the school.

Case 2, Cash Elementary

Cash Elementary is a small kindergarten to grade six school (120 students) in a low socioeconomic area. The students at Cash have difficult home lives and the teachers in the school want Cash to be a safe place for them. Participants in this case included an elementary generalist and IPE teacher (Ms. B) and an EA (Mrs. L).

Ms. B. Ms. B is a very a poised and positive teacher in her first five years of teaching. She is new to her role at Cash Elementary, teaching grades one to six IPE every morning and grade four social/math in the afternoon. She told us that she wanted all students to experience

play, the outdoors, and to transfer their learning from IPE to recess or after school activities. The following quote highlights Miss. B's idea of inclusion, which is to have students engage with each other and have classmates help modify activities so everyone can participate:

> I think having a lot of students here with high needs has really changed me… before I thought I had to do something separate. I always had to have something ready and the students with disabilities were off to the side, 'here's an activity for them, they are going to be here, and here's a box for them'… right away that separation happened. And now, I have completely changed. It shouldn't look like that because that's not the point. They should be involved in the activities and in the right way. So I think modifying less but allowing the kids [in the class] to adapt it for them.

Mrs. L. Mrs. L is a longtime EA with 23 years of experience. She has had a plethora of different assignments in elementary, junior high, and high school: working one-on-one with students, moving class to class with a group of students, or doing 'whatever the new thing is that the board is following.' She said that her focus as an EA is to read her students' moods and try to get them involved. The following quote highlights Mrs. L's idea of inclusion, which is ensuring that students are safe, having fun, and engaged:

> [Vicky] might be able to participate fully in one activity but another activity it is modified and focuses on her feeling like she's part of the group… Most kids of whatever ability will get involved in the activities, which is great, but you're always going to have that handful of students that you wonder how you're going to balance the participation and social inclusion. 'Okay, make sure these guys are having fun and being safe'.

Case 3, Drake Elementary/ Junior High

Drake Elementary/Junior High is a relatively new school in the district and one that has a lot of space, money, and technology. There are approximately 700 students from kindergarten to grade nine. Students intermingled throughout the school and have access to all resources imaginable. Participants in this case included an elementary generalist and IPE teacher (Mrs. H) and an EA (Mrs. M) working in a grade two class.

Mrs. H. Mrs. H is in her fifth year teaching, currently teaching grade two. She told us that her main focus was getting her students 'to grow, progress, and come out of their shell.' She is confident and passionate about IPE because she feels it is not just something that the students need here and now, but it is a subject that will have a life-long impact. The following quote highlights Mrs. H's idea of inclusion, which is making sure to plan for the whole group so everyone can participate, and to modify for individuals as needed:

> We aren't just focusing on the one student. Start big. Can everyone do that? Maybe then go smaller depending on the student and what their needs are. So making the activities whole class and then making them smaller and smaller so it's just individual… inclusion is not one-on-one, it's 'are you working with everyone' right? So 'have you set her up? Great, now you go circulate…' that person wants to feel independent and be left alone too.

Mrs. M. Mrs. M started her position assisting in Mrs. H's class a year ago. She's proud and excited to have taken on this new adventure in her life but relies on her 'mom sense' as she has limited education as an EA. Her approach to being an EA is to 'get in there and have fun.' Eager to learn, she has a positive attitude towards her job, the students, and IPE. She's always on board to try new or different things. The following quote highlights Mrs. M's idea of inclusion,

which is to ensure that students are safe, having fun in class, and doing activities that allow them to maintain their dignity:

> Inclusive in getting her [Gisele] set up in a safe and fun way in the activity and having her paired up with not just one of her friends, but two. So if we're doing floor hockey, maybe she wont be as strong at passing the puck but having that third student involved still enables the other two students to enhance their skills and she still feels like part of the group and you know the other kids are still getting what they need out of the activity too… As long as she's engaged and happy then that's fine.

Results

The data analysis resulted in three themes: (a) training and background education, with a sub-theme of practical experience and EA support, (b) past physical education experiences and current engagement with physical activity, and (c) planning IPE activities and student participation. These themes were established because they represent the participants' holistic experiences that ultimately influence their teaching and assisting in IPE. The responses from the participants generated information about their backgrounds and current situations in IPE.

Training and Background Education

The participants in this study felt that they weren't prepared and had limited backgrounds or education to teach and assist in IPE. In particular, those who had graduated from teachers' degree programs reported rarely spending time discussing or learning how to teach students with disabilities. 'I am not trained in the way these guys [EAs] are and I'm not sure these guys even have enough training they need for these different kids that come in,' said Mr. D., in a statement that was echoed in some form or another by every other participant. Mr. D also said that he

hadn't taken a university course on inclusion during his undergraduate degree program 20 years ago and that he struggled to figure out how to include students with disabilities in IPE.

> I have had a kid in a wheelchair before and with him I found that super challenging because I had no skills working with a kid in a wheelchair and no knowledge of what to do… I got the feeling that he really didn't enjoy it and to me [that] was the really disappointing part. (Mr. D, interview)

Mrs. H and Ms. B are more recent graduates and had experiences similar to that of Mr. D. They said they learned very little in their physical education teacher education classes about students with disabilities, but did, have a general inclusion course in their education program. The participants associated the difficulty they had 'planning' for inclusion with their lack of preparation for dealing with specific disabilities and the minimal resources 'out there' to support them.

> This year has been harder for me in accommodations because of [my student] Gisele. Even like resources out there are not helpful that in they are talking about kids in wheelchairs that can move their wheelchairs and not talking about a little girl who can barely lift something. (Mrs. H, interview)

As for the EAs' experiences, Mr. O and Mrs. M, relatively new EAs, said that they felt fortunate to both be enrolled in an inclusion workshop and another course on autism through their school district orientation and training. However, they explained, they had heard from other colleagues that taking courses like the inclusion course was rare. Generally, it was up to the school principal to decide if EAs could or should participate in these types of training sessions. Neither Mr. O nor Mrs. M had formal training (college or university degree) to become an EA or work with children in schools. The school district orientation training was the only mandatory

training required for the position. Mrs. L had two years of training in a diploma program but explained that the school district didn't always provide EAs with orientation training. She said that extra opportunities to learn, when they were available, were 'invaluable' in providing preparation and readiness and helped EAs to support students in the ever-changing classroom environment.

Practical Experience and EA Support

It wasn't until the participants experienced teaching students with disabilities in their own classes they realized how difficult it was to plan and include students in IPE. The teachers said they lacked the ability, skills, and in-action experience to teach IPE. However, they explained that they believed that EAs made a difference in how IPE was implementation. Mr. D (teacher) said when it came to teaching students with disabilities he didn't have 'practical experience.' This limited his ability and confidence to modify, communicate, and plan for different student needs and levels in his class. However, he found it helpful to have the support from an EA to help teach IPE. For example, Mr. D knew that one of his students, Trevor, had autism, but he didn't know what autism was or what kind of movement skills someone with autism might need to work on. In his interview, he talked about how he could modify some activities but said that he wasn't sure 'where Trevor was at'. Mr. D also expressed the need for 'starting point activities and information to learn about different disabilities' (interview); he said this was needed because he didn't know what to do for the students and had to rely on the EAs, who had experience, to help him.

At Cash Elementary, Ms. B (teacher) had to adapt her class for various grades (one to six) and diverse student concerns including learning disabilities, developmental disabilities, and physical and gross motor impairments. She had limited experience working directly with

students with disabilities in movement settings; she didn't know their physical limitations or boundaries. The students' skills varied, which made it more difficult for her to plan appropriate activities that matched each of their movement abilities. Like Mr. D, she relied on the EAs to support her. Unfortunately, Ms. B said, not all of the EAs were involved or positive about IPE in her school. Some of her EAs sat on the sidelines and expected the students to do exactly what Ms. B said to do; the EAs didn't modify activities when appropriate. On the other hand, Ms. B said that she had Mrs. L (the EA) who 'gets involved in the activities' and added that 'I learn from watching her modifications and interactions' (interview). Mrs. L's experience with inclusion and working with students with disabilities made her a chameleon of sorts. Mrs. L was an EA who worked in many different IPE settings and with many different students. Her practical experience became valuable to Ms. B and Ms. B learned from Mrs. L by working with her in the class.

Mrs. H (teacher) also said that she wasn't comfortable planning for students in her IPE class who had limited physical mobility. She experienced tension planning IPE because she did not know whether all of the students in her class should be doing the 'exact same thing' or if it was okay for different 'students to work on specific skills separately at times' (Mrs. H, interview). In the past, she had often seen students who needed extra support work separately with an EA but she didn't know the best approach for inclusion and student growth in her class and for her students. Mrs. H used Mrs. M, the EA in her class, to help with inclusion. As a team, they would set up and take down activities and sometimes talk about modifications for a student who had limited mobility. Mrs. H also said that Mrs. M was helpful in that she would 'circulate' to manage behaviour in the class. This enabled Mrs. H to focus on teaching students the skills they needed in IPE class.

The EAs said that they learned 'the ropes' from mentor teachers, colleagues, and from observing the teachers' actions in the classroom. The practical experience of learning happened within the IPE and school environment. Mr. O said in his interview that he had no idea what to do on his first day as an EA, but noted, 'I have colleagues around me where I need instructions and other things to learn from because I mean I definitely don't have all the ideas and knowledge that I need to be an education assistant.' Mrs. M said that IPE had become easier once she had gotten to know Mrs. H's routine and structure. 'When [Mrs. H] goes in I know that it's station time so I put the equipment in this area and spread it out' (interview). The EAs really took learning for their jobs seriously and were certain they wanted more education because they were going 'off the cuff' or using 'mom sense' to do their jobs properly.

Past Physical Education Experiences and Current Engagement with Physical Activity

The participants' past physical education experiences and current engagement with physical activity influenced their teaching and assisting in IPE. These experiences both supported and inhibited their comfort level, confidence, abilities, and knowledge in teaching and assisting in IPE. For example, Mrs. H described her lifestyle as very active; she grew up playing sports. She said when she started teaching, she 'was pretty passionate about physical education and not every teacher was passionate about it…' (interview). Her past engagement with physical education made her feel comfortable with the physical education curriculum. Additionally, her current physical activity routine helped her in her planning. For example, she does yoga in her personal life and teaches it to her students. Similarly, Ms. B is very active in her own life and explained that her lifestyle helped her enjoy moving all day, every day while teaching her students. She also had a pivotal childhood experience that contributed to her attitude towards physical education, which led her to teaching about health and wellness.

> I guess for me it was when my brother got sick… I felt like maybe he was cheated a little bit… he never got that time to be a kid. Being in the hospital and doing all of those things I always thought 'what do these kids miss the most?' It's a lot of activity they are missing…I went to university when he was sick and I was still like 'I don't know what to do' but after, I felt I had a clear path of where I wanted to put my focus, health and wellness. That changed me in a big way...[I'm] appreciative of my own body and appreciative every day when we do get to move it. (Ms. B, interview)

One of the stories that stood out about past experiences with physical education was Mrs. M's; she compared her experiences as a student to her current experience as an EA assisting in IPE. She grew up with sports and was 'comfortable in the gym.' She explained that she was always thinking of ideas to make sure students were participating in the activities. She said, 'gym time is very structured from how I grew up or remembered' (interview). Mrs. M thought the activities had 'too much direction and instruction' and that she preferred activities with flexibility as her style was more 'footloose and fancy free.' She said she wasn't always sure about how to modify activities in the structured IPE environment. Mrs. M said she enjoyed participating with the students and was always interactive with *all* of the students in the class, specially the student she often worked one-on-one with, Gisele. She also explained that she had witnessed her fellow EA colleagues sitting on the sidelines and not participating in IPE. She said in her interview that, 'A person that doesn't have that [background with physical activity] or the ability, would be a deer in headlights in a gym or with a hockey stick.' She talked about how it was important for her to keep positive in IPE and *show* the kids that it could be fun to get them engaged. In contrast with these participants' experiences, Mr. O said that he wasn't confident assisting in IPE and identified himself as 'not an athletic guy.' He said that he found IPE to be a

challenge to plan for as an EA and he didn't even know how to do some of the activities properly. For example, in the hockey unit, he wasn't sure how to hold a hockey stick properly. However, he said that he found the specific activities of dancing, running, and stretching easy to help teach because he could do those activities and he enjoyed them.

Planning IPE Activities and Student Participation

The participants in this study believe that the types of activities that were being taught impact student participation in IPE. At Cobain Junior High, Mr. D's physical education year plan was built around extracurricular sports teams and was fairly traditional with units like floor hockey, baseball, badminton, and creative dance. The activities planned for Mr. D's classes made it difficult for Mr. O to get Trevor involved. Mr. O said that Trevor could participate with his classmates in the dance unit but he had to do separate activities in other units,

> I think I have told you about the dancing in IPE, which they are not doing now because they are passed that period. We enjoyed that so much… I even asked Mr. D 'is there more of this?' Unfortunately, this is done and over and we are now playing badminton and hockey. So, of course we will be looking to do that ourselves when the kids are playing hockey. (Mr. O, interview)

It was not that Mr. O and Mr. D didn't want Trevor to participate in the IPE class, they were just unsure if he was able to participate cognitively and physically. More importantly, they really didn't know how to integrate him into the class. Activities such as team formal games, made it difficult to include him, although activities like dance were more open and inclusive.

Both Ms. B and Mrs. H's year plans incorporated all of the different movement dimensions (games, individual activities, dance, gymnastics, and alternative environments). The activities in the elementary grades, compared to Mr. D's junior high classes, had more individual

practice, working in pairs, and small-sided activities. In our observations, we noted that there were a lot of opportunities for students to explore movements and practice skills before entering game type situations in stations and small groups. Interestingly, Ms. B explained that although she found it difficult to plan activities because her students had such a range of developmental needs, she realized the students without disabilities played a significant role including students with disabilities in class-wide activities. Her epiphany changed her approach to planning activities for IPE:

> We did gymnastics and [the students] got Vicky a ribbon and she did a ribbon [dance] and they danced around her but it was them doing it and them including her and I thought that was the example of 100% what it should look like… the students bringing her in, but then giving her a task that she was totally successful in. (Ms. B, focus group)

Ms. B planned activities with all of her students in mind. She became focused on encouraging all of her students to support their classmates to participate in the activities and work together to adapt activities for successful participation.

When it came to planning activities at Drake Elementary/Junior High, both Mrs. H (teacher) and Mrs. M (EA) were focused on 'the one student' who needed assistance, Gisele. Mrs. M was unclear about why some IPE classes had such structured activities and others were free play; she preferred the free movement days because they were easier to include the student she worked with who used a wheelchair. Mrs. M liked the station activities and individual activities, but she found it hard to modify games when a game was a whole group activity. Mrs. H also thought unstructured classes and activities were better for inclusion and for Gisele. In their focus group interview, Mrs. H and Mrs. M explained what it was like during station activities.

Mrs. H: The kids will come over and play with her. And usually the Mrs. M (EA) is there, doing the activity with Gisele and the kids come over and they want to participate.

Mrs. M: Because it's so darn fun!

Mrs. H: And then Gisele is having more fun and there's less spot light on that she is doing something different because everyone is doing something different in the class. There are people playing basketball, hockey, whatever. So I think she has the most fun and then is included

Mrs. M: It's almost like she has more control and she's more vocal I find. 'Your turn Seth' or 'Your turn to the caboose!'

Discussion and Conclusion

The main purpose of this study was to explore the IPE experiences of in-service teachers and EAs who worked in the same classroom. The findings highlight three issues: how teachers' and EAs' training and background education, along with their practical experiences and support from other EAs, contribute to the implementation of IPE; how teachers' and EAs' past physical education experiences and current engagement with physical activity impact their teaching/assisting in IPE; and how the planning and choice of activities influences student participation in IPE. The participants in this study, although having different roles and responsibilities as teachers or EAs, had common experiences within their classroom environments and across the school contexts.

Training and background education play a significant role in how IPE is implemented. 'Teachers are a key element in a child's learning environment, and teacher training has proved effective in fostering commitment to inclusion' (UNESCO 2015, 36). Unfortunately, participants in this study said that they did not have the proper training: the teachers said they had not had

IPE classes in their undergraduate degree programs and the EAs did not have any specific training in IPE. The lack of education was a barrier to the practitioners' planning and choice of activities as well as their confidence to work with students with diverse needs. This unpreparedness is consistent with the literature for teachers and EAs in IPE (Bryan et al. 2013; Ko and Boswell 2013; Lirgg, Gorman, Merrie, and Shewmake 2017; Maher 2016). Practitioners, referring to their own backgrounds, emphasized a deficit in their practical experiences with students with disabilities in the IPE environment. The teachers said that even if they did have some training, the reality of having to spontaneously adapt activities to be more inclusive, in the moment, was more challenging than expected.

All of the participants said that it was imperative that IPE education and training programs included experiences with students with disabilities. Additionally, the EAs said that learning from their colleagues and attending workshops were invaluable when it came to learning about their roles in IPE. In the professional development (PD) literature, Garet et al. (2001) suggest that specific content for curriculum, hands-on active learning, and integrating PD into daily life in schools can produce and enhance knowledge of and skills for participating practitioners. Therefore, to connect these findings to future learning opportunities for IPE practitioners, it is necessary to implement PD geared towards teaching students with disabilities in that context.

Interestingly, the teachers also noted that EAs played a critical role in supporting them in IPE. Teachers rely on EAs to assist in providing specific supports for students with disabilities to improve learning experiences (Pederson, Cooley, and Rottier 2014). Haycock and Smith (2011) found that for IPE EAs, it is beneficial and imperative to have a positive attitude, enthusiasm, knowledge, experience in IPE, and the ability to work as part of a team. Unfortunately, the

findings from this study are that both EAs and teachers have limited training in IPE. Teachers and EAs must collaborate to ensure that IPE is being implemented effectively (Bryan et al. 2013). However, what is the impact on IPE when both practitioners feel unprepared? This research showed that EAs were vital supports for teachers, most commonly in a one-on-one capacity, but that they also helped with monitoring the environment, adapting activities for particular students, and setting up the classroom (Haycock and Smith 2011; Lieberman and Conroy 2013). Morley et al., (2005) found that if EAs aren't participating, monitoring, or helping, they are seen as ineffective in IPE and some teachers have noted they are 'better off elsewhere' (Morley et al. 2005). Teachers generally recognized EAs as 'supportive' for IPE when they were participating. For teachers, EAs' participation and support are critical to the implementation of IPE. If we want more successful IPE programs, EAs need to, 'become familiar with inclusive practice in a PE [physical education] context, and PE teachers need to be aware of the potential for using support staff [EAs] to enhance learning' (Morley et al. 2005, 103).

Practitioners' past experiences with physical education influence their participation in and confidence to support or teach IPE. If a practitioner does not engage in physical activity in their personal life it can hinder their confidence when it comes to instructing, supporting, or participating in IPE. Mis-educative experiences in physical education, especially those that distort an individual's desire to participate, can have the same negative impact (Dewey 1938). Another challenge that practitioners in this study identified was having to modify activities for students with disabilities, because the practitioners did not always know how to play the activity or what to modify in the activity for a particular student. Generally, if the practitioner felt that they were confident and comfortable in IPE, due to educative past experiences and engagement

with physical activity, it was easier to plan inclusive activities. If the practitioner wasn't comfortable or very active in their own personal life, they struggled with getting students involved, making modifications, and engaging in the activities. Dewey's (1938) concept of continuity connects to this theme in this research. Dewey (1938) wrote that '…every experience both takes up something from those which have gone before and modifies in some way the quality of those which come after' (35). The principle of continuity suggests that experiences over time are connected. To discriminate between the value and quality of different experiences, practitioners need to evaluate the past, understand the present, and consider the future (Dewey 1938). These experiences indicate that past experiences have a significant impact on practitioner confidence to teach and assist IPE now, and hopefully in the future. Practitioners who feel that their experiences didn't prepare them to contribute to the IPE environment may be living a mis-educative experience teaching and assisting IPE. Dewey (1938) suggests that reflecting on the past allows individuals to distinguish between educative and mis-educative elements of their experiences. Reflection can help teachers and EAs to understand what support and information they need to teach and assist in IPE. Reflection and communication between practitioners can further help them clarify their roles in IPE, establish communication to ensure that approaches and adaptations are appropriate for students, ensure that comfort levels are accounted for, and share knowledge and information to learn from each others' experiences.

Finally, the participants said that they had a difficult time choosing activities for IPE that suited the needs of all of their students because activity choice influenced participation. For instance, dance activities were more inclusive because the students could interact in the whole class environment. It was more difficult to include students in formal team games, given the complexity of the cognitive and physical requirements. In the past, teachers have identified

difficulties including students in IPE compared to other subject areas, largely due to the distinct context and content (Morley et al. 2005). Ms. B discovered that her students without disabilities had a positive impact on the participation levels of her students with disabilities in IPE. It is evident that practitioners need to plan for and consider their students and context so that the activities they implement encourage participation by all. Some of the 'issues' that practitioners need to plan for are ensuring student safety, expanding their knowledge of students' capabilities, and providing a breadth and depth of activities for all students.

What Can We Learn From These Experiences of IPE?

Due to the unpreparedness, impact of past experiences, and difficulty making appropriate IPE activity choices, future learning and PD should take into consideration practitioners' backgrounds and current contexts of IPE. PD can transform the experiences of teachers instructing IPE (Ko and Boswell 2013). However, physical education PD opportunities seem to fall short for elementary and middle school teachers (Sears et al. 2014). Proper support needs to be given to practitioners, so they can use their skills and provide students with disabilities with the proper support to be successful in IPE (Block and Obrusnikova 2007).

Practitioners need support planning and choosing activities that are inclusive to all students. It is imperative that practitioners are provided support for pedagogical and content knowledge (Parker and Patton 2017) in IPE to account for appropriate activity choices and practical IPE experience. 'Teachers and support assistants should be professionally qualified and capable of successfully integrating pupils with disabilities, and where appropriate, supported by professional development within this area' (UNESCO 2015, 40). PD needs to be developed and implemented in authentic, contextual ways for in-service practitioners, such as teachers and EAs working together in the same setting.

Reflecting helps individuals to better understand how their growth, knowledge, and attitude are affected by experiences in their personal and professional lives (Dewey 1938). If practitioners feel uneducated and have mis-educative experiences teaching and assisting IPE, it can distort how they approach teaching IPE, whereas if we prepare practitioners and support them in their environments they may have more positive experiences with IPE, increasing their desire to take initiative to continue learning to include students with disabilities. PD should also be geared towards listening to teachers and EAs in order to understand their educative and mis-educative experiences (Dewey 1938). Collaboration with IPE-PD planning also follows effective PD literature suggesting that facilitators should collaborate at ground level to provide valuable, relevant, situational PD (Armour and Yelling 2004):

> Evidence suggests that CPD [continuous professional development] is most relevant when it focuses on teachers' real work in schools with young people, addressing their unique school contexts, and acknowledging teachers' prior knowledge and experience. Contextually based CPD responds to local conditions. (Parker and Patton 2017, 450)

Having practitioners, students, and the environment at the center of planning for PD can allow for the complexities of practical IPE situations, lack of training and, contextual needs for teaching and assisting in IPE. The experiences described by the participants in this study have implications for in-service PD and school district training as well as pre-service training for IPE practitioners.

Recommendations for In-Service PD and School District Training

- Deliver PD for practitioners to learn to teach/assist in IPE: IPE content and curriculum, pedagogical strategies, and experiential learning opportunities

- Create contextual, in-service PD for teachers and EAs that considers the clients' context, student needs, prior knowledge and experience, and their interactions in their environment
- Provide opportunities for teachers and EAs working in the same environment to discuss past experiences, backgrounds with IPE, and current students/situations to get on the same page (roles, activities, students, etc.) teaching and assisting
- Establish mentorship or communities of practice: Choose experienced mentor teachers or EAs who have the desire to support colleagues by sharing experiences and ideas and suggesting modifications for students. All of this will help alleviate unpreparedness and will serve to model support and a team approach to IPE for new practitioners

Pre-Service Training

- Unpack stories of IPE. Discuss values, various conceptions or perceptions of inclusion, types of activities in IPE, and comfort levels with IPE
- Provide practical and realistic learning opportunities for pre-service teachers with students with disabilities in a variety of IPE situations and contexts
- Share stories from teachers, EAs, and students about diverse contexts and situations for preparation, reality, and knowledge moving into teaching situations
- Discuss teacher-EA collaboration, communication, and prospective roles for teaching and assisting in IPE

Future research should continue to bring teachers and EAs working collaboratively together to (a) discuss past and current experiences with IPE, (b) outline needs and desires for PD and training, and (c) consider activity modifications for students and IPE. PD should also be developed and implemented to provide a better understanding of the training needs and provide support for teacher-EA collaboration in IPE.

In conclusion, the study confirmed the essentiality of listening to practitioners' experiences. Their diverse backgrounds, complex situations, and unique stories help us to reconstruct past and current experiences in IPE. Experiences are on a continuum and every one influences the next (Dewey 1938). The reflection on the experience of PD and within schools with teachers and EAs together can contribute to practitioners' growth on their journeys teaching and assisting in IPE. This type of reflection is essential to provide educative experiences for student learning in IPE.

Limitations

Patterson and Williams (2002) wrote that 'in hermeneutics, the conclusions expressed are seen as representing the researcher's understanding at the moment' (49). The findings from this inquiry are distinct to the three case studies and six participants that were studied. The nature of qualitative case study research includes small sample sizes in distinct geographical regions. All of the schools and participants came from one school district; the sample may not be representative of other districts and locations. 'Qualitative research is not done for purposes of generalization but rather to produce evidence based on the exploration of specific contexts and particular individuals' (Brantlinger et al. 2005, 203). We have outlined thick descriptions and detail for reader transferability; if readers see similarities and information that could be relevant to their situations, they will determine relevance (Brantlinger et al. 2005).

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Chapter 4: Paper 2 - In-service teachers' and educational assistants' professional development experiences for inclusive physical education

Abstract

Purpose: The objective of this study was to understand and learn about in-service teachers' and educational assistants' (EAs) professional development (PD) experiences for inclusive physical education (IPE), individually and collaboratively. **Method:** Using a multiple-case study design and hermeneutic inquiry, the experiences of three teachers and three EAs were investigated. Data sources included semi-structured interviews, focus groups, observations and researcher reflective journals. **Results:** The practitioners' experiences with PD for IPE revealed the following major themes: (a) It's just not there: IPE-PD is rare, (b) Taking initiative: Maximizing consultants as IPE-PD, (c) Together we're better: Desire for collaborative IPE-PD. **Discussion/Conclusion:** PD for IPE needs to be developed and implemented for teachers and EAs working as an instructional team *together.* Engaging these practitioners in collaborative IPE-PD can support their learning and teaching of IPE and acts as a starting point to form communities of practice in IPE.

Key words: Generalist Teachers, Para-educators, Inclusion, Case Study, Dewey, Professional Learning

Introduction

With 'inclusive education' - addressing and responding to the diversity of needs of all children in schools (UNESCO, 2009) - being the recommended approach in Canada (Lyons, Thompson, & Timmons, 2016), students with disabilities are enrolled, and ideally participating, in classes alongside same-aged peers - including physical education. In elementary and junior high schools, students with disabilities generally have an educational assistant (EA) who supports them with classroom instruction. It becomes critical to the inclusive environment that teachers and EAs work together as a collaborative instructional team to support the inclusion of students with disabilities in all subject areas (Jones, Ratcliff, Sheehan & Hunt, 2012). Unfortunately, when it comes to teaching inclusive physical education (IPE), for *all* students within the physical education context and curriculum, both teachers and EAs have expressed challenges. These challenges have ranged from unpreparedness to instruct IPE and a lack of knowledge and training in the area (DeCorby, Halas, Dixon, Wintrup & Janzen, 2005; Ko & Boswell, 2013; Maher, 2016); inadequate pre-service training on inclusive practices (McCrimmon, 2015); and limited confidence and training specifically to teach students with disabilities in IPE (Block & Obrusnikova, 2007; Hodge et al., 2009; Vickerman & Coates, 2009).

With these issues, it would be assumed that professional development (PD) - a provision method used to mitigate challenges practitioners[13] face in their teaching and assist understanding about specific processes, concepts, or subject matter (Darling-Hammond & McLaughlin, 1996) - would be provided to practitioners instructing IPE. Bryan, McCubbin, and van der Mars (2013) state it is apparent that teachers and EAs require quality PD and collaboration for successful IPE to occur. Based on a review of the literature, we know little about teachers and EAs (who work as an instructional team) experiences with PD for IPE. Therefore, the purpose of this research

[13] Practitioners: When used it is referring to both teachers and educational assistants together.

was to understand and learn about in-service teachers' and EAs' PD experiences for IPE, individually and collaboratively. The main question that guided the research was: What are in-service PE teachers' and EAs', who work as instructional team members, PD experiences for IPE? The sub questions were: What type of PD experiences have these practitioners previously engaged with? What supports are needed for an IPE-PD experience? What supports do in-service PE teachers and EAs need in a PD experience to support collaboration for teaching IPE?

Literature Review

Many teachers feel unprepared to implement physical education (Ko & Boswell, 2013) perhaps partially due to an absence of focus on physical education subject matter in teachers' preparation programs (DeCorby et al., 2005). Within the Canadian context, it has also been demonstrated that university programs often fail to provide the knowledge and experience for pre-service teachers on inclusive practices (McCrimmon, 2015). Therefore, it is not surprising that in-service teachers have explained having limited confidence and training to teach students with disabilities in IPE (Block & Obrusnikova, 2007; Hodge et al., 2009; Vickerman & Coates, 2009). Some of the specific challenges IPE teachers face when teaching students with disabilities are managing time appropriately and planning or adapting activities for diverse abilities (Hersman & Hodge, 2010). Teachers' have also had negative experiences and negative attitudes towards inclusion because, despite feeling that they have a lack of education and knowledge about particular needs, such as behavioural difficulties, they have had to teach students with disabilities - with little to no support (Avramidis & Norwich, 2002; Hodge et al., 2009). However, the reality of inclusive education ensues that all teachers may be responsible to teach IPE to *all* students and to modify their programs for various skill and learning levels even with limited training (Vickerman & Coates, 2009). The overall lack of training and low confidence

levels, together with embedded polices of inclusion, combine to create a serious knowledge and experience gap for IPE.

As for EAs, education and training is as varied as it is for teachers[14]. Many programs that certify EAs do not require courses on interacting with specific curriculum and pedagogy in subject areas such as PE. Maher (2016) administered a survey to EAs inquiring about their educational training and qualifications; the majority of the participants did not receive training on IPE during their education. Similarly, Vickerman and Blundell (2012) found that although EAs' had a lack of IPE specific training in their programs, those individuals who sought out additional in-service training on IPE had increased their competence and confidence. EAs play a vital role in IPE; even with the lack of training, they remain critical resources, particularly for inexperienced IPE teachers (Pederson, Cooley & Rottier, 2014). With both in-service teachers and EAs having limited training in IPE, it becomes evident that further support is needed to ensure appropriate and meaningful learning opportunities for all students.

School districts often address practitioners' lack of training, or provide support for new learning initiatives, by delivering PD. PD has been influential in providing curricular knowledge and understanding (Avalos, 2011), contributing to improvement of instructional practices and student learning (Borko, 2004; Fisherman, Marx, Best, & Tal, 2003), as well as shifting beliefs and practice towards curricular areas and expectations of student achievement (Timperly & Phillips, 2003). Parker and Patton (2017) state that teachers engage in PD "with the potential to enhance knowledge, skills, and dispositions, thus improving practice and contributing to their growth as professionals" (p. 448). Practitioners need proper support to provide students with disabilities opportunities to be successful in IPE (Block & Obrusnikova, 2007). PD has been

[14] Specific certification is not designated or required to be an EA. The hiring process varies for school districts across Canada to receive a position as an EA. Generally, it is preferred that EAs have a high school diploma, first aid training, and a criminal record and child intervention record check. Related post-secondary education and experience is seen as an asset.

recommended for practitioners instructing students with disabilities (Coates & Vickerman, 2008). From the recent literature, we know that practitioners desire PD in this field, such as the Haegele, Hodge, Filho and de Rezende (2016) study investigating how Brazilian physical education teachers' attitudes were influenced by a two-day PD workshop on inclusion and teaching students with disabilities. They found that practitioners expressed agreement and desire for more PD opportunities "…such as the APA [adapted physical activity] workshop, with a focus on strategies for teaching students with various disabilities" (p. 34). Additionally, Sato and Haegele (2017) examined in-service teachers' PD experiences during and after and online APE graduate learning experience and determined PD communities began to form via their PD implementation, which allowed practitioners to become mentors to colleagues. Therefore, it would be of interest to see teachers and EAs PD experiences together who work as an instructional team, to determine how best to support these professional learning communities and mentorship for IPE.

Inquiry into practitioners IPE-PD opportunities, past experiences with IPE and PD, and current challenges with IPE that PD could support would help inform the measures for quality IPE-PD for teachers working as an instructional team (Jones et al., 2012). Deepening the understanding of practitioners' experiences by listening to their stories can facilitate understanding of the supports needed to develop PD and instruction rooted in the experiences of teaching IPE (An & Meany, 2015). Furthermore, utilizing and exploring EAs' experiences in IPE as well as teachers is essential; research with EAs is limited but their stories are unique in IPE (Maher, 2016). Conversations should occur with EAs and teachers together, to improve collaboration and instruction for students (Fisher & Pleasants, 2012). Therefore, to restate, the

purpose of this research was to understand and learn about in-service teachers' and EAs' PD experiences for IPE, individually and collaboratively.

Theoretical Framework

Dewey's theory of experience, described in his 1938 work *Experience in Education,* and in particular his criteria of continuity and interaction, was used as a lens to understand participants' experiences and situations with PD for IPE. To understand the nature of experience we must ask, will the influence of this experience on future experiences be educative, enjoyable and foster a desire for future experiences, or will the influence be mis-educative and repel learners from future experiences? We cannot assume that all experiences will be or are beneficial (Dewey, 1938). Determining *how* PD should be created and enacted for IPE first depends upon practitioners' own conceptualization of the quality of their past and current experiences (Dewey, 1938). Schaefer (2013) used Dewey's theory of experience to inquire into his pedagogical practice in physical education and explains, "Inquiring into how my past experiences with narrative inquiry are interconnected with my identity, and thus, with my lived pedagogical practices, allows me to make meaning of who I am as a teacher, and who I am becoming" (p. 18). Additionally, Boud, Keogh and Walker (1985) used a Deweyan perspective and further emphasize, "Learners need to describe their experience, to work through the attitudes and emotions which might colour their understanding, and to order and make sense of the new ideas and information which they have retained" (p. 11). Therefore, we have actively involved the practitioners in this study in the experience of reflecting on their past and current PD experiences for IPE. The data has been analyzed to understand practitioners' experiences as Clandinin and Rosiek (2007) describe, "experience is the fundamental ontological category from which all inquiry – narrative or otherwise – proceeds" (p. 38).

Practitioners are on a continual process of 'becoming' in their personal and professional growth as educators - meaning they are never 'finished' in their growth process (Armour, Quennersteadt, Chambers, & Makopoulou, 2015) and their experiences should be on going, involve active engagement, and incorporate reflection to reconstruct past experiences (Dewey, 1938). Experience is also on a continuum; Dewey (1938) describes this as, "…every experience both takes up something from those which have gone before and modifies in some way the quality of those which come after" (p. 35). For this study, the idea of *growth* and *continuity* of experiences are essential to evaluate past experiences, understand current situations, and consider what experiences and learnings we are moving towards. That process of evaluating experiences then allows an individual to discriminate between the value and quality of different experiences (Armour et al., 2015; Dewey, 1938). In this research, growth and continuity of experiences has been applied to the practitioners' reconstruction of their experiences. Understanding how practitioners conceptualize their own learning from PD allows us to determine how quality PD experiences can be created for IPE-PD. Continuity, according to Dewey, means that the past can't be separated from the present – or the future.

Quennersted, Ohman and Ohman's (2011) use Dewey's concept of transaction in their research, referring to "...the fact that the only way to acquire information about human beings is through their actions. Therefore, in transactional investigations, the point of departure is the processes that take place in the encounter between human beings and their environment and between human beings themselves" (pp. 161-162). Transaction between the individual and the phenomenon in their environment allows practitioners to make meanings through and of their experiences; "meaning is not treated as something that exists within things themselves or in the minds of human beings, but as indissolubly connected to the relations that are created in and by

action" (Quennersted et al., 2011, p. 162). Similar to this notion of transaction, this research uses Dewey's criterion of *interaction*. Individuals' external environment and internal conceptions of their situation greatly impact how an experience is contributing to one's learning and growth. The transactions and interactions an individual has, impacts their experience. Deductively, this study has used these interaction elements such as, environmental conditions, people/social interactions, and personal conceptualizations (attitudes and motivations) to determine how they have had or may influence future experiences of PD. Ultimately, inquiring into practitioners' experiences of PD for IPE is an essential act to reflect and unpack personal experiences, which can inform elements of quality experiences but also, contribute to the construction of IPE-PD that may foster effective growth and learning.

Research Design

Methodology

A multiple-case study design of three schools (three distinct cases) was used to gather rich, detailed descriptions (Merriam & Tisdell, 2016) of practitioners' experiences. Stake (2005) describes that using multiple case studies allows the researcher to investigate a phenomenon concurrently or consecutively with various groups. Therefore, in this research study, multiple case studies have been used to highlight the uniqueness of the three cases and to also determine shared and different perspectives within and across cases (Merriam, 1998). Hermeneutics and interpretive inquiry were used to interpret practitioners' stories holistically, and to better understand the culture, language, and context of their experiences (Smith, 1991). A qualitative methodology of this type enabled the researcher to continuously engage with the data via the hermeneutic circle (Patterson & Williams, 2002) to make sense of the information gathered. The process included having the researcher make multiple projections, reframe questions, and

interpret the data to engage in a dialectical conversation for a comprehensive understanding of participants' stories (Ellis, 1998). The hermeneutic process allowed the researcher to hear stories of the practitioners separately and value their unique experiences. The process also enabled collaborative conversations and dialogue, leading to an uncovering of new insights on PD for IPE between the instructional team members.

Settings & Participants

The qualitative case studies and data collection methods took place over three months at three different schools located in a Western Canadian province. There were a total of six participants (four females, two males; three IPE teachers and three EAs). Participants were purposefully selected (Patton, 2002) based on the following criteria: (a) practitioner's current position involved instructing/supporting students with disabilities in IPE class as an instructional team member, (b) the practitioner had participated in a PD opportunity at some point in their career, and (c) the practitioner had an interest in sharing their experiences with inclusion, PD and IPE. No fixed age limit or years of experience were set for the participants in the study. Table 4.1 provides an overview of the three cases and their participants[15].

[15] Pseudonyms have been provided to each participant (teachers and EA), any reference to colleagues or student names in quotes, and school names for ethical purposes

Table 4.1

Case & Participant Details

	Case 1: Cobain Junior High	Case 2: Cash Elementary	Case 3: Drake Elementary/ Junior High
School Information	80% of the youth have individualized learning plans	Small school in a low socioeconomic area of the city	New facility fully equipped with equipment and PE teaching space
Student Population	Approx. 250	Approx. 120	Approx. 700
Teacher Information	Mr. D has 20 years of experience and is currently teaching grade 7-9 boys PE	Ms. B has 5 years of experience and is currently teaching grade 1-6 PE & grade 4 Math/Social	Mrs. H has 6 years of experience and is currently teaching grade 2
EA Information	Mr. O has 1 year of experiences and is currently working 1-on-1 with a boy in grade 7	Mrs. L has 23 years of experience and is currently assisting in a grade 1 class	Mrs. M has 1.5 years of experience and is currently assisting in a grade 2 class

Data Collection & Analysis

Data collection was approved and in accordance with the university institutional ethics review board and the school authorities ethics process. Informed consent was received from participants and to ensure anonymity, pseudonyms have been given to participants, schools, and any reference to students or colleagues discussed. Collected data included observations, field notes, one-to-one and focus group interviews with participants over the course of the three and half months. The primary researcher participated as a classroom observer using Boostrom's (1994) observation phases (shifting from video camera, playgoer, evaluator, subjective inquirer, insider, and reflective interpreter) as a guide to move beyond surface level observations to in-

depth contextual reflections and additionally took field notes on each school context, teaching practice, and social interaction occurring in the classroom and school environment. Four full school days were observed per case. Fifteen researcher journal reflections were completed throughout the research process. Reflections were guided by the hermeneutic circle and involved asking questions about the culture, language, and context being observed and Dewey's idea of reflective thinking by reflecting on each observation unpacking the following: presence to experience, description of experience, analysis of experience, intelligent action and summary of process (Dewey, 1910; Frost & Connolly, 2015, Standal & Rugseth, 2014). Semi-structured interviews were conducted face-to-face and audio recorded with each participant individually (approximately 60-80 minutes). The interviews were made up of open-ended questions that first focused on getting to know the participant generally and gaining insight holistically on their experiences with IPE and PD, followed by more specific questions on their experiences with PD for IPE. Following the individual interviews, a small face-to-face focus group with the participants from the same school/case together (approximately 60-80 minutes) was audio recorded and occurred one to two week post individual interviews. The focus groups allowed the participants working in the same school to share insights on their personal experiences with PD to their teaching/assisting partner. The questions in the focus group were created from common topics that were brought forward in the individual interviews such as school/class structure, activities in class, PD opportunities, and planning.

As per the hermeneutic and interpretive frames, data analysis and interpretation occurred constantly during the study to gain a deeper and clear understanding of the participants' experiences in PD for IPE (Patterson & Williams, 2002). Data analysis was comprised of multiple steps through the hermeneutic circle to identify themes. To establish themes, an

organizing system was used for "a more holistic understanding of the phenomenon by showing the inter-relationships among themes and by retaining a rich characterization of individual themes" (Patterson & Williams, 2002, p. 46). Therefore, the following steps were taken: (a) transcription of interviews and focus group conversations; (b) reading of and familiarizing with data (all data sets); (c) identifying individual meaning units (stories) into a chart/table format, which included categorizing the participants' pre-occupations, beliefs, motivations, interests, and values of practitioners from interviews and focus groups, along with grouping observations and field notes into units in chart format; (d) grouping individual meaning units across data sets into common topic areas; (e) creating narratives of each participant to interpret the meaning units and to help with the process of establishing individual themes per participant, per case, and across cases; and (f) explaining inter-relationships among themes and in relation to the theoretical framework, which included identifying gaps in the experiences, surprises, qualities of experience and determining themes. The process was completed for each case and participant individually and then the themes and interrelationships were compared across the cases.

Trustworthiness. Techniques used to ensure trustworthiness in this research included triangulation, member checking, and peer debriefing. Triangulation was facilitated by gathering multiple sources of data (observations/field notes, interviews, and focus groups), which assisted the researcher in confirming emerging themes within and across data sets (Merriam & Tisdell, 2016). Member checking was completed with each participant through the provision of transcripts after the individual interviews to determine if any information needed to be added or removed to clarify their experiences and ensure their statements were accurate (Shenton, 2004; Zitomer & Goodwin, 2014). As well, draft themes from the individual interviews were shared to the participants after the focus groups. The focus group conversations also brought forward the

similar topics as the individual interviews for participants to further elaborate their ideas. The primary researcher also engaged in journaling throughout the research to provide an audit trail and outline the decisions that were made in the research process. Specifically, the researcher documented their personal background, thoughts, interests and perspectives in order to identify and acknowledge assumptions and biases. Additionally, peer debriefing was completed with a secondary researcher throughout the study. The primary and secondary researchers discussed interpretations, reflections, analysis, and emerging themes to account for researcher subjectivity and ensure interpretations of the themes aligned with the participants' experiences (Merriam & Tisdell, 2016).

Results

The results of the study are separated into three major themes. The findings describe practitioners' PD experiences for IPE, which suggest: (a) It's just not there: IPE-PD is rare, (b) Taking initiative: Maximizing consultants as IPE-PD, (c) Together we're better: Desire for collaborative IPE-PD.

It's Just Not There: IPE-PD is Rare

Based on their past and current experiences, the practitioners in the study described that PD for IPE is rare. The practitioners' consensus was 'no, we have not had PD on IPE'. The three teachers sought out PD on IPE but did not find any. It was common for teachers to go to the annual teachers' convention, however, workshops for IPE teachers were often in a separate location and sessions weren't regularly geared towards inclusion. Mr. D noted that there were not always PD opportunities for IPE teachers in junior high to get together.

> I think in phys. ed. we don't have as much [PD] as other subject areas. Like in LA [language arts], science, math it's all the time. And if you go to teachers' conventions

> you're lucky if there's three sessions that have anything to do with physical education… (Mr. D, interview)

The EAs did not seek out PD on IPE specifically, but said explained that they 'would take any PD' they could get. The EAs also noted that in their years of experience, there was limited availability of PD in general for them to participate in; however, they noticed a recent increase in opportunities of PD being offered in the school district this academic year such as online webinars. The EAs explained that they were never offered training in IPE or even heard about opportunities to attend PD on IPE at all.

> I have never been to a PD for a physical education class… do they talk about inclusion? I wish they had more [PD]… Miss. B should feel comfortable that when I come in the class I know what I am doing to get her [the student] in the game because we've had a PD or discussion about it. I don't think there is enough. (Mrs. L, interview)

The teachers said that over the past few years there has been an increase of students with disabilities in their classes and they were actively seeking PD to support them in their situations.

> I wasn't really teaching a lot of IPE so I didn't really see a need for myself to do that type of [PD]. But lately, if more of that [PD] came up I would probably take it because now where I am at my career I would like to be more involved… we are getting a lot more kids [that]… need more help. (Mr. D, interview)

Taking Initiative: Maximizing Consultants as IPE-PD

The three teachers had all previously attended PD, mainly workshops and teachers' conventions, for physical education in general (not focused on IPE). However, it was up to teachers to ask the PD providers questions specific to students with disabilities. The teachers described that 'inclusion' consultants visited their school, which was a type of informal PD for

them. In fact, the only form of PD on IPE they had received. Consultants' roles included coming into the school to support practitioners also being available via email or phone for additional assistance. The participants' school district had an 'adapted' physical education consultant that was the initial point of contact and help for inclusion. Discussing the type of PD for IPE she had previously taken, Mrs. H said,

> …the adapted physical education [consultant] has come up and assisted myself and my EAs this year. Whether it was during recess time to see something that we could do with the student or in IPE classroom time. I did take a PD on physical education and it was with the school board consultant. I just asked questions about that [inclusion] and then connected with the adapted physical education person afterwards. (Mrs. H, interview)

When discussing the effectiveness and type of support the consultants provided, the practitioners unfortunately didn't always find the consultants to be helpful.

> We had the adapted specialist come on site and work with us. She shadowed me and gave me some tips… I was kind of disappointed… some of the suggestions were really surface [level]. I thought, 'Okay she's going to give me some big ideas' but I was really surprised at the suggestions. I didn't get anything specific and then the visit was over. (Miss. B, interview)

Mrs. H also explained that she went outside the district to external consultants to get support because the information provided by her district was not enough. Researcher observation and field notes highlighted that the participants were constantly asking for ideas and support from consultants regarding their students. It was determined that there was a lack of resources for IPE but a desire from each participant for help regarding the inclusion of students with disabilities in IPE. Mr. D described that the school put on a training session as a PD day, focused on working

with students with Autism. However, the consultants running the session geared the content towards literacy and did not touch on other subject areas such as physical education. Mr. D explained because the material did not have specific IPE examples, he struggled to take away any applicable learning.

> We had a PD for 2 staff sessions, 4 to 5 hours, of what I would call 'training' about how to work with students with Autism. But ask me if I remembered anything about it? None of the PD applied to my subject area. It was all about literacy, reading… I thought 'okay, well I am not doing any of that in phys. ed. so what am I going to do about locomotor skills?' I have had two kids with Autism in my building that I work with and when I left the session... I had nothing I could use. Nothing. Then it's back to the EA where the responsibility falls on Ms. Y's [EA] shoulders and Mr. O's [EA] shoulders. I literally got zero out of that session. (Mr. D, focus group interview)

The EAs, however, had mixed feelings about consultant support. At times, the consultants played a critical role in helping EAs with the students they worked with. For instance, when the consultant support was one-on-one, the EAs felt they learned informally from the consultant's presence in the IPE class. It was common for the EAs to have a consultant come to the school to teach them about toileting, lifting, and assistive technology. For Mrs. M, she found the ideas the consultants shared to be 'great,' but she needed the consultants to be more available to support her.

> A few ladies [consultants] from the school district came out and gave us some ideas, so that was great… We need to get more information and have consultants available to us… I can just email them any time and say 'we're doing rhythmic gymnastics, do you have

any cool ideas that we can have for Gisele and everyone so they can enjoy it at the same time.' We need more of that. (Mrs. M, interview)

On the contrary, the consultants did not always provide appropriate support and information. Mrs. L felt that one of the consultants was not considering age appropriate activities for the students and realistic modifications for her to implement. Researcher observations and field notes further stated how the 'new' EAs appreciated any support given by consultants; however, the more experienced EAs and the teachers were all looking for specific subject area and student assistance, which the consultants were not always accustomed to providing. Or, the consultants provided "irrelevant support" (researcher observation field notes).

Together We're Better: Desire for Collaborative IPE-PD

The participants recognized that they had never attended any PD at the same time and that it could be beneficial to learn *together* to teach IPE. In both the individual interviews and focus groups, the practitioners expressed a desire for collaborative learning opportunities, planning and preparation time.

The EAs all mentioned that in order to learn what to do in IPE, they watched what the teacher did in the class and determined how they could be helpful. If they weren't sure what to do, they focused solely on the child they worked one-on-one with in the class. It was apparent that the EAs desired PD for IPE but they also expressed wanting more information from the teacher on what they should be doing in IPE. The teachers described that they had expectations of EAs to take initiative to modify activities during the IPE class without the teacher telling them what to do all of the time. Mr. D said, "I really rely on the EA to basically help teach the skill" (interview). The teachers took an active role trying to teach the EAs what to do in IPE but they were unclear about the EAs role. The teachers felt that more collaboration and communication

was necessary. For instance, Mrs. H and Mrs. M discussed the need to attend PD together to 'get on the same page' with topics like student safety and plans for IPE activities. Mrs. H explained,

> A PD would be great that a teacher and an EA could go to and plan together in regards to the IPE curriculum. It's great if I am planning everything, but I still have to relay the message back [to the EA]. We don't have time for a half an hour meeting before school starts to say 'Okay we're going to do this stuff today'… So that would be useful. (Mrs. H, focus group interview)

Mr. D and Mr. O noted that any form of collaborative PD for IPE would be helpful in their situation. They both lacked the confidence and knowledge on what to do with certain students in IPE and thought working together to share knowledge would help them navigate their challenges. Miss. B said one of her main challenges in IPE was working with multiple EAs; she teaches a variety of IPE classes and the EAs were constantly rotating. She mentioned it was difficult because different EAs came in and out of the classroom on a rotating schedule or, there were a lot of substitute EAs who did not know the children well. The lack of consistent EAs made it a challenge for her to communicate plans, provide information about students, and to have a routine.

Interestingly, the practitioners also felt that beyond collaborative PD for IPE, they needed to learn *how to work together* or work *with one another* in general.

> Could we make one [PD] for the teachers on how to work with an EA? They don't really know what to do with us. Especially if you get a newbie teacher and you get someone like me [for an EA] who has been there for a while, not that I think I could do better than them but bank my experience, take that and then let's work together. (Mrs. L, interview)

> There are no PDs on EAs and teachers working together. So how do we go about it without stepping on anyone's toes? Because I don't want anyone to think that you're here and I am here… no we are here [together]. You're just as much of a teacher (referring to Mrs. M the EA) as I am, so how do we connect that way. (Mrs. H, interview)

Furthermore, the teachers expressed they did not receive training in their teacher education program on working with an EA but they were often tasked with delegating and setting expectations for them. It was clear that PD was needed and was critical for teachers and EAs to learn how to work in/as a collaborative team *and* to learn, discuss, and plan for IPE.

Discussion

The purpose of this research was to understand and learn about in-service teachers' and EAs' PD experiences for IPE, individually and collaboratively. Collectively, the practitioners in this study experienced rare opportunities for PD related to IPE. This is significant as the calls for PD to support practitioners instructing students with disabilities in IPE globally are not new (Bryan et al., 2013; Maher, 2016; Morley et al., 2005; Sato & Haegele, 2017; Vickerman & Coates, 2009). According to the practitioners in this study, their school districts did not provide explicit IPE-PD. Yet they desired PD for IPE, specifically, collaborative PD for teachers and EAs to work and learn together. School districts across Canada are actively taking an inclusive approach to classroom structures (Lyons et al., 2016), which involve teachers and EAs working as a collaborative team. However, PD supports do not seem to be provided for IPE to assist with the shift to inclusive classrooms, which are dynamic and increasingly diverse across school districts (Lyons et al., 2016). Morley et al., (2005) states, "[I]PE teachers need to be aware of the potential for using support staff [EAs] to enhance learning" (p. 103). EAs often impact the social environment, personal relationships, students' identity, student support, networking with peers,

instructional variables, and potentially stigmatization (Broer, Doyle, & Giangreco, 2005). Teachers' should utilize EAs to support their IPE environment; however, with practitioners' dynamic roles in IPE, diverse educational backgrounds and the evident minimal opportunities to engage in PD together, their roles in IPE and influence on IPE instruction *together* need to be further explored. Jones et al., (2012) explored EAs roles and their working relationships with teachers. They found "In order to effectively create an optimal learning environment for students, both teachers and paraeducators (EAs) will need training to develop the skills to function both individually and as part of the instructional team" (p. 22). In order for these practitioners to work together in IPE, training on *how to work together* and role clarity in the IPE setting is essential.

Since the practitioners had no distinct IPE-PD experience to be recalled and reflected upon, we can't assess the quality of experiences that are not present. However, Dewey (1938) describes that it is not only the reflection on experience but also what is being experienced in a given situation that impacts learning and the quality of experience. Therefore, practitioners are not passive learners; they are active in their own reflections and reconstructions of experience facilitating a constant learning process (Armour et al., 2015). Armour et al., (2015) describe, "Specific CPD [continuing professional development] activities could only be regarded as educative if they promoted an appetite and aptitude for, and engagement in, further learning" (p. 9). In relation to this study, we can then propose that in order to construct IPE-PD, practitioners need to be involved in the process as they bring forward their experiences, current situations, and desires for the future. Armour and Yelling (2004) and O'Sullivan and Degleau (2006) further emphasize practitioners should be active in the implementation and construction of PD opportunities to ensure active participation and satisfaction. The practitioners in this study

recognized the gaps in their understanding and needs for IPE; creating more conversations about the learning possibilities and particular topics of desire for PD could enhance the process (Armour & Yelling, 2007). Additionally, for learning and PD experiences to be educative, not only is there a need for PD to be provided, but also it should be continuous and on-going (Bechtel & O'Sullivan, 2007) to assist practitioners on their growth and process of 'becoming' in IPE environments that are ever-changing (Dewey, 1938; Schaefer, 2013). Overall, the deficit of PD for IPE raises a question: what supports are being provided by school districts to support practitioners' growth and development and their need to improve pedagogy, content knowledge, the environment, and their attitudes towards inclusion, IPE, and students with disabilities? To echo Vickerman & Coates (2009), for practitioners to be "satisfactorily equipped" (p. 149) to instruct IPE to students with disabilities, quality PD is vital.

Dewey (1938) suggests that it is critical to have and select present experiences that will contribute or will "live fruitfully and creatively in subsequent experiences" (p. 24). Beyond developing opportunities for IPE-PD, engaging practitioners in the construction of PD to account for context and practicality could result in more effective learning (Armour & Yelling, 2004). A collaborative effort, which could be sparked by consultants and administrators, would help establish educative experiences, promote growth and encourage practitioners to pursue future experiences of learning. "It is a mistake to suppose that acquisition of skills… will automatically constitute preparation for their right and effective use under conditions very unalike those in which they were acquired" (Dewey, 1938, p. 47). We cannot assume the experience of preparation, PD, and learning for practitioners in one situation will equate to 'effective' preparation for the diverse settings of IPE. Therefore, encouraging practitioners to evaluate past experiences and consider what experience and learning purposes they are striving for could help

the construction of quality PD to be educative and worthwhile (Dewey, 1938) for their current *and* future use in IPE. Armour et al., (2015) also suggest, "Effective PE-CPD [physical education continuing professional development] from this [Deweyan] perspective is that which nourishes teachers as curious, dynamic, creative and continuous learners. Instead of attempting to design CPD with a set of fixed ends or, perhaps, tightly specified 'learning outcomes', this perspective would focus on the development of teachers' 'ends-in-view'" (p. 9). Dewey's (1938) principle of interaction suggests "that failure of adaptations of material to needs and capacities of individuals may cause an experience to be non-educative quite as much as failure of an individual to adapt himself to the material" (p. 47). It is important to have the conversations initially with teachers and EAs (and together) to evaluate their pre-occupations, motivations, goals, and topics of interest to make PD educative. A practitioner's internal conditions (desires, interests, etc.) will affect the desires for learning just as the complex environment impacts both experiences of teaching and learning to teach (Dewey, 1938). Currently, these practitioners are motivated and interested in receiving IPE-PD. However, objective conditions (time for planning, resources, opportunities) related to these practitioners experiencing IPE-PD are limited, ultimately leaving them questioning what learning and support is needed to better teach IPE and how to receive it.

A common practitioner experience in these particular cases was that consultants provided the only PD for IPE. The practitioners in the study mentioned that they received some workshops on inclusion (the philosophy and how the school board views their policies on inclusive education) as well as workshops specific to learning about students with disabilities (information specific to various disabilities like autism and fetal alcohol syndrome). Workshops and teachers' conventions were the most common types of PD that the practitioners in this study experienced in their careers. However, these sessions did not provide information on IPE content or

pedagogical strategies for IPE. This is consistent with Morley et al., (2005) findings about IPE teachers' experiences with inclusion PD in the United Kingdom, where teachers said "It was on general classroom lessons…not relevant to what we do down here [in IPE]" (p. 100). The various learning environments IPE takes place in and active orientation of the subject matter contributes to the uniqueness of the PD learning structure needed for IPE. As Mr. D stated from his experience of a PD day at his school, the content in the inclusion PD he attended did not apply to his subject area. The lack of connection between the PD content and IPE demonstrates not only the uniqueness of the IPE environment but also the uniqueness of the types of PD that is needed for IPE. IPE-PD content needs to be relevant to practitioners' real world situations (Parker & Patton, 2017), focus on teaching and pedagogical strategies for inclusion (Hersman & Hodge, 2010;) and embed practical application elements (Morley et al., 2005). Therefore, the provisions that consultants and PD providers offer, must provide a plethora of examples for various disciplines and subject areas to cater to the array of teaching assignments and environments teachers have and EAs work in.

Consultants were recognized in this study by some of the practitioners as both educative and mis-educative (Dewey, 1938). Consultants were helpful in the moment for quick tips, but the knowledge and experience the practitioners desired also needed to be easily modified for future activities or for potential new students. Lytle and Hutchinson (2004) define adapted physical education/IPE consultants roles as the, "advocate, educator, courier, supporter/helper, and resource coordinator" (p. 47). Consultants provide support with developmentally appropriate assessment, IPE planning or programming ideas, and goal setting for individual education/program plans (Huettig & Roth, 2002; Sherrill, 1998). The support for in the moment tips and planning ideas were essential provisions for the practitioners in this study.

Unfortunately, the surface level support, such as simple activity ideas for lessons, was not enough for long-term provision of IPE. Some practitioners' felt the ideas were unrealistic for students' age and abilities, which was mis-educative. Some of the practitioners felt the consultant support was ineffective for their general knowledge, learning, and future application of IPE. Providing support that is transferable and applicable to future situations is an essential characteristic to PD and practitioner learning (Patton & Parker, 2014). Therefore, practitioners should be viewed and understood as active learners (Makopoulou & Armour, 2011) and be engaged in the processes of operationalizing, implementing, and transferring knowledge in PD.

Even though consultants were not always seen as helpful resources, they did act as a source of information and a connector for PD on IPE. Guidelines for consultants as resources and outlining their specific roles for practitioner support could assist practitioners to maximize consultants as a learning support system. In the literature, consultants are sometimes referred to as specialists or 'experts' in a particular area, as advocates, and as resource facilitator (Lytle & Hutchinson, 2004). Having consultants provide effective resources to encourage practitioner learning and continuous growth, and evidently steering practitioners in the direction of opportunities for PD, both inside and outside school districts, would be educative to practitioners seeking support in IPE. Ultimately, Patton, Parker, and Pratt (2013) describe, "Effective PD must also be facilitated with care" (p. 442). If consultants are viewed as primary facilitators of PD, they should consider their approaches and strategies for both formal and informal interactions as PD supports. Without careful consideration of the goals, the sustainability of PD and shifting notions of practitioners as learners does not occur and is not educative (Armour et al., 2015; Dewey, 1938). With the desire for IPE-PD, consultants could advocate for quality PD, share resources, and consider more regular school visits to support the complex situations occurring in

IPE. The literature considering consultants' roles in IPE is limited. Lytle and Hutchinson (2004) state, "It is important to examine the roles APE consultants play. This provides a better understanding of their roles and allows for the development of a working language to describe what they do" (p. 47). Therefore, it would be beneficial for future research to seek out experiences of IPE consultants in a broader capacity (Lytle & Hutchinson, 2004) to provide insight on their roles, how support is being provided to practitioners from school district consultants compared to external consultants, and to gain consultants' insight for IPE training in preparation and/or induction training.

Finally, and arguably most noteworthy, is the necessity for collaborative PD to bring EAs and teachers together in IPE. There is a desire for collaborative PD for IPE with/for both teachers and EAs together. Lyons et al. (2016) discuss that for inclusion to occur in classrooms, it has to be done together as a team approach, using of people as resources, and taking an active approach to observing and learning from each other's practices. Unfortunately, findings from these three cases emphasize that teachers and EAs are currently not equipped with the knowledge on how to work with one-another, let alone how to work together for IPE. Perhaps for the teacher-EA relationship to thrive in the IPE environment, PD needs to be provided for teachers on how to work with EAs and for EAs to navigate their roles and responsibilities with the teacher in the classroom. It is also evident that school districts should be clear on the job descriptions of EAs and this information needs to be directly shared with practitioners so roles are not 'ambiguous' (Bryan et al., 2013). Teachers and EAs might also consider taking initiative to discuss the policy documents administered by school districts and outline respective responsibilities so they can examine the practicality and logistics of how their roles and relationship look specifically in the various spaces and places they teach IPE.

When considering collaborative PD, developing communities of practice ***as*** and ***for*** PD is a critical component to sustaining learning (MacPhail, Patton, Parker, & Tannehill, 2014; Parker, Patton, & Tannehill, 2012) and future work with teachers and EAs working as a collaborative team in IPE. Communities of practice are groups of people who collaborate to learn or contribute to a topic and collective shared interest (Lave & Wenger, 1991). Communities of practice are becoming increasingly popular for team approaches in schools around inclusion and have been known to support continuous PD in PE (Mortier, 2018; Mulholland & O'Connor, 2016; Parker, Patton, & Tannehill, 2012; Patton & Parker, 2017). These communities can be ground level learning groups that promote a supportive and safe environment for all (Parker et al., 2012) and include all team members in the teaching and learning processes related to IPE. Forming and supporting communities of practice among teachers and EAs for learning and collaboration would be a proactive approach for PD and practitioner growth for IPE.

Conclusion

From this study and drawing on Dewey's theory of experience (1938), it is evident that to establish educative PD experiences for practitioners in IPE we might begin with bringing teachers and EAs together to discuss their experiences and current situations to help develop contextual, practical, and relevant PD. Bringing teachers and EAs together in conversations about IPE and for PD, are strategies to consider for fostering communities of practice and a team approach to IPE. Efforts to engage teachers and EAs in collaborative PD while utilizing their situations to help construct IPE-PD are essential to account for practitioners' lack of training and confidence in IPE. From this study, teachers and EAs have further expressed needing PD on how to work with each other and also learn about general activities and planning for IPE.

Collaborative IPE-PD for teachers and EAs together would allow for continuous learning opportunities and growth in dynamic IPE environments.

Future research might consider exploring practitioners' views on the type of PD and processes of PD for both teachers and EAs, specifically on working together in the activity space and for IPE-PD. It would also be valuable to investigate school district consultants' impact as PD supports for IPE, how practitioners maximize consultant support in IPE and PD, and consider how consultants might support practitioner collaboration or communities of practice for IPE. Recently, online PD courses in the United States have been developed and implemented as training and certification for adapted PE specialists (Healy, Block, & Judge, 2014; Sato, Heagele, & Foot, 2017). Although inclusion and school policies may differ from the United States to the Canadian context, the approach to offer more broad online PD courses for practitioners should be considered for practitioner growth and on-going learning, in addition to in-service PD in school contexts to account for practitioners' lack of knowledge specific to inclusion and IPE. Lastly, research should not only develop and implement collaborative IPE-PD, but it should evaluate how this type of collaborative PD is educative to practitioners' continual professional growth and ultimately, student learning experiences in IPE.

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Chapter 5: Paper 3 - Playing on the same team: Collaboration between teachers and educational assistants for inclusive physical education

Abstract

Together, teachers and educational assistants have an opportunity to ensure physical education (PE) is inclusive, accessible, and meaningful to all students. This article discusses collaboration for teaching inclusive PE (IPE), where students with disabilities participate within the context of the general PE environment with their peers. With the diversity we see in practitioners' backgrounds, school contexts, and student populations, it can be difficult for them to 'get on the same page' and work together without having a strategic plan. This article highlights a process for collaboration and suggests tasks for teachers and educational assistants to implement to achieve a collaborative approach to teaching and planning for IPE. It is essential for teachers and educational assistants to work through this plan and create an inclusive environment *together* to ensure appropriate and meaningful opportunities of IPE are being facilitated for students with disabilities. Specifically, this article discusses ways for teachers to better connect and work collaboratively with educational assistants in the IPE environment. Teachers and educational assistants can ensure the best IPE experiences by: (a) starting the conversation; (b) unpacking experiences; (c) setting expectations; (d) discussing students; (e) planning or success; (f) pursuing professional development; and (g) engaging in collaborative reflection.

Introduction & Background

As physical education (PE) practitioners, we should strive for environments and programs that are inclusive, meaningful, and joyful for *all* students. We try to ensure our programs and instructions are fostering enthusiasm for movement and educating students to be confident and competent in physical activities, ultimately leading to healthy active lifestyles. In Canada, elementary generalist teachers are often tasked with teaching diverse students and teaching students PE along with all the other subject areas. However, elementary teachers do not always feel that they have enough background education to teach PE (DeCorby, Halas, Dixon, Wintrup & Janzen, 2005) and feel unprepared to teach students with disabilities (McCrimmon, 2015). A popular approach taken up in many education systems over the last decade is an inclusive approach. An inclusive approach focuses on ensuring all students regardless of ability, are participating in grade level programs with their same-aged peers. This means teachers have students with disabilities within their general education classes. Throughout this article we refer to the term 'inclusive' PE (IPE), to encompass classrooms that have students with disabilities and diverse needs participating in general PE. The information in this article may be applicable to self-contained or separate classes as well because the information is on collaboration between teachers and educational assistants (EAs), who work together in a variety of classroom environments. Many inclusive classrooms have EAs who provide one-on-one or classroom support for students with disabilities (Government of Alberta, 2018). EAs are also known as paraeducators in the United States by their professional organization, as well as paraprofessionals, teacher aide, or learning support assistants in some other countries. Although terminology of IPE and EAs may vary, similar issues of inclusive classrooms occur across the

world. The suggestions made in this article may be applied in most settings in which teachers and EAs work together.

Holistically, IPE program provides students with disabilities (a) access to and supports for general education and learning, (b) a sense of belonging, (c) accommodations for individual difference in curriculum and instruction, and (d) opportunities for skillful participation (Goodwin & Watkinson, 2000; Lyons, Thompson, & Timmons, 2016). To cultivate an inclusive environment and to achieve these outcomes for IPE, it is imperative teachers and EAs work as an instructional team to include students in appropriate ways. Given the diverse nature of student needs and the dynamic class environment of IPE in schools, collaboration between teachers and EAs is essential. Practitioners (term used is referring to teachers and EAs together) must start to 'play on the same team' regardless of their title; it is critical to discuss roles, objectives, and situations to foster an inclusive, meaningful, and joyful experience for all.

Teachers are known to "create the context for learning and have been regarded as the key to successful inclusive education and the drivers of change" (Thompson, Lyons, & Timmons, 2015, p. 123). They support and plan for adaptations in areas such as content, approaches, structures, and strategies used in IPE. Relatedly, EAs have been identified as effective to help instruct students, modify curricular activities for students, support the integration of students in classes, and accompany students in the classroom (Haycock & Smith, 2011; Lieberman & Conroy, 2013). EAs support students and assist teachers to execute effective learning opportunities. The EAs participation in the IPE class *has* an impact on the learning environment. Although their contribution in the IPE environment is more effective when they have the knowledge, attitude, and willingness to participate and work collaboratively (Haycock & Smith, 2011), EAs are still critical supports to make IPE successful. Teachers and EAs need to

collaborate to enhance the IPE environment and effectively support students with disabilities (Bryan, McCubbin, & van der Mars, 2013; Piletic, Davis, & Aschemeir, 2005). Therefore, teachers and EAs are essential teammates to create this inclusive environment and execute instructional practices necessary for IPE. Playing on the same team means discussing the vision and application of IPE, implementing the plan and working together towards established, common goals. To do so, teachers and EAs need a plan in place to develop a working relationship and seek opportunities for professional growth to implement and instruct meaningful IPE.

Strategic Plan Overview

The strategic plan outlined below has been developed based on an inquiry into teachers' and EAs' stories of IPE and professional development (PD) working together in the same classroom (Morrison & Gleddie, 2018). There is not one situation of IPE, one PD opportunity, or one key piece of advice to give practitioners as personal experiences, students, and environments are so varied and complex. However, overwhelmingly the practitioners from this research desired PD on 'how to work together'. Since school districts might not provide enough PD for IPE, practitioners may need to execute their own collaborative professional learning to discuss their practices, support each other learning about IPE, and build their professional relationship. Executing a plan such as this also provides both teachers and EAs working in the same environment with a voice in order to help them discuss the content and pedagogy occurring, create a realistic guide for their roles, and foster discussion for collaboration. The following section outlines the strategic plan, which highlights a process and specific tasks, including practical elements for practitioners to engage with *together* in order to work collaboratively in IPE: (a) starting the conversation; (b) unpacking experiences; (c) setting expectations; (d)

discussing students; (e) planning for success; (f) pursuing professional development; and (g) engaging in collaborative reflection.

Strategic Plan: Process and Tasks

1. Starting the Conversation: Getting to Know Each Other

Open communication and building rapport are key elements to collaborative relationships (Mattessich & Monsey, 1992). Starting the conversation with your EA to get to know *who they are* and *where they come from,* along with sharing these details about yourself can help you connect effectively. Share information such as characteristics about yourself, your interests, how you work and stories about your past. This information provides rich detail to others about you who are so they can value your experiences. Sharing information about your experiences is also important because you can recognize the unique backgrounds each of you brings to the IPE environment. Lytle, Lieberman, and Aiello (2007) also suggest that it's important to get to know your EAs, introduce them to students and colleagues, and put their name on the door to ensure they feel ownership and as part of the team.

Table 5.1

Task: Answer the following questions separately and then discuss the answers and topics together

- Your interests or your hobbies outside of work
- Why you wanted to become a teacher / EA
- What your teaching / EA backgrounds are
    - Grades /schools you have worked in
    - Types of students you have worked with
- What is your biggest strength or asset to: the classroom, the student, and the teacher or EA as a partner in the classroom?
- What makes you feel like you are valued in your position?
- If you had to pick a goal for yourself this school year, what is something you'd like to get better at doing? How can your teaching / assisting partner help you achieve your goal?

Devecchi and Rouse (2010) also describe the following elements, which contribute to the success of teacher-EA collaboration: sharing knowledge and skills to support individual children and the whole class; getting to know each other's teaching and behaviour management strategies; and having practitioners be approachable and respectful to each other. Therefore, teachers should also outline their educational philosophy and approach to teaching and classroom management with EAs. Outlining details about your beliefs and classroom structures helps the team-building process and sets the stage for collaboration (De Fonte & Capizzi, 2015). EAs should be open to learning and respecting the teacher's approach but the teacher must ensure they are open to hearing the EA's ideas and input as well. Often times, this type of information, philosophy, and management strategies, aren't shared between teachers and EAs early enough; we can't assume that other people will pick up on those expectations so it is essential to set time to discuss these areas. During the first few weeks in a classroom, teachers should suggest that the EAs observe the class structure, instructional strategies, and routines. Also be sure to ask if they have questions about your approach and strategies used to start the conversation about getting to know each other.

Table 5.2

Task: Discuss the following areas with your EA

- Educational philosophy and teaching style (provide a general statement and a specific IPE philosophy)
- Classroom & gymnasium routines and set up
- Breaks, recess routines, transitions, supervision/duties etc.
- Students that need more support in different classes/subject areas
- Students that work well together or that don't work so well together
- Behaviour and classroom management strategies used

2. Unpacking Experiences: Backgrounds & Comfort Levels

We all come from different backgrounds, with different experiences. Dewey (1938) reminds us that our previous experiences impact those that follow. Sharing experiences allows us to reconstruct them and helps us come to understand how we feel about a situation or subject area. Discussing past experiences helps us to learn from both positive and negative events and assists us to analyze our motivations, comfort levels, beliefs, preoccupations, and values. These discussions facilitate understanding of external influences (e.g. equipment, space, activities, people) that could impact our knowledge, practice, and beliefs about IPE.

For IPE, it is important to *reflect* on our own experiences with inclusion, PE, *and* IPE to evaluate how our past might influence what we do as practitioners. It is also valuable to *share* these experiences with your EAs and hear their stories to compare your backgrounds and discuss how you can use these experiences to support each other. This can also help you have a better understanding of where someone else's beliefs and approaches are coming from. Teachers of PE often forget that not everyone is comfortable in the PE environment and even less so in IPE. Sometimes people have negative past experiences, a lack of experience, or minimal education in an area causing negative feelings towards a subject. If someone brings negative experiences to a situation, it doesn't mean that they have nothing to contribute, it means they should evaluate *why* they feel that way about those experiences and *how* they can transform their attitude to facilitate positive experiences for others. For instance, a practitioner might have had negative experiences as a youth in PE, which might make them uncomfortable participating in activities with students. Also, some practitioners might have had a great PE experience as a child, but think that the PE class they teach or assist in now, should be exactly like theirs was. Overall, a PE program should provide a breadth and depth of experiences for students and should be developed based on the

curriculum placed alongside the students in front of you. Try not to make assumptions about your teaching or assisting partner's participation and comfort in IPE until you have unpacked your experiences together. Unpacking experiences will help you plan for an IPE class that makes everyone feel like they can contribute and participate.

Table 5.3

Task: Chart and discussion activity to unpack experiences

1. Create a T chart together with positive experiences on one side and negative experiences on the other
    a. Jot down positive and negative experiences, elements, or memories of PE or physical activity on the chart
    b. Talk about what made those experiences either positive or negative for you and why you felt that way
2. Now think about your experiences with inclusion and working with students with disabilities:
    a. Discuss some of the experiences and students you have worked with in the past
    b. What worked well or not so well for inclusion to occur?
        i. Consider: strategies, organizational elements, instruction, etc.
3. Brainstorm some of the activities that you do in IPE (you can break this down in the various curriculum dimensions: Dance, Games, Gymnastics, Individual Activities/Fitness, and Alternative Environments/Outdoor Education)
    a. What areas do you feel comfortable participating in and teaching/assisting in?
    b. What are areas of growth that you might need support on to engage fully in the activities?
    c. How can you help each other feel comfortable in IPE and working with different students to ensure the students are getting opportunities to participate?

3. Setting Expectations: Roles & Responsibilities

You have learned about each other's previous experiences and discussed comfort levels with IPE, so now it's time to clearly define roles and responsibilities. In teacher education programs, pre-service teachers often don't learn specifics on how to work with other adults in the classroom such as EAs. Similarly, sometimes EAs don't have much training on their particular roles in the classroom, since the diverse classes they work in might have different expectations. Practitioners need support and guidelines to help them set out realistic roles and appropriate

ways to communicate and collaborate. Commonly, EAs' roles and responsibilities are not clearly defined (Bryan et al., 2013). Additionally, whether you're new or experienced, roles tend to shift and change frequently in the school environment. School districts or administration might have (or should have) a policy for EA roles. Roles are also often defined in individual professional contracts. However, this information might not be passed along to teachers or EAs. A policy or guidelines for EAs might also not exist, which means now it is your chance to create it. Lytle, Lieberman, and Aiello (2007) note that it is essential when training EAs that clear job descriptions are outlined. Therefore, creating these roles and responsibilities *together* is critical to ensure the expectations, responsibilities, and roles in IPE are clear and appropriate.

Table 5.4

Task: Establishing Roles

1. Consult your district guidelines and individual professional contracts on EA/teacher roles if they are available. If there are no guidelines set out, discuss and compile a list of potential roles for and EA. Consider the following broad topic areas that may help you think of roles:
    - Behaviour management, conflict resolution strategies, and supervision
    - Instructional strategies for students (schedules, visuals, assistive/communication technologies etc.)
    - Preparation of materials
    - Before, during, and after class (including set-up/take down or personal care responsibilities)
    - Understanding and modifying activities in IPE
    - Individual education / program plans
    - Communicating information to parents
- Talk about examples of how each of these could play out in IPE
- Discuss the expectations you both have for these areas and check off items on the list that you might need to learn more about or get support on
- Suggested resource for support: Hee Lee and Haegele (2016); Lieberman (2007); Lieberman and Houston-Wilson (2018); Grenier and Lieberman (2018).

The way adults communicate and speak to each other and navigate situations in the classroom environment also matters (Carnahan, Qilliamson, Clarke & Sorensen, 2009, p. 36). "The effectiveness of the collaboration is not only the result of clearly defined roles and

responsibilities, but also the ability of team members to respect and trust each other's knowledge, competence and experience…" (Devecchi & Rouse, 2010, p. 91). For a team approach to be possible, discussing the meaning of respect, expectations, and communication strategies can help team members work together productively and efficiently.

Table 5.5

Task: Outlining Respect, Appropriate Expectations & Communication

- The teacher should inform the EA their policy and plan for student respect and respect in all teaching environments
    - Discuss how you have or will create IPE rules/goals with the students around respect. If possible, the EA should be involved in creating these guidelines with the class
    - To establish mutual respect, discuss your definitions of respect and how you plan to model and execute respect for one another in and outside of IPE
- Discuss the expectations you have for each other in relation to the following topics:
    - Attitudes in and towards IPE
    - Role modeling actions, behaviours, etc.
    - Feedback (to students and to each other)
    - Taking initiative to set up/clean up or modify activities in IPE
    - Instruction to students in IPE
- What are good times and methods (verbal communication, written out sheet, email, etc.) to share plans?
- What are good times and methods to talk about students?
- When will you meet to discuss if expectations are being met or how to reevaluate the roles and expectations set?

Adapted from The Alberta Teachers Association (2000)

4. Discussing Students: Goal Setting & Inclusion Strategies

From your previous conversations regarding past experiences with PE and inclusion, you might have brought up different students you've worked with or the students you have in your class currently. It is important to come together to set goals for the students. EAs expertise and experience with various disabilities are not always sought out or valued (Maher, 2016). EAs also "…spend more time with their students than anyone else in the school…and have a wealth of knowledge pertaining to their specific child" (Haegele & Kozub, 2010, p. 3). When it comes to

discussing students, setting goals, and planning for instruction there has to be collaboration to bring together the EA's expertise (knowledge on students) and teacher's expertise (curriculum and pedagogy).

When discussing and planning for student goals and appropriate inclusion measures, it is critical to first consult students' individualized education/program plan or personal learning plan. These plans often have information pertaining to the students' accommodations and needs. Unfortunately, it is sometimes rare that information specific to IPE exists in these documents. To ensure you are setting appropriate goals, you should consider covering all areas of the student's learning repertoire such as having a physical/movement goal, social goal, or cognitive/learning goal. With comprehensive and diverse goals in place, teachers and EAs are able to plan and modify activities in class to strive towards one or all of the goals in *all* subject areas. Remember that goals can be created for learning, personal growth, and for students' future. Create a file or document for a student profile with their specific goals for IPE; pass this information along to substitute teachers, EAs, or new staff entering the class so you have consistency and clear recommendations for students.

Table 5.6

Task: Goal Setting

- Make SMART goals for students
    - Specific for physical, social, or cognitive/learning domains with short and long term projections
    - Measurable so you know how to evaluate them and what you're evaluating
    - Attainable and Realistic to ensure they are appropriate for the student and for assessment purposes
    - Time-based to ensure progression and new goals can be established the following year
- Discuss how you're going to track student progress and achievement and how you will share this information to one another

5. Planning for Success: Curriculum, Class Structure & Adaptations

EAs don't often receive IPE specific training or have an opportunity to see the curriculum that the teacher follows to plan their lessons and evaluate students. It is helpful if the teacher makes it clear at the beginning of the class, week, or unit what outcomes the students are working towards. This helps the EA to be informed on the purpose of the activities and how they can support student learning during class time. Just as a teacher would share the learning objectives with students, this information should be shared to EAs in advance. Teachers can post this information on their class website, share lesson plans with EAs in their mailboxes, write learning objectives on the white board, or orally communicate the information to EAs. When it comes to planning for inclusion of students with disabilities in IPE, modifications need to be discussed proactively, instead of becoming reactive solutions when students find activities too difficult.

Although the EA should not be required to plan additional lessons, they may support the teachers' plan by modifying the activity or instructions to the students. Modifications to the activities can then be communicated to the teacher to ensure they are appropriate. Both the teacher and EA should be open to adapting the plan to best fit the needs of the students. Sometimes the teacher will want the student to participate in the same activity without modifications because this helps them with their evaluation of the curriculum and to see comparative student achievement. In this instance, the EA must trust that there is a reason for the teacher's decision. Other times the EA might have full freedom to take creative initiative and change the activity to something more manageable for the student. This is where open communication is essential and keeping each other informed on modifications and adaptations. It is also important to remain open to hearing suggestions from each other so the most appropriate

approach can be implemented. It could also be critical to set aside dedicated time to work through instructional plans and modifications together to help the flow of IPE.

There are many facets to consider when it comes to the curriculum, class structure, and adaptations. Together, take a look at some of the following tasks and suggested resources to help your planning process for creating a classroom environment that puts everyone on the same page and allows every students to participate to their fullest.

Table 5.7

Task: Curriculum & Activity Modifications/Adaptations

- You've previously brainstormed different activities of IPE (Table 3), now consider answering the following:
  - What activities allow for inclusion to occur more easily?
  - What activities are challenging to teach for the diverse students in your class?
- How will you ensure you have a balance of different activities? (individual, pair, and group work)
- How can you provide choice to student in IPE? (i.e. options for equipment for students to choose)
- How can you modify different activities to make them more inclusive?
  - Discuss how you might change the space/environment, task, equipment, people/students
- Suggested resources for support:
  - Block (2016); (Jacula & Morrison, 2018); (Hickson & Morrison, 2018); Lieberman and Houston-Wilson (2018)
  - Adapted Physical Education Teacher Tool Box SHAPE America (2018) and Physical and Health Education Canada's Fundamental Movement Series (2009)

Table 5.8

Task: Class Structure

- Talk about classroom routines (those already in place or a good idea to start) to support inclusion of students with disabilities (i.e. equipment set up or student /peer helpers)
- Discuss what structured vs. unstructured IPE looks like?
  - How could you use stations or task cards to support the IPE class?
  - Suggested resource for support: Iserbyt and Byra (2013)
- How can you use peers in the class to support inclusion?
  - Suggested resource for support: Cervantes, Lieberman, Magnesio, and Wood (2013)
- How do you set up your class to ensure Universal Design for Learning in IPE:
  - Suggested resources for support: Grenier, Miller, and Black (2017)

6. Pursuing Professional Development: Collaborating as PD

Professional development (PD) is essential to support practitioners' professional practice, including their knowledge and skills in different subject areas. Unfortunately, IPE specific PD is often rare in school districts, therefore, it is essential that you take initiative to seek out PD opportunities in and outside your district, suggest potential areas of need for PD to administration, and find other PD resources.

Table 5.9

Task: Seeking PD & Sharing Resources

- Talk about PD sessions going on in the school district that you can potentially attend
- Come up with some topics that you both would like support on and pitch them to other teachers/EAs; take those ideas to your administrative team
- Check out who the consultants are in your school board (inclusion, PE, and IPE/adapted) and try to have them come in sooner rather than later to chat about your class, students, or questions you might have around IPE
- Seek out organizations in your state that might provide resources or support. Sometimes these groups have people who come out for free or provide an online chat service if you have questions
- Connect with your colleagues - in your school, district, and outside the district
- Use social media as a tool to seek support for IPE - twitter, facebook, etc.
- Discuss together how you can both support each other's learning and instruction of IPE
- Share resources you might have (online, hardcopy, people, etc.) with each other
- Suggested resource for support: Lieberman (2007)

7. Engaging in Collaborative Reflection: Check-Ins and Feedback

For the team approach to work in IPE it must be a continuous process of dialogue between practitioners and reflection on what is happening in IPE. Providing and receiving feedback as a partnership will help improve the practices and environment for inclusion. Practitioners should be open to various lines of communication such as listening, accepting feedback, revisiting roles and responsibilities throughout the year, having meetings and sending emails, expressing issues and concerns, and sharing successes (The Alberta Teachers

Association, 2000). Lieberman (2007) outlines an evaluation checklist for EAs and Da Fonte and Capizzi (2015) discuss a work-style preference evaluation, which could be a good starting place to create feedback and check-in measures together. Having teachers and EAs collaborate shouldn't be isolated to one specific subject area but rather it should be a consistent element across subjects. Therefore, it is critical to set aside time and have clear guidelines for check-ins and feedback. Having regular monthly check-in times or bi-weekly meetings together will ensure you're on the same page and working effectively as a team.

Table 5.10

Task: Outlining Regular Meetings and Check-in's

- Discuss the following:
  - How often can you connect for a brief chat on how things going?
  - Do you prefer to connect in person or via email?
  - Are you both on the emails to parents, administration, etc. to ensure consistent and clear communication among all members of the inclusion team?

Table 5.11

Task: Feedback

- EAs should receive frequent feedback about the execution of their roles and responsibilities. This can be in forms of written and verbal feedback, positive reinforcement and self-assessment to make the collaboration and supervision of the teacher easier.
  - Discuss the best ways to give and receive feedback to one another
  - Discuss how the EA can provide the teacher with feedback on their role and the teachers supervision
- Feedback might be in necessary in the following topic areas:
  1. punctuality
  2. strengths and weaknesses
  3. ability to follow instructions
  4. communication
  5. attitude toward work
  6. time management
  7. work and organizational skills
  8. ability to accept suggestions and criticisms
  9. initiative and resourcefulness
  10. attitude toward students
  11. dependability
- Suggested resources for support: Da Fonte and Capizzi (2015) and Lieberman (2007)

Adapted from The Alberta Teachers Association (2000)

Conclusion

In order to establish that inclusive, meaningful, joyful environment and program for *all* students, teachers and EAs need to play on the same team and work together in IPE. Teacher-EA collaboration opens up the possibilities of unique instruction opportunities, knowledge sharing, curriculum adaptations, and most importantly, student support to foster successful participation in the physical, social, and cognitive areas of IPE. To achieve such collaborative efforts in IPE, teachers and EAs need to learn how to work with one another and learn from each other. The key steps to take in building this relationship to work collaboratively in IPE are: (a) starting the conversation; (b) unpacking experiences; (c) setting expectations; (d) discussing students; (e) planning for success; (f) pursuing professional development; and (g) engaging in collaborative reflection. Make time to communicate, build a relationship, support each other, and plan for successful IPE.

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Chapter 6: Discussion

> *"Dewey understood well that we each live in, and on, our own experiential middle grounds, always somewhat stuck in the mud of trying to get from here to there, from is to ought, and that this muddling around was something we should work on, as doing so would prepare us for the inevitable muddling that comes with the unknown of the future"* (Downey & Clandinin, 2010, p. 384)

The purpose of this research was threefold: to understand and learn about in-service teachers' and EAs' experiences with PD for IPE; to explore how they envision PD and supports to teach IPE; and to use this information, along with my experiences and the literature, to construct an experience for collaborative IPE-PD. Throughout this discussion, I will: (a) discuss the research findings using Dewey's theory of experience as a framework; (b) reflect on the research process and findings; and (c) outline future directions for research in this area.

Educative & Mis-educative Experiences

We cannot assume that all experiences will be beneficial; rather, "Everything depends upon the *quality* of the experience which is had" (Dewey, 1938, p. 27). When considering the nature and quality of experiences, Dewey (1938) describes an experience as either educative or mis-educative. Educative experiences are those that lead to growth and a desire for future experiences, whereas mis-educative experiences distort growth and instill a lack of interest for future experiences (Dewey, 1938). In this study, I learned that the participants had rare opportunities of PD for IPE. The participants' school district did not provide explicit IPE-PD, therefore it could not be determined if their experiences of PD for IPE were educative or mis-educative. However, I did learn that the participants had both of these types of experiences with past PD opportunities. The participants explained they previously attended teachers' conventions, workshops on inclusion, workshops on physical education and induction training. The participants described that they would ask questions related to IPE in these PD experiences,

however, they were not provided with information they believed was valuable to connect to content or pedagogy for IPE. For instance, the workshops on 'inclusion' or learning about particular disabilities did not have examples for IPE. Another experience the participants shared was how they maximized school district consultants as a form of PD to seek ideas for IPE. Consultants would come to their schools to provide one-on-one support to EAs, provide in-service classroom support to discuss students with teachers and EAs, or the practitioners would contact school district consultants for resources on IPE.

The educative aspects of these experiences included participants' appreciation for PD that took place within their schools where they could then focus on their students and real world context. When consultants attended the participants' class, it allowed them to ask specific questions related to their students and the activities they were implementing. Consultants were helpful in offering quick tips in the moment, to enhance students' inclusion in activities. The mis-educative aspects of these experiences were that consultants/ PD providers were not always knowledgeable on IPE to support the practitioners' questions and desire for examples in that context. Additionally, some of the participants found the consultant support to be superficial. Although, they supported them with on the spot solutions, participants felt the more important learning about how to construct an IPE program and how to develop activities for future use with students, was limited. The practitioners also noted the consultants did not come to the school often. There simply was not enough time and not enough information from the consultants for the participants to advance their teaching and assisting in IPE.

From the participants' shared experiences, it is evident that IPE-PD needs to be a topic of PD and provided in school districts for all practitioners teaching and assisting in IPE. The call for IPE-PD is not new (Maher, 2016; Morley et al., 2005; Sato & Haegele, 2017), however, the

findings from this study demonstrate it still an area of need *and* interest for both teachers and EAs. The participants' past experiences with PD also indicate that consultants and PD providers play an important role in IPE-PD. Consultants and PD providers need to thoughtfully consider their PD facilitation approaches and strategies. Parker and Patton (2017) discuss that PD should be 'facilitated with care,' meaning the knowledge, experience, environment, and desires of practitioners should be taken into account. IPE-PD should also include specific examples and strategies tied to practitioners' students and their current context, while at the same offering diverse examples and transferable strategies for future teaching and assisting experiences in IPE. Furthermore, the scheduling of IPE-PD should be more than a one-time visit or one-time workshop. Patton & Parker (2012) note that while these one-time opportunities are effective for gaining knowledge and 'things to do on Monday' they are ineffective when it comes to long term learning opportunities. IPE-PD should be on going and flexible in order to meet needs over time (Armour & Yelling, 2004; Petrie & McGee, 2012).

Interaction

Dewey's (1938) principle of interaction is made up of two key elements: objective conditions and internal conditions. Objective conditions are elements in an environment that impact an experience such as "…equipment, books, apparatus, toys, games played, [or people]…" (p. 45). Internal conditions happen within an individual during an experience - thinking, feeling, motivation, etc. The ways in which an individual experiences the relationship between internal and objective conditions shapes their 'situation'. Dewey (1938) describes the concept of the situation as the unity between the person and their environment. Dewey (1938) claims,

> An experience is always what it is because of a transaction taking place between an individual and what, at the time, constitutes his [or her] environment…the environment, in other words, is whatever conditions interact with personal needs, desires, purposes, and capacities to create the experience which is had. (pp. 43-44)

When considering the participants' situations of IPE, I found the three cases were very different. The participants lived IPE differently. The IPE situations had many differing objective and internal factors that influenced how IPE was taught and implemented. Objective conditions included: the practitioners' students, school schedules, IPE timeslots, planning time, resources, and equipment. Internal conditions included: practitioners' knowledge, confidence, instructional approaches, and conceptions of IPE.

The findings of this research suggest that contexts and beliefs (internal and objective conditions) are critical aspects to consider for practitioner learning and the development and implementation of IPE-PD. Armour and Yelling (2004) highlighted that PD should be situational. Collaboration at the ground level to provide valuable and relevant PD applicable to practitioners' contexts is essential for learning. With such diverse situations of IPE, PD should be school-based and focused in the complex lives of practitioners (Armour, 2006; Garet, et. al., 2001). The diversity of internal and objective conditions influencing the IPE situation for each practitioner also indicates that PD should take place within the social environment of practitioners if at all possible (Parker & Patton, 2017). Patton et al., (2013) described that it is important to seek advice from participants of PD relative to the design and planning of the activities and information being shared. Dewey (1938) states "…that failure of adaptations of material to needs and capacities of individuals may cause an experience to be non-educative quite as much as failure of an individual to adapt himself to the material" (pp. 46-47). Inviting

practitioners to be part of the decision-making and focusing on their beliefs, needs and situations can lead to proper adaptations of materials and ownership of learning (Armour & Yelling, 2007; Parker & Patton, 2017).

Continuity

Dewey (1938) describes "…every experience both takes up something from those which have gone before and modifies in some way the quality of those which come after" (p. 35). The principle of continuity suggests that experiences over time are connected. Therefore, to allow practitioners to discriminate between the value and quality of different experiences, they need to evaluate past experiences, understand current situations, and consider future experiences and learning (Dewey, 1938). When the participants discussed their past experiences with IPE and PD, they emphasized their background of educational experiences. They felt 'unprepared' to teach and assist in IPE. The teachers discussed how their undergraduate courses minimally included information on IPE and the EAs talked about how they had no training specific for IPE at all. The unpreparedness and lack of education for teaching and assisting in IPE is consistent with the literature (Bryan et al., 2013; Ko & Boswell, 2013; Lirgg et al., 2017; Maher, 2016). Unique to this study, however, the participants' specific experiences with physical education or experiences working with students with disabilities had a direct connection to their confidence in teaching and assisting IPE. For instance, those participants who had educative physical education experiences and were active in their personal lives, felt confident in modifying equipment for students with disabilities in IPE. Similarly, those participants who had educative experiences working with students with disabilities in a variety of settings, felt confident in making instructional specific modifications. These experiences indicate that past experiences have a

significant impact on practitioner confidence, current, and hopefully future teaching and assisting in IPE.

When the participants evaluated their current IPE situations and future desires for IPE-PD, they expressed a desire for collaborative PD opportunities. The participants realized they had never attended any PD *at the same time* and described that it would be beneficial to learn *together* to teach IPE. At the same time, they viewed collaborative PD as an opportunity to support their planning and instruction in IPE. Interestingly, the participants also felt they needed to learn *how to work together* or *how to work with one another* in general. The desire for collaborative IPE-PD, PD for EAs on how to work with teachers, and PD for teachers on how to work with EAs is essential in supporting the implementation of quality IPE and a collaborative approach to IPE.

Dewey (1938) suggests that it is critical to have and select present experiences that will contribute or will "live fruitfully and creatively in subsequent experiences" (p. 24). In accordance, IPE-PD needs to unfold in an on-going nature to accommodate for past, present, and future experiences. Having continuity of experiences for IPE-PD contributes to practitioners' life-long development. As a result, IPE-PD should (a) discuss practitioner past experiences; (b) review educational backgrounds; (c) bring practitioners together for learning; and (d) teach practitioners how to work with one another and together in IPE.

Growth

In Dewey's (1938) idea of growth, "…ideas are not fixed but are formed and reformed through experience" (p. 8). Growth is not a 'finite achievement'; it is an on-going and continuous process of learning (Armour et al., 2015). Therefore, we must understand that growth is about constantly reconstructing experiences. Similar to the practitioners' continuity of experience in

this study (the evaluation of past, present, and future experiences) growth for educators in general means we are in a perpetual state of becoming as part of our learning process – this is why PD is so vital. IPE-PD must be developed and implemented to contribute to practitioners' growth. Additionally, the way IPE-PD is developed and implemented should *be* education as growth. This means IPE-PD should promote active and transformative experiences that influence an educator's continual process of becoming - it should be on-going, continuous, and involve reflection.

Dewey (1938) describes that it is not only the reflection *on experience* but also what is *being experienced* in a given situation that impacts learning and the quality of experience. Practitioners must be engaged and central to the co-construction of IPE-PD. They must actively reflect on their previous experiences with IPE and PD but also on their current situations to determine what could become educative in an IPE-PD experience. Armour et al., (2015) suggest that practitioners are not passive learners; they are active in their own reflections and reconstructions of experience facilitating a constant learning process. They further illustrate that underlying Dewey's idea of growth, "…ideas are not fixed but are formed and reformed through experience" (Armour et al., 2015, p. 8). Growth is about constantly reconstructing experiences for future encounters. Practitioners *and* PD providers are subject to transformation through experience and should reflect to 'form and reform' IPE-PD experiences. Educative PD experiences are those that intrigue practitioners to continuing learning; PD that is tailored to practitioners' desires, can support their personal and professional growth and their ongoing engagement with learning (Armour et al., 2015). To ensure growth for practitioners who teach and assist in IPE, developing growth-based IPE-PD is an essential starting point.

Researcher Reflections

Engaging in this research was both an inspiring and messy process. In hermeneutics and interpretive inquiry, the researcher, participants, and contexts cannot be separated. In fact, there is a clear emphasis on co-construction of knowledge by the participants and the researcher. My work has been an on-going conversation with my participants to bring our knowledge together and create understanding about experiences with PD for IPE. Smith (1991) describes this as, "fusion of horizons, whereby what I bring and what you bring to the encounter can be dialogically engaged to produce a condition in which we feel we understand each other" (p. 191). My role as the researcher has been essential to knowledge construction with my participants to bring their stories and experiences to the surface. Crafting the case and participant portraits (Chapter 1) was an eye-opening method and process that helped me to capture a more holistic understanding of my participants and their experiences. Further, I took a strengths-based approach in conversations with my participants to affirm the stories they shared were worthwhile – regardless of whether they were educative or mis-educative.

As a researcher and IPE 'consultant', I also had to navigate my role with the participants - which brought me to an important learning experience. I came to realize how influential my role was in bridging the conversation gaps between teachers and EAs. As a 'third party' to the teacher-EA relationship in IPE, I acted as a moderator. I was able to provide a space for stories and insights of both individuals in each case (one-on-one interviews) to be heard and also bring those forward in discussion to open dialogue between participants (focus group interviews). Carson (1986) describes, researchers plays a critical role bringing contradictions and information in conversation to participants' attention.

> Doing research in a conversational mode changes the relationship between persons who have been hitherto labeled a "researcher" and "practitioner." While it is unlikely to totally abolish the distinctions between them, conversational research does offer the possibility of developing a community of cooperative investigation into significant educational questions (Carson, 1986, p. 83).

These collaborative conversations in the focus groups were pivotal to the findings of this research. I believe they provided a unique opportunity to share stories and to learn from each other, which was educative and essential for practitioners' collaboration and instruction of IPE moving forward.

This research study is the beginning of a larger journey of collaborative IPE-PD implementation to support teaching and assisting in IPE. I entered into this program questioning the support for IPE in schools, wondering whether IPE-PD existed or not, and confused about the relationship among teachers and EAs working together in IPE. *'2014 Hayley'* would have liked to say she is walking away from this research with answers to her research questions and her assumptions - and to some degree I feel I have. However, instead of 'walking away with answers', I am just getting started on what may become a lifelong program of study.

I believe I am now in a place to ask new questions and implement new ideas based on what I have learned from this research. The participants' stories and experiences have opened up exciting new questions about IPE and PD including:

- Current support and PD for inclusion in schools is minimal. ***Why don't administrators and school districts accommodate for this lack of support and PD?***
- Practitioners are still facing challenges with implementing IPE such as a lack of education/knowledge and minimal resources (e.g., personnel or equipment), yet the main

source of IPE-PD to accommodate for these issues is from school district consultants. ***How do consultants define their roles and support for IPE?***

- Collaborative PD for the dynamic IPE environment is rare. ***How do we create and implement IPE-PD that is realistic and meaningful in diverse IPE settings?***
- Participants in this study desired collaboration but they recognized they needed to learn how to work with one other and how to work together as a collaborative team in IPE. IPE-PD needs to be implemented for practitioners to support their relationships and implementation of quality IPE. ***How does collaborative IPE-PD support practitioners' implementation of IPE and impact student learning in IPE?***

Future Directions

The practitioner experiences explored in this study have clear implications for in-service IPE-PD. Jones et al., (2012) reassures, "There is no one size fits all model that is appropriate for the provision of training for paraeducators [EAs] and teachers who are preparing to work as a collaborative, instructional team" (p. 2). However, I believe there are a series of actions and guiding processes for an experience that could facilitate collaborative learning to support teaching and assisting in IPE. I have combined the findings from this research with Dewey's theory and the trends in effective PD to propose a draft framework for an in-service collaborative IPE-PD experience (Table 6.1). The experience is designed for teachers and EAs *together*. It reflects a process and is ongoing for collaboration and learning. The IPE-PD experience would allow for practitioners to reflect and unpack their experiences; for continuous learning opportunities; and to encourage practitioner growth in the ever-changing inclusive and dynamic PE environments.

Table 6.1

Draft Framework for In-service Collaborative IPE-PD Experience

Phase	Experience Description
Initial Contact	Consultants (internal or external to district) approach practitioners and practitioners approach consultants – it's a two way street. Initial contact should outline the contexts, interests and needs for IPE-PD.
Building Rapport	Getting to know each other is a critical phase to the beginning stages of IPE-PD. Discussing practitioner backgrounds, past experiences with IPE and PD, IPE context, students, and roles in IPE and PD is important *prior* to planning the IPE-PD active learning phase. Consultants should observe practitioners' classes & solicit information on the practitioners' desired learning areas and outcomes.
Collaborative Planning	Plan the learning process together. Make time to sit down and outline the amount of potential visits, the content for IPE-PD, and types of support required (workshop, modeling, resources, etc.). Discuss appropriate times and ways to connect.
Active Learning	The IPE-PD plan is in motion. Consultants may provide resources, demonstrations, and make time for collaborative planning. Implementation of the plan continues where information is shared for learning and hands-on support is provided.
Reflection	Reflection occurs individually, collaboratively (teachers and EAs together) and with the consultant as the facilitator.
Assess	Practitioners and consultants connect and assess: (a) learning, (b) PD supports, and (c) PD process.
Reconstruct & Reform	From the assessment of the IPE-PD, practitioners and consultants continue to plan for future learning and discuss collaborative practice moving forward. As the environment is constantly changing and new needs and interests become present, the assessment process is necessarily continuous. Reframing the experience requires information from reflection and assessment to bring forward in a new collaborative planning session and to discuss active learning for IPE-PD.

I believe the practitioners' experiences shared in this research also provide insight into future directions for pre-service teacher and EA education. Pre-service training programs and courses related to IPE should consider the following suggestions: (a) Unpack stories of IPE: discuss values, various conceptions of inclusion, stereotypes, approaches to IPE and comfort levels with IPE; (b) provide practical and realistic learning opportunities *with* students with disabilities in IPE in a variety of situations/environments; (c) share stories from teachers, EAs, and students about diverse contexts and situations of IPE for preparation; and (d) discuss teacher-EA collaboration, communication, and prospective roles for teaching/assisting in IPE.

Continuing research on IPE-PD is critical to improve IPE and ultimately, the student experience in IPE. Based on the current study, three distinct yet connected research directions need to be pursued. First, researchers should bring teachers and EAs together in conversations to learn more about their working relationships and collaboration in IPE. Second, in IPE-PD we need more researchers to explore practitioners' views on the type and processes of PD, including collaborative PD. Finally, it would be valuable to investigate the impact of school district consultants as a critical support for IPE-PD. Considering how practitioners maximize consultant support in IPE and PD and how consultants might support practitioner collaboration for IPE is critical. Collaborative IPE-PD needs to be developed and implemented in diverse contexts to learn more about the efficacy of IPE-PD for teachers and EAs learning to teach/assist in IPE. Furthermore, research should not only develop and implement collaborative IPE-PD, such as the experience outlined from this research, but it should evaluate how this type of PD is educative to practitioners' continual professional growth and ultimately, student learning experiences in IPE.

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Appendices

Appendix A: Research Ethics Approval

Notification of Approval

Date:	January 4, 2017
Study ID:	Pro00064508
Principal Investigator:	Hayley Morrison
Study Supervisor:	Douglas Gleddie
Study Title:	Professional development for inclusive physical education: Fostering educative experiences
Approval Expiry Date:	Wednesday, January 3, 2018

Approved Consent Form:	Approval Date	Approved Document
	1/4/2017	Parental Information Letter and Consent
	1/4/2017	Participant Information Letter & Informed Consent

Sponsor/Funding Agency:	SSHRC - Social Sciences and Humanities Research Council	SSHRC

Thank you for submitting the above study to the Research Ethics Board 1. Your application has been reviewed and approved on behalf of the committee.

A renewal report must be submitted next year prior to the expiry of this approval if your study still requires ethics approval. If you do not renew on or before the renewal expiry date, you will have to re-submit an ethics application.

Approval by the Research Ethics Board does not encompass authorization to access the staff, students, facilities or resources of local institutions for the purposes of the research.

Sincerely,

Anne Malena, PhD
Chair, Research Ethics Board 1

Note: This correspondence includes an electronic signature (validation and approval via an online system).

Appendix B: Information Letter and Consent Form

INFORMATION LETTER
INFORMED CONSENT: TEACHERS &
EDUCATIONAL ASSISTANTS

Professional development for inclusive physical education: Fostering educative experiences

Investigator:
Hayley Morrison
Email: hjmorris@ualberta.ca
Phone number: (705) 706-5334

Supervisor:
Dr. Douglas Gleddie
Email: dgleddie@ualberta.ca
Phone number: (780) 248-1951

Dear Participant,

My name is Hayley Morrison and I am a PhD student in the Department of Elementary Education at the University of Alberta. After completing my undergraduate degree and bachelor of education in health and physical education, I found a passion in teaching individuals with disabilities physical education and physical activity. I began consulting in 2012 to support teachers and educational assistants working with students with disabilities in their classes; I provided workshops and practical in-service support in several school districts in Ontario. My consulting work led me to a Masters degree examining resources for teaching students with disabilities. I am now engaged in the Doctoral Program and am investigating the experiences of teachers and educational assistants with professional development (PD) for inclusive physical education. I am seeking to learn about the types of support and vision for PD for teachers and educational assistants who aspire to learn and collaborate together to teach inclusive physical education. You are being asked to be in this study because you are a teacher of physical education in an elementary school or an educational assistant and have shown interest in learning about inclusive physical education. The purpose of this study is to provide an opportunity for teachers and educational assistants to discuss their experiences and voice their needs, wants, and interests for PD on inclusive physical education *together*. These discussions will happen through individual interviews and focus group interviews (1 teacher and 1 educational assistant) to help support a collaborative relationship and learning experience. Understanding these experiences and having these conversations will allow me to develop and implement practical PD to support teaching physical education to students with disabilities. The results of this study will be used in support of my dissertation. Furthermore, learning about these experiences and creating a practical PD experience for practitioners needs and wants, may help future PD plans to support teaching children with disabilities in physical education.

Study Procedures

Procedures for this study will include two one-on-one interviews and two focus group interviews that will take place away from instructional time and occur at a time and location that is convenient for you. I will also do two-three class/school observations to be negotiated with you based on your schedule and school requirements for external observers in the classroom. In addition, we will create a practical PD experience based on your needs, wants, and availability to implement in your class during regular school time.

Finally, I will provide you with a short letter outlining my involvement in the class to send home to parents of your students, as I will be present in the classroom for observations and the PD experience. Your participation in this study will involve the following:

Phase 1

1. Scheduling a time for the initial observation (half day at the school). This observation is for me to come to your school and see your class get to know you and your context.
2. Optional: You will be asked to complete one or two pre-interview activities the week prior to the individual interview (approximately 30 minutes to 1 hour to complete). You will be provided with a set of questions that might ask you to create a drawing, select an artifact, or write a list or timeline.
3. You will be asked to participate in an individual interview (approximately 30 minutes to 1 hour long). This interview will allow you to reflect on your experiences with PD and inclusive physical education PD.
4. Scheduling a time for the second and third observation days (full days at the school). These observations will also help me to get to know the context, class and school routines, and resources/equipment available to you.
5. You will be asked to participate in a focus group interview (teacher and educational assistant - approximately 30 minutes to 1 hour long). The first focus group interview will provide an open-space to collaborate and discuss (a) the potential supports needed and (b) the visions for an in-service practical PD session to teach inclusive physical education.

Phase 2

6. From the information gathered in Phase 1 (interviews, focus groups, and observations) along with my own experiences, and the literature, I will then create a practical in-service PD experience to implement with you to support your instruction and support of inclusive physical education. The implementation will occur at your school over the course of several months (the amount of visits has not been determined as it will be discussed and suited to your needs and wants. I anticipate between 3-8 visits / sessions at the school in the physical education class).
7. You will be asked to participate in a follow up individual interview (approximately 30 minutes to 1 hour long). At this time, I will ask follow-up questions that emerge from my review of your interview transcripts, the focus group discussions, observation notes, and the PD sessions. More specifically, we will discuss your experiences with the PD experience.
8. You will be asked to participate in a follow up focus group interview (teacher and educational assistant - approximately 30 minutes to 1 hour long). At this time, I will ask follow-up questions that emerge from my review of your interview transcripts, the focus group discussions, observation notes, and the PD sessions. More specifically, we will discuss both of your experiences with the PD experience.

Additional Information

Each interview and focus group will be scheduled based on your availability and take place in a location that is chosen by you (this could be the park on a Saturday or over coffee before/after work). Each interview and focus group will also be audio recorded and transcribed verbatim. Prior to each observation, I will check with you and your students to ensure you all feel comfortable with my presence in your class. I will observe lessons from the side in order to not interfere with your class routine unless you prefer for me to participate more actively within the physical education environment. During the practical PD experience I will also be present in the classroom and at this point may engage in more participation in the class with students. The level of my interactions and participation will be discussed with you to ensure there is no discomfort and there is an appropriate amount of support for PD occurring. Lastly, you will be provided with an opportunity to review the transcripts of the interviews to clarify the ideas you brought up, to verify my interpretations of your experiences, and to verify the findings from the information you shared. In addition, you will be able to ask to see any data I collected from you during any point in the

study; you may withdraw anything you feel uncomfortable with me using for this study.

The benefits of your participation in this study include the following:

- Participation in this study will provide you an opportunity to reflect on your previous experiences with PD in order to help create a supportive learning opportunity through PD for teaching inclusive physical education.
- You will receive a hands-on, practical PD experience catered to your needs to support teaching inclusive physical education. Your participation with this PD will allow you to share your experiences, thoughts, and evaluations from the PD to guide future practical PD for inclusive physical education.
- The research project provides teachers and educational assistants an opportunity to support their collaboration. Therefore, your participation will help inform how teachers and educational assistants can work and learn together to teach and support students with disabilities in physical education.

There are no foreseeable risks to you that may arise from your participation in this study that exceed beyond what you would encounter in your daily routine.

Your participation in this study is completely voluntary. You are under no obligation to participate. Furthermore, you are not obliged to answer any specific questions if they cause you discomfort or distress for any reason. You can also at any point during the study inform me when observing your class or implementing the PD is inconvenient for you. Even if you agree to be in the study and you decide to change your mind, you can withdrawal anytime up to a month after the final focus group interview (this means after the PD implementation and the individual interviews and focus groups are completed). Should you choose to withdraw from the study, data collected prior to your withdrawal will be used only if you give me permission to do so.

Confidentiality & Anonymity

- This research will be used for my dissertation, research articles, and presentations. None of your personal information will be shared in any form.
- Data will be kept confidential. Only I will have access to the data. My supervisor and other supervisory committee members may see some of the data, but your name would not be affiliated with any of the data you share in order to protect your anonymity. You, your students, or your school will not be identified in the dissemination of the research. All names will be replaced with pseudonyms.
- We may use the data we get from this study in future research, but if we do this it will have to be approved by a Research Ethics Board.
- The University of Alberta Research Ethics Board requires data to be kept in a secure place for a minimum of 5 years following completion of a research project. Electronic data such as interview recordings, typed interview transcripts and observation notes will be stored in a password protected external hard drive, and when appropriate destroyed by deleting the hard drive and shredding any printed material.

If you have any further questions regarding this study, please do not hesitate to contact myself by phone: (705) 706-5334, or by email hjmorris@ualberta.ca, or my supervisor, Dr. Douglas Gleddie by phone: (780) 248-1951 or email: dgleddie@ualberta.ca.

The Research Ethics Board at the University of Alberta has reviewed this study for its adherence to ethical guidelines. For questions regarding participant rights and ethical conduct of research, contact the Research Ethics Office at (780) 492-2615.

Consent for participation in research

I consent to participate in the study entitled “Professional development for inclusive physical education: Fostering educative experiences ”. The purpose, procedures and duration, and potential benefits of the study have been clearly described to me. I acknowledge the fact that I have been provided the opportunity to obtain any further information regarding the study, and any questions I have raised have been answered to my full satisfaction. Moreover, I am aware that I am free to withdraw consent at any time during the study without any prejudice to myself.

Participant name (please print): _____

Phone number: _____ email address: _____

Participant signature: _____ Date: _____

Appendix C: Observation Process: Boostrom's Phases

Boostrom (1994) Learning to pay attention: Changes in perspective.	
Observer as…	Characteristics
Observer as videocamera	- Sponge - Feeling of being lost/scared - Not sure what to look for/at - Doesn't see much significance - Creates a grocery list
Observer as playgoer	- Emotions become involved - Coming to comprehend people in the context - There becomes a plot - Questions: What is this about? In relation to the people and surroundings - Sharing in the experience - Jots notes but can get caught up in the action
Observer as evaluator	- Seems to believe evaluation is the aim – it's a big risk to evaluate - "To judge so quickly was to close the situation" (p. 56) – need to reflect on what your purpose is so you don't forget your questions - In order to avoid the risk of concluding observation with all negatives, you need to look at your preconceived notions or preoccupations
Observer as subjective inquirer	- A turning point in understanding – questioning meaning - Look into everything more deeply - Understand that the questions will change; new posed questions through out from what you're paying attention to - Ask yourself: How do you make the familiar strange? - You see less limitations and more interactions. The prior perceptions are not dismissed just utilized in a different way - Start to include yourself and construct the events
Observer as insider	- Coming to some realizations and putting together the part-whole relationships - Getting insight – seeing what's going on makes sense now - The "AHA" moment and understanding why things go on the way they do - Gaining a storied understanding and building your findings - This is "getting it"
Observer as reflective interpreter	- Now looking for patterns or themes in the findings - Looking back and beginning to see everything in a new way – developing new insight - "So what?" Now think of the significance, meaning, reflections, positive implications for key stakeholders etc.

Appendix D: Pre-Interview Activities

Template for Pre-Interview Activities Prompts: Teacher

Pre-Interview Activities: About the person in general

Please **complete two or more** of the following visual representation activities and bring them to our interview. Please use pens, pencils and preferably colored markers on blank paper. We will begin our interview by having you show me and tell me about the ones you completed.

1.	Draw a diagram or images to show where your support or support systems come from.
2.	Think of an activity that is very important to you. Use three colours to make an abstract diagram that expresses what it is like for you to do this activity.
3.	Draw a picture or diagram of a place that is important to you. Label the most important parts of that place and what happens in each of these parts.
4.	Draw a schedule for your day, week, or year and use colours to indicate how time is spent. Make a legend to explain the colours.
5.	Think of an important event that changed things in your life. Make two drawings to show what things were like for you before and after the event happened. Feel free to use thought bubbles or speech bubbles.
6.	Think of an activity that is engaging for you. Make two drawings showing what things are like when that activity is going well and another showing what things are like when that activity is not going well. Feel free to use thought bubbles or speech bubbles.

Pre-Interview Activities: About the topic of the research

Also please **complete two or more** of the following visual representation activities and bring them to our interview. Please use pens, pencils and preferably colored markers on blank paper. We will begin our interview by having you show me and tell me about the ones you completed.

1.	Think of an important event that changed things for you in your career. Make 2 drawings to show what things were like for you before and after the event happened. Feel free to use thought bubbles or speech bubbles.
2.	Use colours to make three drawings that symbolize how the way you experience teaching has changed over time.
3.	Make a list of 20 words that come to mind when you think about teaching and then divide them into two groups. Copy them out to clearly show the original list and the two groups of words. Please bring all 3 lists to the interview.
4.	Make two drawings: one showing a “great day in PE” and another showing a “not so great day in PE”. Feel free to use speech bubbles or thought bubbles.
5.	Make a timeline indicating key events or ideas that changed the way you approach IPE.
6.	Make two drawings, one showing a “good day” at a professional development event and another showing a “not so good day” at a professional development event. Feel free to use

	speech bubbles or thought bubbles.

Template for Pre-Interview Activities Prompts: Educational Assistant

Pre-Interview Activities: About the person in general

Please **complete two or more** of the following visual representation activities and bring them to our interview. Please use pens, pencils and preferably colored markers on blank paper. We will begin our interview by having you show me and tell me about the ones you completed.

1.	Draw a diagram or images to show where your support or support systems come from.
2.	Think of an activity that is very important to you. Use three colours to make an abstract diagram that expresses what it is like for you to do this activity.
3.	Draw a picture or diagram of a place that is important to you. Label the most important parts of that place and what happens in each of these parts.
4.	Draw a schedule for your day, week, or year and use colours to indicate how time is spent. Make a legend to explain the colours.
5.	Think of an important event that changed things in your life. Make two drawings to show what things were like for you before and after the event happened. Feel free to use thought bubbles or speech bubbles.
6.	Think of an activity that is engaging for you. Make two drawings showing what things are like when that activity is going well and another showing what things are like when that activity is not going well. Feel free to use thought bubbles or speech bubbles.

Pre-Interview Activities (PIAs): About the topic of the research

Also please **complete two or more** of the following visual representation activities and bring them to our interview. Please use pens, pencils and preferably colored markers on blank paper. We will begin our interview by having you show me and tell me about the ones you completed.

1.	Think of an important event that changed things for you in your career. Make 2 drawings to show what things were like for you before and after the event happened. Feel free to use thought bubbles or speech bubbles.
2.	Use colours to make three drawings that symbolize how the way you experience teaching has changed over time.
3.	Make a list of 20 words that come to mind when you think about teaching and then divide them into two groups. Copy them out to clearly show the original list and the two groups of words. Please bring all 3 lists to the interview.
4.	Make two drawings: one showing a “great day in PE” and another showing a “not so great day in PE”. Feel free to use speech bubbles or thought bubbles.
5.	Make a timeline indicating key events or ideas that changed the way you approach IPE.
6.	Make two drawings, one showing a “good day” at a professional development event and another showing a “not so good day” at a professional development event. Feel free to use speech bubbles or thought bubbles.

Appendix E: Life, Education & Work Overview

Name:

Age	**Geographical location - where did you live at this time?**	**Education activity or employment activity**	**Any explanatory notes**
Birth - 11 years old			
12 - 15 years old			
15 - 16 years old			
16 - 18 years old			
18 - 22 years old			
22 - 25 years old			
25 years old to now			

Timeline for Teaching PE and IPE

Name:

Year span & Was it separate PE or IPE etc.? (Example: 2000-2004, IPE)	**School & Grade levels** (Example: Morrison Elementary, Gr. 1-3)	**PE schedule &** (was it per day or how many times a week) **Physical location(s)** (Example: 3 times/week in gymnasium, classroom, outdoors etc. (If multiple just write multiple))	**Any explanatory notes: Was there an EA / were you supporting 1-1 instruction?** (Example: 3 students with IPP's requiring 1-1 support *or* 1-1 support for 1 student full day)

Appendix F: Interview Guide: Open-ended Questions

Teacher Specific

Purpose of the interview: My research interest is in the area/topic of inclusive physical education professional development. More specifically, I am interested in the way that teachers of physical education and educational assistants experience professional development on inclusive physical education. In our interview I hope to learn something about how you experience/have experienced professional development on inclusive physical education.

Group 1: Getting to know you questions:

1.	What would you like to be **really good at doing**?
2.	Have you ever done anything **that surprised other people**?
3.	If you had **one week off a month**, what are some of the things you would like to do with your **extra time**?
4.	If you could spend **two weeks with someone** who does a special kind of work who might you choose?
5.	If you could **pick something** that you **wouldn't have to worry about anymore** what is one of the things you might choose?
6.	What are some of the things you like about being your age? And What are some of the things about being your age that you **don't like so well**?

Group 2: Questions about teaching:

1.	When you meet a new class at the **beginning of the year**, what are some of the things you **pay most attention to**? What are some things that are important to learn or to notice?
2.	In your **earlier years as a teacher** what were some of the parts of teaching work that **took up a lot of your attention** or effort?
3.	As time has gone on, what are some of the **parts of teaching** that are **most satisfying** or enjoyable?
4.	What are some of the ways that your **teaching approaches** have **stayed the same** or **changed** over the years?

Group 3: Questions about teaching physical education:

1.	Over time, do you recall any **big changes** in your **approaches** to doing things in PE classes?
2.	In P.E., what are some of the things that **make some classes of students easier to work** with than other classes?
3.	On a day when things are **going well** in the classroom what [else] would you say is usually **contributing to that good experience**?

4.	On a day when things are **not going well** in the class what are **good things to do** to help the whole situation?

Group 4: Questions about teaching inclusive physical education:

1.	What are some of the **approaches you like using** for teaching **inclusive** physical education?
2.	What **kinds of situations** are more **difficult or challenging** than others for teaching inclusive physical education?
3.	If a fellow teacher was **just starting to teach** inclusive physical education what are a few **tips you would want to offer**?
4.	What are some of the things **that took time to learn along the way over your years** with teaching inclusive physical education?

Group 5: Questions about participant's experiences with PD:

1.	What are some of the things you **look forward to** at professional development events?
2.	What makes some professional development experiences **better than others** from your perspective?

Group 6: Questions about participant's experiences with IPE - PD:

1.	Have you **ever had a specific professional development** experience on inclusive physical education OR special education? If so, what was it like for you?
2.	Ideally, what would you have liked if you could have **designed your own professional development** opportunities each year? What might you include for the topic of inclusive physical education?

Educational Assistant Specific

Purpose of the interview: My research interest is in the area/topic of inclusive physical education professional development. More specifically, I am interested in the way that teachers of physical education and educational assistants experience professional development on inclusive physical education. In our interview I hope to learn something about how you experience/have experienced professional development on inclusive physical education.

Group 1: Getting to know you questions:

1.	What would you like to be really good at doing?
2.	In the world of nature, the world of things, or the world of people, what surprises you the most?
3.	Have you ever done anything that surprised other people?
3.	If you had one week off a month, what are some of the things you would like to do with your extra time?
4.	If you could spend two weeks with someone who does a special kind of work who might you choose?

5.	If you could pick something that you wouldn't have to worry about anymore what is one of the things you might choose?
6.	What are some of the things you like about being your age? And what are some of the things about being your age that you don't like so well?

Group 2: Questions about teaching:

1.	When you first started working as an educational assistant what are some of the ways it was the same or different from what you expected?
2.	When you first started working as an educational assistant, what are some of the things you paid most attention to? What are some things that are important to learn or to notice?
3.	What are some of the parts of being an educational assistant that are the most satisfying?
4.	What are some of the things that can make the work of an educational assistant difficult or frustrating?

Group 3: Questions about teaching physical education:

1.	As you look back on your experiences with supporting in the PE class, how would you say your strategies have changed or stayed the same a lot over time?
2.	Is there anything you wish you had the opportunity to learn before beginning to assist teaching in physical education?
3.	Over your career, have some parts of assisting in physical education become easier? Have some parts of assisting in physical education become more interesting to think about?
4.	If you could plan an event for educational assistants to support their learning and practice in physical education, what would you plan?

Group 4: Questions about teaching inclusive physical education:

1.	Each day, when you start working with a student with disabilities in inclusive physical education, what are some of the things you think about a lot or pay attention to?
2.	Looking back over your work in helping students with disabilities in inclusive physical education, what are some of the parts that have gotten easier to do?
3.	What are some of the parts of your work helping students with disabilities in inclusive physical education that you would like to get better at?
4.	Right now, what are some of the key ideas or key approaches that you find helpful and useful in your work helping students with disabilities in inclusive physical education?

Group 5: Questions about participant's experiences with professional development:

1.	What are some of the things you **look forward** to at professional development events?
2.	What makes some professional development experiences **better than others** from your perspective?
3.	If you were organizing a professional development event **what activities or components** would you want to emphasize?

Group 6: Questions about participant's experiences with IPE professional development:

1.	Have you ever had a specific professional development experience on inclusion/ physical education OR special education? If so, what was it like for you?
2.	What kinds of activities or focuses would you like to see included in a professional development experience on inclusive physical for yourself or others?

Appendix G: Focus Group Interview Guides

Case 1: Cobain Junior High

We will take turns pulling one of the cards to start conversation. Each card will have a topic on it. I ask that you share your experiences by "telling us about" the topic on the card in relation to teaching inclusive physical education and in relation to professional development.

School Structure (Pink) • Staff meetings / collaborative meetings • Communication / online communications • Fitness studio / outside / gymnasium space • Flex days / weekly schedule
Activities / In-Class (Green) • Dance vs. team games • Badminton / Floor hockey / Track and Field • Peer supports • Stations
Professional Development (Purple) • Professional Development "Take Away" • Process of an in-service PD • Supports and resources for IPE / Desired knowledge • Community of Practice
Student & Teacher / Planning (Yellow) • Goals for students and goal setting • Individual Program/Education Plan • Life skills / Behaviour • Skill development / modeling

Case 2: Cash Elementary

We will take turns pulling one of the cards to start conversation. Each card will have a topic on it. I ask that you share your experiences by "telling us about" the topic on the card in relation to teaching inclusive physical education and in relation to professional development.

School Structure (Pink) • Expectations (teacher, EA, student) • Staff meetings / collaborative meetings • Communication / online communications • Roles, Responsibilities, Boundaries
Activities / In-Class (Green) • Peer supports • Adapting Activities • Stations
Professional Development (Purple) • Resources • Teacher & EA collaborative PD

• Community of Practice
Student & Teacher / Planning (Yellow) • Goals for students and goal setting • Individual Program/Education Plan • Structured vs. Unstructured Classes

Case 3: Drake Elementary & Junior High

We will take turns pulling one of the cards to start conversation. Each card will have a topic on it. I ask that you share your experiences by "telling us about" the topic on the card in relation to teaching inclusive physical education and in relation to professional development.

School Structure (Pink) • Expectations (teacher, EA, students) • Communication / face-to-face & online communications • Roles, Responsibilities, Boundaries • Staff meetings / collaborative meetings
Activities / In-Class (Green) • Rhythmic Gymnastics & Yoga • Peer Supports • Adapting Activities
Professional Development (Purple) • Supports and resources for IPE / Desired knowledge • Resources • Community of Practice • Process of an in-service PD
Student & Teacher / Planning (Yellow) • Structured vs. unstructured classes • Individual Program/Education Plan • Goals for students and goal setting • Curriculum or preparing for adaptations

[i] Movement experiences in Alberta curriculum are categorized into five dimensions: dance, gymnastics, games, individual activities, and alternative environments

[ii] Practitioners: For the purposes of this study, the term practitioners refers to both teachers and educational assistants