

**Exploring Play-Based Learning in Full-Day Kindergarten in St. John's,
Newfoundland and Labrador**

by Chinwe Ogolo A (Dissertation) submitted
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Abstract

Teaching through play-based learning is emphasized as a fundamental strategy for achieving full-day kindergarten curriculum objectives in Newfoundland and Labrador, Canada. Through a multi-case studies design, this study investigated the implementation of play-based learning by exploring three kindergarten teachers' perceptions of, and experiences with, play-based learning. In addition, the study explored four practices, outlined as play-based pedagogical practices in Newfoundland and Labrador, in three English classrooms. These practices involve how the classroom environment was set up to enhance literacy and numeracy learning, how much time was provided for children to play and explore, sustained shared thinking between teachers and children, and how teacher-directed and child-initiated activities are integrated. Furthermore, the study sought to understand children's opinions on play and learning in full-day kindergarten. Data collection methods included direct observations, semi-structured interviews, drawings, and photographs. The data was analysed through a universal design for learning framework. The findings reveal that the teachers believe that there is a relationship between play and learning, and that play-based learning benefits children academically and developmentally. Also, the findings illustrate that the three kindergarten classrooms implemented the outlined practices. The children had ample time to engage in free play, literacy and numeracy were integrated into every area of learning and the environment, teachers and children engaged in sustained shared thinking, and there was a combination of teacher-directed and child-initiated activities. There was also a mix of large group, small group, individual learning, and child-initiated activities. The findings demonstrate that although children enjoy playing and believe that they learn when they play, they found it difficult conceiving play and learning as the same. A result worth considering are challenges, which might impact the teachers' implementation of play-based learning, especially insufficient materials, resources, and inadequate teacher preparation/education.

Keywords: play-based learning, universal design for learning, full-day kindergarten, teacher-directed activities, child-initiated activities, sustained shared thinking, play, learning, kindergarten teacher, kindergarten children.

General Summary

This study explores how play-based learning is implemented in three English kindergarten classrooms in one elementary school in St. John's, Newfoundland and Labrador, Canada. In this province, play-based learning is considered the primary vehicle for kindergarten curriculum delivery. Through a review of the literature, I found that there was limited literature that focused on this topic, so I undertook this study to contribute towards closing this gap in the literature, especially, within the context of St. John's, Newfoundland and Labrador. I used three research questions to gain insightful knowledge about the present climate of play-based learning. The first question focused on kindergarten teachers' perspectives on play-based learning. The second question was intended to help me observe and understand how play-based learning was implemented in the three classrooms. The third question focused on the children's experiences with play and learning in kindergarten. To gain this insight, I collected data through direct observations, semi-structured interviews, drawings, and photographs. I used a universal design for learning framework to make sense of the data. The findings reveal that the kindergarten teachers in this study understand what play-based learning is, and that they believe play-based learning is essential in helping children develop academic and socio-emotional skills. The data revealed that the teacher participants desire more professional development, varied resources/materials, and more space to help them further implement play-based learning. Also, the findings demonstrate, in this dissertation, that the teachers provide ample time for the children to play; and thoughtfully set up playful opportunities through teacher-directed play and child-initiated play, whole group activities, small group activities, and individual activities. This study revealed that teachers receiving support from the school leadership team is especially helpful in implementing play-based learning. Extra classroom support, such as an early childhood educator in each kindergarten class and an online discussion forum specifically for kindergarten teachers in Newfoundland and Labrador is desirable to facilitate the implementation of play-based learning. The children in the study reported that they like to play because it is fun. They perceive that they learn while playing, but do not necessarily articulate play and learning as connected. The findings from this study demonstrate that the Newfoundland and Labrador's Department of Education is on the right path towards ensuring holistic academic and socio-emotional development of children in the province by promoting the use of play in kindergarten.

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Chapter One

Introduction

I invite you to embark on this dissertation journey with me, as I navigate the terrain of play-based learning within the context of Newfoundland and Labrador. Play-based learning refers to “early childhood learning opportunities that are rich in child-initiated play, especially when it involves the presence of a caring, engaged, and responsive adult” (Newfoundland & Labrador. Department of Education and Early Childhood Development, 2016, p. 36).

This dissertation is written in a manuscript style format. The manuscript format allows for the publication of three distinct papers while looking at the same phenomenon (play-based learning in Newfoundland and Labrador). I use a manuscript format to address these broad questions regarding play-based learning. It is structured in the sense that chapter one, this introductory chapter, presents the overall literature review and theoretical framework used throughout this dissertation. Chapter two reviews the methodology for this study. Chapter three is the first manuscript, which addresses the first research question while chapters four and five answer the second and third research questions respectively. The conclusion chapter, chapter six, provides a discussion of issues that arose across all three manuscripts.

This introductory chapter discusses the background of the study, and shares insight into my interest in the concept of play-based learning. I provide an outline of the problem/purpose statement, that is, the rationale for the study, which begins my research journey with three overarching research questions. A review of relevant research studies on the understanding of play-based learning, play-based pedagogy in Newfoundland and Labrador, and the various challenges of play-based learning is

provided. The framework of universal design for learning is defined and explained as one possible lens to explore play-based learning within my context of Newfoundland and Labrador.

Researcher's Background

Imagine a scenario where eighteen Grade 1 pupils, sitting in neat rows of five are facing a whiteboard and I, the teacher, teach one of the many subjects offered in the Nigerian school curriculum. These subjects include English, Mathematics, Social Studies, Civic Education, Music, Fine Arts, Religious Studies, Agriculture, Physical Education, Verbal Aptitude, Quantitative Aptitude, and French. These are a lot of subjects for first grade. My desk is at the side of the whiteboard, and behind the rows of chairs and desks, are shelves that house school bags, schoolbooks, pencils, erasers, sharpeners, and numeracy and literacy activity books. There are crayons, but those are the only playful items in my classroom because the government and parents, in Nigeria, consider play and academic learning as two separate constructs. The crayons are only meant to be used when the children participate in an arts class. I have cardboard displays of numbers, the alphabet, and images and words that the students ought to know. Alas, my classroom is different because I try to add a bit of creativity and fun to my teaching by using technology to demonstrate concepts that the children are required to learn rather than strictly using designated textbooks, whiteboard markers, and the whiteboard. Unlike the other teachers, I encourage my students to draw and colour during their free period rather than ask the students to put their heads on their desk. Another way I differ from my colleagues is that I play games like Mr and Mrs Wright with my students (which is an ice breaker activity) where we dance and sing. I often have other teachers come to my class to complain about the noise. The students enjoy the colouring, the movement, the dancing, and the singing. Unfortunately, this was not the norm in my Nigerian school culture. As a

teacher, I see that play is valuable as a vehicle for children's learning, not just at break time. However, in Nigerian culture, what parents and the government value and expect is for children to learn all the subjects within a specific time frame. The delivery of curriculum is primarily through rote teaching, or formal teaching, where the teacher is the producer of knowledge and the children are the consumers of the knowledge provided to them.

After two years of teaching, in 2014, I went to England to pursue a Master's degree in Education. In one of my modules, I had the privilege to learn about how play and creativity are important for a child's academic and social development. This made me reflect both on my childhood and years as a teacher. I realised that play was something that I would like to further incorporate into my future teaching practices.

I came to Canada in 2015 to visit my sister. Tish, my eight-month-old niece at the time and I bonded over many activities of which play was a central theme. We would play with her toys, read books, and watch programs that promoted playing, singing, and dancing. Her parents were often surprised at how at such a young age she was able to place the right shapes in the correct spaces or how she was able to correctly recognize letters of the alphabet. I was surprised at her memory recall in how well she could recite the alphabet, numbers, colours, and shapes at the tender age of eight months. Playing with my niece, and reflecting on the teacher I desired to become, I realized that the foundations of literacy and numeracy could be achieved through play. For my sister and I, our formative learning years of literacy education were based on learning to write letters without really understanding how these letters produced sounds which were the basis of actual words. For instance, we memorized a lot of words for regularly scheduled spelling tests (our teachers called this "dictation"). In kindergarten (in my Nigerian context, nursery class), I could spell the

word “country” without understanding what that word meant. My deepening relationship with my niece through play lead me to understand how a play-based learning approach could build a strong literacy foundation for children. Each day as I witnessed Tish learning through play, I was further inspired to engage in research in this area.

This experience has led me on a doctoral journey which began in 2016. Deciding on a dissertation topic was not an easy choice. I asked myself what was important to me as a teacher. From my beginnings of teaching in Nigeria, I was drawn to the practical aspects of classroom and school life. I wished to conduct research in a classroom with teachers and children. I decided to read through the Newfoundland curriculum guide for kindergarten and grade one. I had a Eureka moment, when I noticed that the curriculum foundation was premised on play. However, it was challenging to consider 'play' as a research topic, as it is such a broad and extensive research area, “Where would I begin”. I decided to narrow my research interest by focusing more on the practices of play-based learning, rather than on the types, forms, and qualities of play. After conducting a literature search, I realized that there was limited research on play-based learning in Newfoundland and Labrador since its focus and implementation in 2016. While there were some studies on play-based learning in Ontario, British Columbia, and other provinces in Canada, this was an opportunity to include Newfoundland and Labrador in the research conversations about play.

Coming from a background of schooling as both a student and later, a teacher, where play-based learning had little value as a teaching pedagogy, play was appealing to me as an inquiry topic. I was curious and wanting to return to a classroom to further understand the importance of play in young children’s schooled lives. This qualitative study provided an opportunity to be with children again in a

classroom setting to consider how play-based learning was a successful pedagogical approach for children's learning. This study was a personal journey that grew out of my playful learning approach as a classroom teacher, and as observed as an Aunt to Tish's playful learning. Most importantly, this study contributes to the limited body of knowledge on play-based learning within the Newfoundland and Labrador context, in particular, and more broadly, across Canada and internationally.

The next section, of this introductory chapter, discusses the problem, purpose statement and research questions. The problem statement is required as this provides the rationale behind conducting this study by reviewing several research studies and highlighting the knowledge gaps identified from those studies. The knowledge gap(s) lead to the purpose statement, which explains how the current study aims to contribute towards bridging the identified gap in the literature. The research questions are constructed to unpack the problems and provide an overview of the scope of this study.

Problem, Purpose Statement and Research Questions for This Study

The Problem Statement

The German word 'Kindergarten' translated as 'children's garden' was first conceptualized by Friedrich Froebel (Manning, 2005). Froebel believed that the natural disposition of the child was to play, and he encouraged parents and caretakers to nurture that aspect of a child's life. Froebel was convinced that the formal education of young children tended to squash children's natural inclination towards play. Froebel, in his book, *The Student's Froebel*, admonished parents not to force work on children that are unsuited to their nature. This, according to Froebel, will stunt their growth and development. For Froebel (1896), children should be encouraged to play because "play is the highest point of human development in the

child-stage, for, it is the free expression of the child's inner being" (Froebel, 1896, p. 30). Children have a natural curiosity and inquisitiveness toward everything that comes within their environment. Through play, a child can explore these discoveries, which adds richness to the child's inner and outer life, and then carries through into adulthood (Froebel, 1896). In other words, when children are encouraged to play before they enter "boyhood" (roughly between the ages of six to nine) this leads to positive dispositions toward future instruction and learning (Froebel, 1896). Regarding this, Froebel, therefore, perceived play as fundamental to developing young children's potential.

Similar to Froebel's vision for kindergarten, young children between the ages of four and five, in Newfoundland and Labrador, attend kindergarten. The kindergarten environment is designed to support young children's cognitive, socio-emotional, physical, spiritual, and moral development in Newfoundland and Labrador (Kindergarten Program, 2008-2009). Factored into the kindergarten program is an acknowledgement that young children are individuals who are unique and have diverse needs and developmental abilities (Kindergarten Program, 2008-2009). That is, a one size fits all strategy may not be applicable in the kindergarten setting. In order to meet the needs of the diverse young children in kindergarten classrooms, the curriculum guide recommends developmentally appropriate instructional strategies.

Consequently, teaching through play is considered a fundamental instructional strategy in the education of young children in Newfoundland and Labrador (Newfoundland. Department of Education, 2010; Newfoundland & Labrador. Department of Education & Early Childhood Development, 2016). With the advent of full-day kindergarten in Newfoundland and Labrador in 2016, kindergarten teachers are required to teach curriculum content through play-based learning. However, little

is known about its implementation within the Newfoundland and Labrador context. This is what my study set forth to explore and describe.

Studies from Turkey and Canada, such as Bulunuz (2013), Burke (2019), and Scharer (2017), reveal that there is often a gap between the theory, policy, and practice of play-based learning. Bulunuz (2013) notes that although play is emphasized as the main vehicle for curriculum delivery in Turkish kindergartens, there is a lack of experimental and theoretical studies to demonstrate how to guide learning through play. Further, Burke (2019) argues that although play is seen as beneficial to the academic achievement and socio-emotional development of young children in kindergarten classrooms, however, at times teachers' instructions often focus on meeting numeracy and literacy curriculum objectives. As a result, the socio-emotional learning may not get as much attention. Therefore, research is needed that highlights the benefits of using play in instructing young children in literacy, numeracy, and that addresses the socio-emotional development of children.

Other studies have found that teachers have challenges reconciling play and learning (Bulunuz, 2013; Lynch, 2014; Lynch, 2015; Pyle & Bigelow, 2015; Scharer, 2017). Thus, they experience difficulties in implementing play-based learning. Scharer (2017) states that even though prospective early childhood education teachers in British Columbia appreciate that play helps children learn, they are concerned about what parents will think if they teach curriculum content solely through play. As a result, play and learning are viewed as different. Consequently, many early childhood education teachers find it challenging to implement play-based learning. In addition, studies such as Pyle and Alaca (2018) and Pyle and Bigelow (2015) argue that Ontario kindergarten teachers' perceptions of play may influence how the children view play and learning, which in turn calls for a need to explore young children's experiences with play and learning in the kindergarten classroom.

Danniels and Pyle (2018) note that a compounding problem with implementing play-based learning is that many researchers who focus on the developmental benefits of play emphasize the importance of free play. In contrast, researchers who advocate for teacher-directed play focus on the academic benefits of play (Danniels & Pyle, 2018). Consequently, a kindergarten teacher in St. John's may implement play-based learning in their classroom based on the needs of the children in their classroom.

The kindergarten program in Newfoundland and Labrador recognizes that every child is different in their abilities, needs and development. Newfoundland and Labrador, Department of Education (2018) reports that early years' programs should consider children's differing experiences, abilities, family structures, interests, and cultural backgrounds when making decisions concerning approaches to teaching and learning. It is recommended that the principles of universal design for learning be adopted in curriculum renewal, and in the design of the learning environment, to produce more flexible learning opportunities for all learners (Newfoundland & Labrador, Department of Education, 2018).

The Purpose Statement and Research Questions

Universal design for learning is an educational framework that was designed to help teachers meet the needs of diverse learners in their classroom and meet curriculum goals (CAST, 2018). CAST (2018) defines universal design for learning as "a framework to improve and optimize teaching and learning for all people based on scientific insights into how humans learn" (CAST, 2018, para. 1). Accordingly, this study explores play-based learning by using universal design for learning as a framework to understand kindergarten teachers' and kindergarten children's perspectives. This framework bridges our understanding of play and learning by providing principles, guidelines, and checkpoints by which play, and learning

experiences can be analysed and understood. This study focuses on the implementation of play-based learning in kindergarten classrooms in St. John's, Newfoundland and Labrador. The purpose of this study is to provide a snapshot of the current climate of play-based learning in the Newfoundland and Labrador context. As there has been a limited number of studies conducted on the implementation of play-based learning since it began in 2016, this is a needed study. The questions, in this study, are intended to provide an understanding of play-based learning from the perspectives of three kindergarten teachers, kindergarten children in three classrooms, and the researcher, which might be beneficial for practice and policy development at the provincial level. Also, this study is intended to contribute to the discussion around play-based learning by providing a Newfoundland and Labrador context which is currently lacking. The research questions are as follows:

1. What are the perceptions and experiences of some kindergarten teachers in St. John's regarding play-based learning?
2. How is play-based learning implemented in some classrooms in St. John's?
3. What are some young children's experiences and perceptions of play and learning in a full-day kindergarten?

These three questions are framed to unpack the research problems that have been highlighted and to close the knowledge gaps in the literature by providing a Newfoundland and Labrador context.

The next section provides an overview of the main literature search strategy, which is pearl harvesting (Sandieson et al., 2010), that I employed in selecting the various literature studies used in this study. The section allows me to explain why some studies were chosen over others as it is impossible to include all literature on

play, play-based learning, universal design for learning, qualitative research, methods in research, and data analysis.

Literature Search Strategies

Pearl harvesting (Sandieson et al., 2010) was the search method used to identify relevant literature for this study. Pearl harvesting has four steps for information retrieval. Step 1 involves selecting a sample of relevant articles (pearls) to your topic. I used Memorial University's "One Search" tool to achieve this. I searched *"play-based learning"* or *"universal design for learning in early childhood education"*. I selected books and articles I believed were relevant. For example, Janet Moyles is a professor who has written articles and books on early years education. She has authored several books on play. Additionally, she was a professor in the university where I did my master's degree in England, and Moyles is cited in some articles on play-based learning such as articles written by Bulunuz (2016) and Peterson et al. (2016). I selected Moyles' books and the articles in which she was cited. I also included the works of early childhood development theorists. Therefore, I read books authored by Froebel (1896), Piaget (1962; 1967), and Vygotsky (1978).

The next step involves extracting relevant search keywords from the sample literature. This was achieved by looking at the literature to see what words were used in the titles, abstracts, and subject descriptors by the journal. For example, from the Bulunuz (2016) article, I retrieved words like "play-based activities", "playful pedagogies", "kindergarten" and "teaching through play". I compiled a list of keywords that may be used from the pearl books and articles. For instance, "playful pedagogy", "playful teaching", "playful learning", "play-based pedagogy", "universal design for learning", "UDL", "UDL implementation", "UDL practices", "UDL strategies" "early childhood education", "early years", "early learning", and "early education".

In step 3, I refined the list of search keywords as I searched in various databases. I searched Education, ERIC, and Google Scholar databases. I narrowed my search in the databases to peer-reviewed articles, written in English, with no limits on publication dates. My aim was to find articles on play-based learning, universal design for learning, data collection methods, and data analysis. I began to use different combinations of the keywords. For instance, I searched “universal design for learning” and “early child*”, “universal design for learning” and “play-based*”, “universal design for learning” and “play-based*” and “early child*”. I excluded, in the case of universal design for learning, features such as special education, and students with exceptionalities and technology. I included learning, teaching, children and youth, teachers, early childhood to try to narrow the search. Nevertheless, I was still getting articles that were not relevant to my study. There were not many articles that looked at universal design for learning and play-based learning together.

Step 4 involves validating the search keywords in the synonym ring. I checked the titles, abstracts, and subject index of my new articles to see if there were additional search terms I could extract. In the end, I settled for articles that discussed the different topics around my study and research methods in order to be cognizant of what work has been done and to identify the gaps concerning play-based learning in early childhood education.

It is necessary I acknowledge that international educational systems vary, and some may be considered superior to others. However, my intention was to understand several aspects of play-based learning by reviewing literature from different contexts. The selected relevant literatures are discussed below. The outline is as follows: a general overview of the literature review discussion, the importance of play, defining play, benefits of play, play-based learning, play-based pedagogy in

Newfoundland and Labrador, and challenges regarding the implementation of play-based learning.

Literature Review Discussion

General Overview

The aim of this study is to explore the implementation of play-based learning in the Newfoundland and Labrador context. As such, the overview of the literature is to identify existing gaps. Some of these gaps include limited representation of the Newfoundland and Labrador kindergarten teachers' and children's voices regarding play-based learning. This literature review section begins with discussions of the importance of play. Here, I consider discussions on play as the right of every child. The next section focuses on the difficulty associated with defining play and providing select definitions from the literature. Following this, the benefits of play are reviewed, mainly focusing on the academic and socio-emotional benefits. Next, the approaches to play-based learning are considered, which is followed by a discussion on play-based pedagogy in Newfoundland and Labrador. The challenges of implementing play-based learning are highlighted. Finally, universal design for learning as a theoretical framework that underpins this study is explained. This literature review section is intended to highlight some of the existing discussions on play-based learning and to situate the contribution of this study to the body of knowledge on play-based learning.

The Importance of Play

Play is argued by some researchers to be the right of every child (Moyle, 1989; Souto-Manning, 2017; United Nations Convention on the Rights of the Child [UNCRC], 2010). Moyle (1989) contends that when children are not provided opportunities to play, they are cheated out of becoming their full selves. The United

Nations includes play as part of the rights of a child (United Nations Convention on the Rights of the Child [UNCRC], 2010). UNCRC (2010) declares that “States Parties recognize the right of the child to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts” (p. 29). In addition to this, Souto-Manning (2017) contends that “play must be the right of every child. Not a privilege. After all, when regarded as a privilege, it is granted to some and denied to others” (p.785). Souto-Manning (2017) believes that play should be available to all children to reduce further inequalities, and that schools should not deny children their play in favour of academic rigour because it has learning possibilities.

In 2012, the Council of Ministers of Education, Canada (CMEC) made a statement on the importance of play. According to the CMEC (2012), “play allows them [children] to actively construct, challenge, and expand their own understandings through making connections to prior experiences, thereby opening the door to new learning.” (para. 5). As such, play should be included in children’s education in Canada. Similarly, Newfoundland and Labrador, Department of Education and Early Childhood Development (2019) declares that “learning starts with play” (p. 39) and that through play “children rehearse, practice, and consolidate general knowledge and academic concepts. They also refine acquired skills and abilities that are emerging” (p. 40). The provincial government advocates that play be included in the daily experiences of young children in Newfoundland and Labrador. Play is the right of every child, however, Brillante and Nemeth (2018); Moyles (1989); and Peterson et al. (2016) caution that the cultural value of play should be accounted for as well; this is because different communities will value play based on the structure, definition, and importance attached to it. For example, a culture that believes that the child is to help with the upkeep of the family may not view play as necessary (Moyles, 1989).

Brillante and Nemeth (2018), in a book about applying universal design for learning principles in early childhood classrooms, explain that Asian families view play and academics as two different things, with academics being more highly valued of the two. However, some European families see little difference between play and academic learning. This is especially important as we tend to believe that all children play the same or value play in the same way. This research finding became more apparent when I spoke to a Nigerian mother who had her daughter in a Montessori school in St. John's. I was excited to tell her about my study. This mother felt that her child was not challenged enough in kindergarten public schools because they tended to play a lot. She felt that her daughter would benefit from a more structured school. I understand her perspective because I grew up in a similar culture to hers that differentiated play and learning in a similar way.

In the document, *Common Understandings – Play-Based Pedagogy* (2016), the authors explain that the reason they are advocating for a play-based pedagogy in kindergarten in Newfoundland and Labrador is because the opportunities for children to engage in play and play-based learning has diminished over time. The provincial government attributes these diminishing opportunities for children to engage in playful experiences to increased screen time, participation in adult activities, and time-crunched parents. Accordingly, “children are experiencing a decrease in opportunities for child-initiated play. As a result, teachers may have young students coming to their classrooms who will not have previous experience in organizing and initiating play episodes without adult assistance” (p.34).

In summary, it is crucial, therefore, to provide opportunities for young children to play (CMEC, 2012; Moyles, 1989; Newfoundland & Labrador. Department of Education & Early Childhood Development, 2016; Souto-Manning, 2017; UNCRC,

2010) regardless of their background, race, or socio-economic status while still respecting cultural understandings of the role and purpose of play.

Defining Play Through the Literature

In the previous section, play is described as the right of every child because they have a natural tendency towards play. That is, most children enjoy playful activities. Therefore, it is essential to include play in their daily activities, including their daily schooling. However, there is no agreed upon definition of play, which makes it a difficult concept to define (Danniels & Pyle, 2018; Moyles, 1989; 2012; Pyle & Bigelow, 2015; Roskos & Christie, 2013). Danniels and Pyle (2018) attribute this difficulty in the definition of play to include what activities may be considered as play. According to Moyles (1989; 2012) and Roskos and Christie (2013), the different forms and qualities make play complex. For instance, forms of play include socio-dramatic play, rough and tumble play, pretend play, fantasy play, and imaginary play. Also, Roskos and Christie (2013) argue that play is difficult to define because it looks different across developmental ages and across culture and history. Reflecting on how play varies across culture and history, as described by Roskos and Christie, I realize how technology has changed how we play. Instead of going to a park, I can put on a virtual reality headset and be transported into a virtual world where I can interact with other players. Moyles (1989; 2012) and Pyle and Bigelow (2015) suggest that due to these varying forms and qualities of play, practitioners find it challenging to observe, understand, and analyse its benefits.

Moyles suggests that instead of trying to confine play to a particular definition, play should be viewed as a process in which the participant determines whether there is an outcome of the play activity (Moyles, 1989). Likewise, Hewes (2018) argues that although there is no consensus on the definition of play, researchers however agree on what play behaviours are. These play behaviours are “intrinsically motivated”,

“controlled by the players”, “concerned with process rather than product”, “non literal”, “free of externally imposed rules”, and “characterized by the active engagement of the players” (Hewes, 2018, p.2). These play behaviours are present when children are provided with long uninterrupted block of time to play (Hewes, 2018). This idea is supported by Peter Gray in an interview by ECETP (2018) on play-based learning. Peter Gray explains that the characteristics of play are that it is “self-chosen and self-directed”. Adult directed activities are not play. Play is “intrinsically reinforcing and motivating”. Through play, children explore and learn what they like to do. Play is “structured by the child or children playing”. For Gray, there is no such thing as unstructured play. In their play, children learn to create and abide by socially acceptable rules. Lastly, play is “imaginative”. According to Gray, play involves children stepping out of the real world. This idea is further reinforced by the Newfoundland and Labrador, Department of Education and Early Childhood Development (2019) as they state that “. . . play has a purpose. It’s how children make sense of the world around them and find a place in it. Play is defined as fun, open-ended, and spontaneous activity chosen by the player.” (p. 39). According to Gray (2018), Hewes (2018), Moyles (1989), and Newfoundland and Labrador, Department of Education and Early Childhood Development (2019), for children to learn through play, teachers need to understand these play behaviours/characteristics in order to focus more on the process that occurs during play rather than the product.

Considering cultures and contexts, Peterson et al. (2017) believe that play is “a culturally constructed concept” (p. 2). They explain that ideas around play must be depicted as specific to certain sociocultural communities within distinct historical and geographical contexts. Peterson et al. (2017) acknowledge that they subscribe to the western notion of play that views it as “child centred and supportive of children’s

learning and overall development” (p. 2). From a Pan-Canadian point of view based on the statement provided by CMEC (2012), play is viewed as essential to children’s social, emotional, and academic success. As this study is situated within a Newfoundland and Labrador context, it is important to consider the definition of play in the curriculum document. Play is defined as “a vehicle through which learning occurs. It is an intrinsically motivated, voluntary activity that allows the child the opportunity to construct their own knowledge. When children are playing, they are truly engaged in their activity” (Newfoundland & Labrador. Department of Education & Early Childhood Development, 2016, p. 10). This definition aligns with Froebel’s (1896) ideas on the value of play in education. He maintains that play is a child’s way of working and growing. Therefore, learning is enhanced at school through play experiences (Froebel, 1896; Manning, 2005).

Another challenge associated with play is the differing recommendations on how it should be implemented in kindergarten. These differences are based on what researchers consider beneficial to the child. On one hand, researchers who focus on the developmental benefits of play emphasize the importance of free play (child-initiated or pure play). On the other hand, teacher-directed play (structured play) is emphasised by researchers who focus on the academic benefits of play (Danniels & Pyle, 2018).

In teacher-directed play, the teacher plans activities to engage children in learning a specific concept (Danniels & Pyle, 2018; Education and Early Childhood Development, 2016; Moyles, 1989). The teacher takes an active role in the children’s play. An example of this is when a teacher intentionally plans games to teach numerical skills (Danniels & Pyle, 2018). While in child-initiated play, children engage in pretend play that they initiate (Danniels & Pyle, 2018; Education and Early Childhood Development, 2016; Moyles, 1989, 2010). In this approach, the teacher

takes a passive role in the children's play. Danniels and Pyle (2018) provide an example of sociodramatic play as a type of free play, where groups of children use their imaginations to enact roles while creating and following social rules. Likewise, "when children engage in pretend play with others, they are developing their language skills, social skills, and an understanding of social rules. Children will use their imaginations to explore, discover, and document the world and their understanding of it." (Newfoundland & Labrador. Department of Education & Early Childhood Development, 2019, p.41). Pretend play for Lillard (2017) is "a signature behaviour in early childhood. Children pretend to be other people, that one object is another, and even that non-existent things exist – all apparently with full knowledge of what the real situation is" (p. 826). According to Moyles (1989), pretend play enhances children's language and learning as it provides children, not only with the opportunity to begin learning and developing where they currently are but to use their real and imaginary experiences. Piaget (1962) explains that symbolism is an essential aspect of pretend play; that is, the child does not have to assign the actual object that is needed for that activity but can assign other objects to represent that object, for example, when a child pretends that a banana is a mobile phone. This is necessary for abstract thinking. This is further explained by Moyles (2012). For her, pretend play is vital in early literacy development because it helps the brain to represent images and icons, and it enhances receptive and expressive language.

Conversely, Lillard et al. (2013) argue that there is inadequate evidence to definitively state that pretend play helps with children's development due to weak methods and non-rigorous approaches in studies of how pretend play contributes to children's development. Nevertheless, they recommend that schools should focus more on child-centred educational methods as they best help young children develop (Lillard et al., 2013). According to Roskos and Christie (2013), the notion that play

and literacy are connected is hard to prove due to play's increasing complexity in early childhood, which makes it difficult to define or observe, such as the varied view of play as "free play, pretend play, sociodramatic play, thematic fantasy play, and guided play" (p.84). However, Roskos and Christie (2013) conducted a critical appraisal of several research studies on play-literacy. They show that when play environments are rich in literacy content (objects and prints), literacy behaviours and experiences, such as reading and writing, occur. Additionally, they note that social resources (teachers and peers) further enhance these literacy experiences by providing more opportunities for children to engage in reading and writing. Roskos and Christie (2013) explain that creative drama play helps with children's story comprehension, especially for meaning-making skills. They feel this is important to deepen our understanding of multimodal literacies, which argues that language is not the only mode of communication and that language can be represented in many modes. This is important because, in the digital age, there are different modes of meaning such as written, visual, tactile, audio, gestural, spatial, and spoken (Roskos & Christie, 2013). Further, Lillard (2017), in an opinion paper, argues that although there is a lack of human empirical studies to show how pretend play helps a child's development, studies that examined rats' play fights can be used as an analogy to understand the benefits of pretend play. She believes that there is a possibility that pretend play helps with self-regulation and understanding social signals which enables symbolic interactions of behaviours.

To reduce the complications associated with measuring the impact of play on children's development, especially due to the absence of instruments to measure mature play in preschools, Germeroth et al. (2019) developed a new observation tool called Mature Play Observation Tool (MPOT). They conducted a multi-year longitudinal study of twenty-six early-childhood classrooms, with a focus on four and

five-year-old children. Germeroth and colleagues found that children who scored well on the MPOT, in their study, were better at performing skills such as self-regulation, literacy, and numeracy. Germeroth et al. (2019) emphasize that make-believe play is the most important kind of play for the support of cognitive and socio-emotional development as it provides opportunities for all children to operate within their zone of proximal development and beyond. This is because when children engage in make-believe play such as role playing, they situate themselves in experiences that improve their thinking and communication.

The summary of this section is that, although there is a lack of consensus on the definition of play or how it should be implemented in schools, nonetheless, from the above literature, researchers agree that it is a process and a vehicle within specific sociocultural, historical, and geographical contexts that can benefit children's learning and development. Play should be encouraged in schools as a right, not a privilege, to help bridge inequality gaps amongst children because it offers opportunities for fostering children's learning. Play should also be encouraged to help children develop holistically. Therefore, the next section discusses the benefits of play by reviewing studies that focus on how children benefit academically and socio-emotionally from play.

Benefits of Play

Danniels and Pyle (2018) explain that the debates on whether play in the classroom should be child-initiated or teacher-directed is based on the perceived benefits of play: academic or developmental benefits. Also, according to the provincial government "the introduction of full-day kindergarten in Newfoundland and Labrador gives teachers the opportunity to capitalize on the benefits of play and play-based learning" (Newfoundland & Labrador, Department of Education & Early Childhood Development, 2016, p. 34). Therefore, it is essential to review studies on

the benefits of play. Several studies, as discussed below, demonstrate that play contributes to cognitive development, such as, literacy skills, problem-solving, creativity, communication, and understanding social rules. I consider the cognitive benefits in terms of academic skills in this section. I discuss some of the academic benefits of play, followed by socio-emotional benefits.

Academic Benefits of Play.

Bulunuz (2013) notes that although Turkish teachers and administrators claim that play is important in kindergarten, few can articulate the relationship between play and learning. As such, play and learning are often treated as separate. In a quasi-experimental study, Bulunuz (2013) reports that “children with the same demographics who participated in the teaching science through play group made significantly greater gains in learning of science concepts than the children who experienced the didactic teaching” (p.243). Also, the results reveal that children “increased in ability to describe, classify, make predictions and explanations, build cause and effect relationships, solve problems, and recall their observations” (p. 243). However, she noted that the teachers in the study observed that sessions in the experimental group generally lasted longer than the comparison group. She recommends that regardless of the time factor, teachers should incorporate play in children’s learning of scientific concepts. Furthermore, The Alliance for Childhood (2018) reports that play facilitates the development of a healthy brain because “play is one of the primary processes in our lower subcortical brain that helps us anticipate and respond to situations that promote or threaten our survival.” (para. 4). Also, play supports the development of higher forms of cognition, and the skills children acquire when they play lead to better grades (Alliance for Childhood, 2018).

Wohlwend and Peppler (2015) argued against the erroneous notion that play is frivolous noting that “at the heart of this zero-sum game are assumptions that

rigorous content requires work, while play is frivolous” (Wohlwend & Peppler, 2015, p.22). They believe it is a mistake to reduce playtime to make room for rigorous work in numeracy and literacy to meet curriculum standards in the United States of America. Wohlwend and Peppler (2015) argue that play deepens children’s understanding of curriculum content, and it helps practitioners meet curriculum goals. This argument is also reflected in the work of Pellegrini and Bohn-Gettler (2013), who carried out controlled experiments on elementary school children. They advocate that the recess time allocated to children in elementary schools should not be reduced or eliminated because it “has benefits for children’s cognitive, social, and physical health. Furthermore, it can improve children’s achievement scores.” (para. 3). Play during recess can improve children’s attention to academic tasks, and thus enhance academic achievement and learning.

Wajskop and Peterson (2015) argue for the importance of dramatic play in elementary classrooms because “dramatic play provides opportunities for children to explore and come to new understandings about experiences and observations from everyday life.” (p. 20). They believe that it promotes meaning-making, story-making, and overall literacy skills. In this article, they relied on literature based on dramatic play and observations of Brazilian and Canadian classrooms. Wajskop and Peterson posit that when children engage in dramatic play, they use explicit, meta, and narrative languages, which are essential to early literacy. According to them, “children create stories and gain symbolic understandings, particularly when using implicit objects in their dramatic play.” (p.20). For example, a child in the article used a curling iron and ironing board cover to represent a sword and a shield. By using an object to represent something else, the child was involved in symbolic thinking which is necessary for writing. This idea is collaborated by Peterson et al. (2017), in a quantitative study conducted with grandparents of kindergarten children in northern

Canada. Peterson et al. (2017) note that dramatic/pretend play is important in helping children's literacy since it involves abstract thinking, which corresponds with the symbolic representation of ideas needed to read and write. For Wajskop and Peterson (2015), children engage in metalanguage when they use implicit objects because they must think, explain, and communicate to others what the objects currently represent. Dramatic play draws upon children's language knowledge and dialogue conventions. Wajskop and Peterson (2015) encourage teachers to observe and record children's meaning-making and story making in dramatic play, integrate the information in planning learning activities, and create classroom environments that provide opportunities for children to exercise control over the direction of their dramatic play.

The works of Alliance for Childhood (2018), Bulunuz (2013), Pellegrini and Bohn-Gettler (2013), Peterson et al. (2017), Wajskop and Peterson (2015), and Wohlwend and Pepler (2015) reviewed above illustrate that children's play is beneficial to their cognitive development and academic success as different forms of play contribute to children's understanding of concepts, meaning-making, and comprehension. The findings here suggest that schools should not reduce or eliminate play in favour of academic rigour since play has the potential to help children achieve curriculum and learning goals. Moreover, children do not view play as work. When playing, they are working, but since they derive pleasure from the activity, they do not view it as work. It could be assumed that this is the reason why kindergarten teachers, in Newfoundland and Labrador, are encouraged to adopt a playful approach to teaching children to meet curriculum goals. This section focused on the academic benefits of play in schools, the next section emphasizes the socio-emotional benefits of play.

Socio-Emotional Development of Play.

The social and emotional development of a child is important as it aids in the cognitive and holistic wellbeing of the child. Moyles (2012), in her book, *A-Z of Play in Early Childhood*, describes the socio-emotional benefits of play. She holds that play ensures that children grow up to be good future citizens as it promotes qualities such as reasoning, empathy, inquisitiveness, cooperation, sharing, and a belief that they can be an agent of change in the world. Additionally, Miller and Almon (2009) maintain that play serves as a major stress reliever for children, especially with regards to the pressure that might be attributed to meeting academic standards. This can help prevent the rise in anger and aggression in children.

In an article about how to support social competence and prevent challenging behaviours, Powell et al. (2006) explain that play can be used as an intervening tool to help toddlers and pre-schoolers with challenging behaviours. According to them, challenging behaviours may include “disrupted sleeping and eating routines, physical and verbal aggression, property destruction, severe tantrums, self-injury, noncompliance, and withdrawal.” (p.24). Powell et al. (2006) recommend that role play, cooperative play, imaginary play, and dramatic play can help children with challenging behaviours to learn friendship skills, understand and express emotions, empathize, learn how to resolve conflicts, and develop self-management skills. According to them, “teaching materials and techniques geared to engaging young children, such as stories, puppets, simple games, pictures and videotaped vignettes, role-play and dramatic play, and art activities” (p. 31) can be used to develop socio-emotional skills with the children with challenging behaviours.

Young et al. (2019) conducted a literature review that focused on longitudinal studies on how early childhood education could help with the identification and prevention of special education needs, such as learning disabilities, speech

impairments, and emotional-behavioural challenges in children under the age of four or five. Based on this review of longitudinal studies, Young et al. (2019) argue that the experiences children have prior to kindergarten can affect their academic and developmental trajectories and these trajectories can be optimized through high quality early childhood education. Therefore, Young et al. (2019) suggest that the Canadian government should take advantage of the neighbourhood schools, especially prior to children attending kindergarten and grade school. In addition, Young et al. (2019) recommend that “if the federal government intends to increase access to ECE [early childhood educators] for diverse children, human resource issues must be addressed, as extra needs require extra staffing and professional development” (p. 14), specifically for skills on inclusion, that is, knowing the needs of the child and how to support those needs. According to Young et al. (2019), this could prevent children from developing special education needs down the road.

Penney et al. (2019), in line with the recommendations of Young et al. (2019), also appeal for quality early childhood education. In a comprehensive literature review that explores how socio-emotional learning can be adopted in early childhood education to identify and prevent the development of mental health issues, Penny et al. (2019) found that inadequate preparation of early childhood educators contributed to mental health issues being unidentified before children begin kindergarten. Penny et al. (2019) describe characteristics of mental health problems as “emotional dysregulation, peer rejection, disturbed sleeping or eating, aggression, irritability, being headstrong, being hurtful toward others, and defiance” (p. 61). Less visible signs of mental health issues include children who are “withdrawn, lack interest in social relationships, have low energy, appear anxious, lack curiosity about their environment, appear perfectionistic, and seem irritable over an extended period of time” (Penney et al., 2019, p. 62). They suggest that early childhood educators be

educated to recognize, monitor, and intervene (Penney et al. 2019). Penney et al. (2019) recommend a quality early childhood education curriculum with an emphasis on socio-emotional learning.

As this study focuses on kindergarten classrooms in Newfoundland and Labrador, it is essential to understand what challenging behaviours may be present on the part of children. Regarding challenging behaviours, as described in the above literature, such as physical aggression, suggesting poor self-regulation, the provincial government recommends that children attend KinderStart prior to their beginning kindergarten to develop needed socio-emotional skills. The idea is that the skills the children acquire and develop in KinderStart will make for a smoother transition into kindergarten. KinderStart according to the official document is intended to be conducted as monthly visits by the child and family throughout the school year before they begin kindergarten (Newfoundland & Labrador. Department of Education & Early Childhood Development, 2019). These visits occur four times over an 8-month period, for a duration of two and half hours per session, during a school year. This adds up to a total of ten hours for pre-kindergarten children to get acquainted with the necessary expectations of behaviour in the kindergarten classroom. Through play-based learning, children in KinderStart sessions are encouraged to engage in pretend play, which facilitates self-regulation, understanding and responding to how others think and feel, and growing emotionally (Newfoundland & Labrador. Department of Education & Early Childhood Development, 2019). This is achieved through topical sessions that focus on friendship, social responsibility, and promoting positive behaviours. The children's parents and caregivers are encouraged to participate in these sessions to reinforce what the children learn in the sessions later, in the home environment. The objective of encouraging children to play in KinderStart and to inform parents of the benefits of play such as socialization skills is to avoid the

development of challenging behaviours, which show in a child as a lack of self-regulation skills. In addition to the KinderStart program, the provincial government is proposing the implementation of Junior Kindergarten. The proposed Junior Kindergarten is “a play-based, quality early learning program that would be available for four-year old children in the province during the year prior to Kindergarten (Newfoundland & Labrador. Department of Education & Early Childhood Development, 2019, para. 4). Currently, the province has the KinderStart program.

Findings from a natural experiment conducted by Pelletier and Fesseha (2019) demonstrate that children who attended full-day kindergartens in Ontario were more likely to develop better self-regulation skills than those who attended half-day kindergarten. As a result, the children were less likely to be diagnosed as having special education needs in later grades. According to Pelletier and Fesseha (2019), “FDK children have more time for high-quality, child-driven play” (p. 52), which is essential for developing self-regulation skills because the teacher and early childhood educator provided more time for playful opportunities in full-day kindergarten than in half-day kindergarten. As children are provided opportunities to engage in play, such as imagination building of pretend play, children learn to see events that happen in the classroom through others’ perspectives, and further learn to inhibit some behaviours, take on new roles in peer relationship building, all of which in turn fosters self-regulation skills. They conclude by noting that having a kindergarten teacher and an early childhood educator in the kindergarten classroom was beneficial, especially for children who were struggling.

Furthermore, The Alliance for Childhood’s (2018) report recommends that one way to minimize children’s negative interaction experiences who are diagnosed as having attention-deficit/hyperactivity disorder (ADHD) is to “provide children with abundant rough and tumble play experiences that build and refine the social brain

during the first few years of children's lives before any ADHD diagnosis is appropriate" (para. 18). According to this report, rough and tumble play offers children the opportunity to "improve self-control, attention and hyperactivity" (para. 18) because when children engage in this type of play very early in their lives, they develop appropriate social skills. This way, the incidence of ADHD children can be reduced in school settings. Also, the report encourages adult supervision to "assure that naughty behaviours can be discouraged, and hence the positive benefits of play can be consolidated into lasting adaptive behaviour patterns, characterized by good self-regulation and empathy toward others" (para. 19).

In summary, from the reviewed literature, it is apparent play has socio-emotional benefits, because when children play, they have an avenue to act out emotions and experiences that they may not be able to express otherwise. This helps them make sense of their world and their feelings. Having considered the academic and socio-emotional benefits of play, the next section considers a study by Platas (2017) that discusses the interconnectedness of academic skills as well as socio-emotional development when children play.

Integrating Academic and Developmental Benefits of Play.

Hewes (2018) argues that "play provides a natural integration of learning domains, integrating social, emotional, and physical learning with cognitive and academic learning. This integration is difficult to achieve and maintain in teacher-directed instruction." (p. 5). Platas (2017) shares ideas on how a mathematically rich environment in tandem with mathematical talk can support children's mathematical skills development and social and emotional development. She argues that the two domains (academic learning and social and emotional development) are mutually supportive. Platas (2017) demonstrates how engaging pre-schoolers and kindergarteners in mathematically supportive environments and talk facilitated the

development of self-regulation, social awareness, and initiative. For example, when children played games with dice and spinners, they learned how to count, take turns, and interact with their peers. The study found that when children play, they gain several benefits which are intertwined. Therefore, in a play-based kindergarten classroom, a well-designed classroom environment in addition to access to an array of vocabulary could help young children learn academic skills alongside social and emotional skills.

In the previous sections, I discussed the importance of play by explaining from the literature that play is the right of every child, which means that children should be provided with opportunities to play, especially in school settings. Also, I considered the challenges of defining the concept of play as it varies across socio-cultural and historical context. However, the provincial government places value on play in schools because they believe it is an avenue for children to grasp curriculum content. Since the provincial government recommends play in schools, I reviewed studies on the academic and socio-emotional benefits of play, such as how play could enhance children's attention to academic task, extend their communication and comprehension abilities, in addition to facilitating their development of social skills, especially self-regulation. In the next section, I focus on play-based learning, which discusses some approaches to how play can be used in pedagogy in early childhood education, in order to help children, benefit from play both academically and developmentally.

Play-Based Learning

Having considered how play benefits children academically and socio-emotionally, this research literature section focuses on play-based learning. In this section, I will reference the literature to define play-based learning (Danniels & Pyle, 2018; Newfoundland & Labrador. Department of Education and Early Childhood

Development, 2016), explain pedagogical approaches to play-based learning (Miller & Almon, 2009; Moyles, 2010; Pyle & Bigelow, 2015), and discuss some challenges associated with implementing play-based learning in the classroom (Bulunuz, 2013; Lynch, 2014,2015; Bubikova-Moan et al., 2019; Scharer, 2017). Additionally, I will also discuss teacher-directed and child-directed practices, classroom environments, sustained shared thinking, and play-based pedagogy in the Newfoundland and Labrador context.

Danniels and Pyle (2018) define play-based learning as “essentially, to learn while at play” (p.1). As this study is based in Newfoundland and Labrador, a local definition is necessary. “Play-based learning refers to early childhood learning opportunities that are rich in child-initiated play, especially when it involves the presence of a caring, engaged, and responsive adult.” (Newfoundland & Labrador. Department of Education & Early Childhood Development, 2016, p. 36). Thus, play-based learning is an educational approach that recognizes that children are actively engaged in their learning. This relates to Piaget’s (1962; 1967) work, which views the child as an explorer and active participant in their learning. For him, children develop at different stages, and practitioners need to employ developmentally appropriate practices to meet their learning needs. One way of using developmentally appropriate methods that place the child at the centre of their learning is through play. To achieve this, teachers need to integrate play into every facet of teaching and learning.

To further understand how different kindergarten teachers may approach and implement play-based learning, these approaches to understanding play-based learning will be considered (Miller & Almon, 2009; Moyles, 2010; Pyle & Bigelow, 2015). These researchers’ approaches demonstrate several ways of implementing play-based learning. For instance, Miller and Almon (2009) provide a continuum model, which is included in the Newfoundland and Labrador curriculum guide, Moyles

(2010) suggests a pedagogical model, while Pyle and Bigelow (2016) provide three profiles of how play-based learning is implemented in three Ontario kindergarten classrooms. Researchers, Miller and Almon, are based in the United States, Moyles in the United Kingdom, and Pyle and Bigelow are based in Canada. These authors provide recommendations from different contexts.

Miller and Almon's (2009) report for the United States Alliance for Childhood argue that "in a healthy kindergarten, play does not mean 'anything goes.'" nor "is play so tightly structured by adults that children are denied the opportunity to learn through their own initiative and exploration." (p.12). For Miller and Almon, a healthy kindergarten classroom should maintain a balance between child-initiated play, where children explore the world with the active support of teachers, and teachers guide learning in a way that is rich, focused, and experiential. However, Miller and Almon (2009) note that teachers typically have difficulty understanding the relationship between play and learning. Consequently, this makes it difficult for them to integrate play in the classroom.

A playful pedagogy is developed by Moyles (2010) as a way to facilitate the implementation of play-based learning. For Moyles, this consists of "pure play", "playful learning", and "playful teaching". Moyles explains that pure play is "initiated and led by the child(ren) and sustained and developed by them for their purposes." (p. 20). Children have autonomy over their play. Playful learning relates to "learning experiences that are child-or adult-initiated or inspired, which engage the child in playful ways" (p. 21). This should mirror the child's disposition to play as much as possible. Playful teaching is "teaching that utilizes the child's natural and innate joy in playful learning" (p. 21). That is, teachers should instruct in an enjoyable and fun manner (Moyles, 2010). Moyles (2010) recommends using a playful pedagogy to meet curriculum goals.

Conversely, Lynch's (2014) exploratory netnographic study observed that many Ontario kindergarten teachers regard the play-based curriculum as a threat to children's academic achievement (Lynch, 2014). Netnography is a study conducted online to understand a phenomenon. The finding shows that kindergarten teachers that did support play in the classroom were not comfortable describing their work as play. Rather, they preferred the term "structured play". Perhaps teachers in this research felt this way because, as Bulunuz (2013) points out, there are few experimental and theoretical studies on how to facilitate learning through play. This makes it difficult for teachers to implement play-based learning in their classrooms.

The profiling approach is from the work of Pyle and Bigelow. Pyle and Bigelow's (2015) qualitative study discovered that teachers in three kindergarten classrooms in Ontario implemented play-based learning differently. The differing teacher roles in play-based learning contribute to the integration of play in classroom environments (Pyle & Bigelow, 2015). The findings highlight that the teachers viewed "play as peripheral to learning, a vehicle for social and emotional development, or a vehicle for academic learning" (Pyle & Bigelow, 2015, p. 388). Their views were based on their understanding of the purpose of play and their role in children's play. Teachers who believe that play is peripheral to learning view it as a break from academic learning. They encourage child-initiated play and construct play contexts. Their role is to supervise behaviours and withdraw students for teacher-directed instruction and assessment (Pyle & Bigelow, 2015). Teachers who believe play is a vehicle for social and emotional development report that it provides opportunities for socialization and independent agency. For them, play should be child-initiated with open access to resources, and it should be structured to allow children to solve social problems. Their role is to model and support social problem-solving tactics and joining the children's play (Pyle & Bigelow, 2015). In the last profile, teachers who

view play as a vehicle for academic learning believe it helps children internalize new academic concepts. They believe that play should both be child-initiated and teacher-directed, and both should co-construct the play contexts. Their role is to extend children's learning, encourage discussions about play contexts, and introduce academic concepts to play (Pyle & Bigelow, 2015). Pyle and Bigelow conclude that "by constructing these three play profiles, this paper begins the process of explicitly describing particular play-based learning approaches," (p. 392). Thus, these three profiles can help categorize classroom-approaches to play-based learning.

Additionally, Pyle and Bigelow (2015) note that the approaches the three teachers adopted in their classroom influenced how children perceived play and learning. To illustrate, the children in the classroom where the teacher viewed play as peripheral to learning perceived play and learning as different, while in the classroom in which the teacher used play to deepen academic learning, the children expressed that they learned during play. This finding is echoed in a qualitative study conducted by Pyle and Alaca (2018), which focused on 134 children's perception of play and learning in Ontario. The findings reveal that in five classrooms, children viewed play and learning as similar constructs, while in the other five classrooms, children believed play and learning were different constructs. Their views were influenced by their classroom environment and the teacher's presence during play. For instance, the children that expressed that there was a connection between play and learning provided examples of when they were involved in play-based centre activities. Conversely, the children who did not believe there was a connection between play and learning were in classrooms where academic learning and play were presented by the teachers as different activities. In a classroom where the teacher often called some children aside during free play to work on their writing or reading, the children perceived that play and learning were distinct. Also, a qualitative study conducted by

Theobald et al. (2015), on Australian pre-schoolers' (3 and 4 years old) opinions on their play and learning in school, note that the children's perception of play varied from those of the adults. Children in their study identified activities as play when they had autonomy and agency in the activity, and they identified activities as learning when their teachers were involved. Therefore, Pyle and Alaca (2018), Pyle and Bigelow (2015), and Theobald et al. (2015) demonstrate that how teachers intentionally employ play opportunities may determine whether children believe there is a dichotomy between play and learning.

To summarize, having considered different approaches (Miller & Almon's continuum model, Moyles' playful pedagogy, and Pyle & Bigelow's profile approach) to how kindergarten teachers might implement play-based learning, it is necessary to discuss what play-based pedagogy should be in Newfoundland and Labrador as described in the curriculum documents.

Play-Based Pedagogy in Newfoundland and Labrador

Peterson et al. (2016) state that "the prominence of play in kindergarten curricula varies across the five provinces" (p. 18). As such, play-based learning varies from Canadian province to province, depending on the emphasis placed in the curriculum by the provincial government on the role of play in kindergarten. Peterson et al. (2016) note that the implementation of play-based learning, or lack thereof, is dependent on the teachers' values, perspectives, experiences, and background, as they examined the value of play placed in the curriculum of five Canadian provinces (British Columbia, Alberta, Saskatchewan, Manitoba, and Ontario). They found that play was integral to kindergarten curricula in Saskatchewan and Ontario. However, it was implicitly mentioned in the Alberta, British Columbia, and Manitoba curricula where support documents provided more support for play. Similar to the provinces of Saskatchewan and Ontario, the Newfoundland and Labrador curriculum and support

documents place much emphasis on play as an instructional strategy. As stated in the document, “kindergarten teachers will continue to be required to meet curriculum outcomes within their classrooms in a play-based kindergarten program.”

(Newfoundland and Labrador, Department of Education & Early Childhood Development, 2016, p. 35). Therefore, the kindergarten curriculum in Newfoundland and Labrador requires kindergarten teachers to deliver the curriculum through play. Before considering what play-based pedagogy is in Newfoundland and Labrador, I will consider what the document states that it is not.

According to Newfoundland and Labrador, Department of Education and Early Childhood Development (2016), the curriculum should not be delivered primarily through direct instruction and whole group work. Also, playtime should not be used as a break or reward. Furthermore, playtime should not be organized by the teacher in a manner that makes children move through their stations in small groups selected by the teacher using a timer. A classroom is not considered play-based if it has not been equipped with various play materials to sustain play.

Above are practices that should not occur in a play-based classroom in Newfoundland and Labrador. For Newfoundland and Labrador, Department of Education and Early Childhood Development (2016), play-based pedagogy is:

An approach where the teacher recognizes that children learn through an active, hands-on, playful environment. In a play-based classroom, the teacher makes decisions about and adjusts the daily schedule, the environment, the materials, interactions and activities based upon the strengths, needs, interests, and input of the students in the classroom, as required, to enhance learning opportunities (p. 35).

This definition comprises some common practices that are listed as requirements in a Newfoundland and Labrador play-based classroom. Of particular interest to this study are the following practices:

Students are provided with extended periods of time for exploration and play; literacy and numeracy are integrated into every area of the learning and the environment; teachers stimulate children's activity and talk through 'sustained shared thinking'; there is a mix of both teacher-initiated and child-initiated activities throughout the week; and there is a mix of large group, small group activities as well as individual learning and child-initiated activities (pp. 52-53).

This study intends to explore how these practices are implemented in some kindergarten classrooms in St. John's. The next sections focus on teacher-directed activities and child-initiated activities, classroom environments, and sustained shared thinking. The following are considered in light of how the NL curriculum should be implemented.

Teacher-Directed Activities and Child-Centred Activities.

To further elaborate on play-based learning, teacher-directed activities and child-centred activities need to be considered. Consideration of both of these activities is necessary because teachers' opinions about educational goals often inform what instructional methods they employ, including play-based pedagogy (Pyle & Bigelow, 2015). For Pyle and Bigelow (2015), these educational goals are connected to the learning objectives for the students. Therefore, whether a teacher prefers a teacher-directed or a child-centred approach is determined by what they believe their students need. Lerkkanen et al. (2012) note that "teacher-directed practice is based on the teacher's determination to proceed with predetermined instructional content" (p. 268). Teacher-directed approaches may include didactic ways of teaching which include little or no play (Bulunuz, 2013; Lerkkanen et al., 2012; Miller & Almon, 2009). In teacher-directed practices, children's participation is limited as the teacher demonstrates instructional conversation.

In contrast, in a child-centred approach or practice, the teacher allows children to explore, inquire, and play. Teachers also use activities that make learning

meaningful and experiential (Miller & Almon, 2009). In addition, there is a mixture of the choices made by the teacher. Lerkkanen et al. (2012) describe a child-centred classroom as one in which “teachers assist and facilitate children’s learning by providing them with both guidance and opportunities to direct their own exploration of objects and academic topics, making teaching akin to a partnership between the teacher and the children.” (p. 267). Children are encouraged to engage in conversations, elaborate on their thoughts, and participate in small group activities that encourage peer interactions (Lerkkanen et al., 2012). According to the Newfoundland curriculum guide, for play-based learning to occur, the kindergarten teacher needs to adopt a child-centred approach to make learning authentic.

In summary, play-based learning encourages a child-centred classroom where the teachers and children are co-constructors of knowledge. The next section discusses how classroom environments are essential for a play-based learning approach to be successful.

Classroom Environments.

The importance of the physical environment of the classroom is often overlooked (Morrow & Rand, 1991). Morrow and Rand (1991) claim that when classroom environments are manipulated to include, support, and encourage play, the developmental dividends are enormous to the children. Play provides the ideal context for children to practice, elaborate, and extend emergent literacy skills. Therefore, classrooms need to be structured in a way that promotes play. Consequently, classroom materials need to be carefully selected to ensure instructional success, especially with regards to the themes being studied (Morrow & Rand, 1991).

Platas (2017) recommends that classroom environment should be rich in mathematical materials and resources such as number walls created by the students, manipulatives, balance scales, jigsaw and geometrical puzzles, blocks, games with dice and spinners, books that facilitate a sense of numbers and pretend play areas. Platas (2017) further believes that setting up classroom environments with these items promote independence and social interaction, which helps in the development of “self-regulation, social awareness, and initiative” (p. 34).

Clark (2017) explains in her book, *Listening to children: A guide to understanding and using the Mosaic approach*, that classroom environments have been described as being “the third teacher” in schools such as Reggio Emilia (p.77). That is, indoor and outdoor environments are regarded as vital to the learning process. Therefore, considerations should be noted when designing these spaces for optimum learning. The kindergarten curriculum guide for Newfoundland and Labrador states “when designing the environment, the teacher must consider what values are to be communicated through the classroom design.” (Newfoundland & Labrador. Department of Education & Early Childhood Development, 2016, p.54). Accordingly, the kindergarten physical space should be designed to provide opportunities for children to engage with materials, equipment, and people to facilitate optimal learning. Essentially, the classroom environment should be another teacher (Newfoundland & Labrador. Department of Education & Early Childhood Development, 2016). There should be a variety of learning areas which include reading, listening, writing, numeracy, science, technology, art, dramatic play, block, and large group meeting areas. For example, the dramatic area should encourage children to interact, experience or re-enact real or imaginary situations. This area should enhance children’s numeracy and literacy skills as they engage in role-play, such as checking groceries at a grocery store. The guide recommends that the

classroom spaces should change during the semester (Newfoundland. Department of Education, 2010). This demonstrates what a kindergarten classroom environment should look like.

In sum, in this section, I considered what the classroom environment should look like in a play-based learning kindergarten classroom within a Newfoundland context by reviewing literature by Clark (2017), Morrow and Rand (1991), Platas (2017), and the Newfoundland and Labrador curriculum document (2016). In addition to learning from their teachers and their peers, children also learn from their environments. Consequently, kindergarten teachers should thoughtfully and intentionally organize their environments to ensure optimal learning. The next section considers sustained shared thinking which is highlighted as one of the common practices in a Newfoundland and Labrador kindergarten classroom.

Sustained Shared Thinking.

The zone of proximal development is defined by Vygotsky (1978) as “the difference between the child’s actual development level as determined by independent problem solving and their potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers” (p. 86). Bodravo and Leong (2015) argue that this portion of Vygotsky’s work has been misinterpreted to include only knowledgeable adults; they reason that more knowledgeable peers should be included as well. Vygotsky maintains that play is the source of the zone of proximal development because when children engage in imaginary play, they demonstrate their current knowledge level and capabilities more than in other activities. Pound (2011) notes that the critics of Vygotsky argue that his work is highly theoretical, as he came about most of his ideas by observing children and the social interactions around them.

However, one study conducted by Scharer (2017) uses a Vygotskian approach to demonstrate how play-based learning can be implemented to meet British Columbia's kindergarten curriculum goals. She argues that setting up play learning environments can help children learn numeracy and literacy skills (Scharer, 2017). For example, Scharer (2017) turns her classroom into a museum with spaces used as exhibition centres, coffee shop, and extensions. In the coffee shop, children develop literacy skills by reading the menu or writing or drawing the customers' orders. They learn numeracy skills by calculating prices or refunding money. The children learn social skills by collaborating or taking turns. Here, children learn vocabulary which they may otherwise have missed by talking to the teacher or their peers. Scharer (2017) notes that by turning her classroom into a museum and demonstrating how various skills can be acquired and developed, she was able to challenge the belief that "play and instruction are separate activities and cannot be brought together." (p. 69). She encourages prospective early childhood educators to use play to meet curriculum goals.

Siraj et al. (2002) define sustained shared thinking as "an episode in which two or more individuals work together in an intellectual way to solve a problem, clarify a concept, evaluate activities, extend a narrative etc. Both parties must contribute to the thinking and it must develop and extend." (p. 8). For them, this a necessary component of early years pedagogy. To further elaborate on this concept, Siraj et al. (2015) developed an observation scale which described sustained shared thinking as comprising of "building trust, confidence, and independence"; "social and emotional well-being"; "supporting and extending language and communication"; "supporting learning and critical thinking"; and "assessing language and learning". A benefit of sustained shared thinking is that it places the child at the centre as the teacher follows their lead and supports them to achieve higher cognitive levels (Brodie, 2016).

Sustained shared thinking is included as one of the practices of play-based pedagogy in Newfoundland and Labrador.

In sum, whatever the approach to play-based learning, it is important to make learning activities child centred. The teacher needs to be open to integrating more child-centred activities in their teaching. They should be equipped to provide rich classroom experiences to make learning meaningful to children. Teachers also need to engage children in sustained shared thinking to extend and enhance their learning. The literature review on teacher-directed and child-initiated activities, classroom environments, and sustained shared thinking were informed by the Newfoundland and Labrador curriculum document to understand what the common practices in a play-based classroom ought to look like.

The next section considers some of the challenges that are associated with the implementation of play-based learning as described in several research studies, such as Hoskins and Smedley (2019) and Lynch (2015).

Challenges Regarding the Implementation of Play-Based Learning

The Newfoundland and Labrador documents have outlined what best practices of play-based learning should look like in a kindergarten classroom. However, there are challenges associated with implementing play-based learning as noted in the literature. One of the key issues identified by Fesseha and Pyle (2016) is that “more than half of the kindergarten teachers who participated in this study did not implement play-based learning” (p. 372). This is due to the Ministry of Education in Ontario’s failure “to provide its educators with the support necessary to navigate the realm wherein play-based learning meets curriculum and policy” (p. 373). Although their study provided a snapshot of the existing climate of play-based learning in an Ontario context, Fesseha and Pyle suggest that further research needs to be done on

how policy and curriculum influence teachers' perspectives of play-based learning, that is, how curriculum can be adapted to better support a playful pedagogy in the early years. This issue of a lack of consensus on the definition of play-based learning is echoed in a meta-synthesis conducted by Bubikova-Moan et al. (2019) as they noted that "teachers may employ different or alternative ways of labelling PBL [Play-Based Learning]" (p. 785). Therefore, this lack of agreement is identified as a challenge of implementing play-based learning across the literature they reviewed.

Studies such as Bubikova-Moan et al. (2019), Bulunuz (2013), Lynch (2014; 2015), and Scharer (2017) show that kindergarten teachers may find it difficult to implement play-based learning because some teachers believe that play and academic learning are two separate domains. For instance, some Ontario kindergarten teachers in Lynch's (2014) study viewed the play-based curriculum as a "threat to children's academic development" (p. 339). In addition, Scharer (2017) notes that, though prospective early childhood educators in British Columbia appreciated that play helps children learn, they are concerned about what parents will think if they teach curriculum content through play. Also, the meta-synthesis conducted by Bubikova-Moan et al. (2019) reveal that the issue of parents not perceiving play as essential to school readiness was experienced by early childhood practitioners in other countries, such as Abu Dhabi. Contrary to this, Peterson et al. (2017), in their quantitative study, report that parents and grandparents were in support of Ontario teachers using play to teach children because they believe that children learn when they play. Regardless, Lynch (2014) reports one kindergarten teacher's concern that "she encounters students who are too shy and will never participate in voicing their interests whereas other students are dominant and always participating" (p. 339). Obviously, this may defeat the purpose of using play to meet the needs and interests of all students.

The findings from the netnography study by Lynch (2014) show that some Ontario kindergarten teachers were dissatisfied with the level of support received from their principals, while others were satisfied with the support they received. Also, Lynch's (2015) study states that some American kindergarten teachers recounted their "tense relations with school administrators and principals that influenced their views and practice of play in kindergartens" (pp. 360-361) as they are pressured to meet curriculum outcomes in more traditional ways. This is also echoed in Fesseha and Pyle's (2016) findings, which reveal that "administration and colleagues were identified by 38% and 60% of participants, respectively" (p. 371) as those who do not regard learning through play as a viable means of meeting curriculum outcomes. Cancio et al.'s (2013) survey indicates that administrative support plays a vital role in whether American teachers who had children with emotional and behavioural challenges remained for the long term or left within a short period.

Administrative support is considered as support from the "principal" and "leadership" (Cancio et al. 2013, p. 89) and this is the definition of administrative support that this study adopts. Their findings suggest that school leaders who provided emotional and informational supports have teachers who have job satisfaction. Leadership support can be in the form of "consideration", "guidance and feedback", and "professional growth" (Cancio et al. 2013, p. 89). Furthermore, a quantitative study by Suporitz et al. (2010) demonstrates that principals and peer support influence teaching and learning, which affects how students learn. According to these researchers, the principals in the study influenced students' learning indirectly through teachers' instructional practices. Also, teachers' peers directly influence one another's instructional practices. Principals affect teachers' instructional practices by fostering a climate of collaboration and communication on instructional practices between teachers. This is because, through collaborative conversations

about their professional work, peers influence each other. Equally, principals influence teachers by stating the missions and goals clearly, and fostering community and trust (Suporitz et al., 2010).

Some American kindergarten teachers expressed that they have not been adequately educated to implement play-based learning (Lynch, 2015). Along a similar line of inquiry, Bubikova-Moan et al. (2019) convey that early childhood practitioners in different countries also reported “teacher education and qualifications” (p. 789) as key issues in implementing play-based learning. These teachers reflected on their “own limited knowledge and comprehension of play theory or PBL as a concept” (p. 789). Some practitioners across national context still held on to their traditional views of teaching. While other practitioners described that they had limited knowledge and understanding of play theory and how to use play in children’s learning. Bubikova-Moan et al. (2019) suggest that there is a need for professional development with an emphasis on play theories and play-based learning where teachers can gain knowledge and understanding, which they can, in turn, enact in their practices. In addition, they recommend that practitioners should engage in work-place based and cross collegiate reflections to help their practice. Further, Suporitz et al. (2010) suggest that peer coaching is one way teachers can gain professional development. Through peer coaching, teachers observe each other and learn to examine students work regarding assignments. Another way teachers can gain additional training is through formal and informal instructional advice networks (Suporitz et al., 2010). Through these forums, teachers can provide and seek assistance from other teachers. In a quantitative study by Keung et al. (2019), professional learning communities are defined as “an inclusive and mutually supportive group of people with a collaborative, reflective and growth-oriented approach towards investigating and learning more about their practice in order to

improve pupils' learning" (Stoll, 2011, as cited in Keung, 2019, p. 876). According to Keung et al. (2019), teachers involved in a professional learning community are constantly conducting "reflection, collaboration, and collective learning to form a shared vision of children's learning." (p. 876). Their study found that kindergarten teachers in Hong Kong who participated in professional learning communities develop instructional strategies, such as theme-based and play-based learning, for improving children's learning. Teachers engage in reflective practice when they participate in professional learning communities. Accordingly, Hall (2020) argues that ideally reflective practice is supposed to be a collaborative process of inquiry leading to action. The process of reflective practice includes problem identification, solution development, and solution testing. In their ethnographic study, Hall reports that a dialogic approach to reflective practice is necessary for novice teachers to develop their practice. Reflective practice "is not supposed to be solitary but rather collaborative between teaching colleagues or supervisors and teachers." (p. 672). Other challenges identified by Fesseha and Pyle (2016) include "class size, materials, and space" (p. 371). These are also highlighted as barriers in the work of Bubikova-Moan et al. (2019), while teamwork between the kindergarten teacher and early childhood educator in Ontario was identified by Lynch (2014). Another challenge is the time needed to implement play-based learning amidst other academic and administrative commitments (Bubikova-Moan et al., 2019; Fesseha & Pyle, 2016; Hoskins & Smedley, 2019). According to Hoskins and Smedley (2019), although the practitioners from England in their qualitative study valued play, almost all of them said they do not have enough time to focus on learning through play in their settings due to the pressure to meet the academic demands set by policymakers. For example, the government's emphasis on achieving school readiness. As such, the teachers focused more on developing academic capabilities rather than allowing free flow play (Hoskins & Smedley, 2019). Moreover, Fesseha

and Pyle (2016) note that some Ontario kindergarten teachers found it challenging to intentionally plan to set up playful learning opportunities through an environment that could help children learn specific outcomes.

Notwithstanding these challenges, McLennan (2011), who was a kindergarten teacher in Ontario, provides useful strategies for implementing play-based learning while meeting curriculum goals. Some of these strategies include approaching the curriculum as a starting point to help plan lessons but allowing enough flexibility to accommodate children's different interests. Teachers should be creative in their professional judgement. For example, they could create a post office area to encourage children to write rather than writing alphabet prints repetitively, or teachers could integrate curricula expectations across multiple curriculum strands. She believes that by applying these strategies, the true spirit of kindergarten as articulated by Froebel will be kept alive.

In sum, this section highlighted and discussed some of the challenges that kindergarten teachers face in implementing play-based learning. To recap, these challenges include: lack of consensus on the definition of play-based learning, the inability of some teachers to perceive play and learning as the same thing, insufficient time, inadequate professional development, lack of support from school leadership, limited classroom space, and inadequate materials or resources.

To conclude this literature review, I provide a brief summary of the main issues identified and addressed in the review and how these inform the scope and focus of my study. The research questions are as follows:

1. What are the perceptions and experiences of some kindergarten teachers in St. John's regarding play-based learning?
2. How is play-based learning implemented in some classrooms in St. John's?

3. What are some young children's experiences and perceptions of play and learning in a full-day kindergarten?

To explore the current body of knowledge on these issues and to identify gaps in the literature, I considered studies that discuss the importance of play by emphasizing that play is the right of every child (Moyles, 1989; Souto-Manning, 2017; United Nations Convention on the Rights of the Child [UNCRC], 2010). However, from the literature, I am aware that play varies across socio-cultural contexts (Brillante & Nemeth, 2018; Peterson et al., 2017). As this study is situated within a Newfoundland and Labrador context which acknowledges the importance of play in the schooling of children, I can adapt the view that play is a necessity in Newfoundland kindergartens. In order to explore the various perceptions of, and experiences with, play-based learning, I thought it necessary to review studies on the definition of play and play-based learning (Danniels & Pyle, 2018; Moyles, 1989; 2012; Pyle & Bigelow, 2015; Roskos & Christie, 2013), the approaches to implementing play-based learning (Miller & Almon, 2009; Moyles, 2010; Pyle & Bigelow, 2015), the benefits of play (Alliance for Childhood, 2018; Bulunuz, 2013; Moyles, 2012; Pellegrini & Bohn-Gettler, 2013; Pelletier & Fesseha, 2019; Peterson et al., 2017; Platas, 2017; Powell et al., 2006; Wajskop & Peterson, 2015; Wohlwend & Peppler, 2015), and the challenges of implementing play-based learning (Bubikova-Moan et al., 2019; Bulunuz, 2013; Fesseha & Pyle, 2016; Hoskins & Smedley, 2019; Lynch, 2014; 2015; Scharer, 2017). Through this review, I remained conscious of the Newfoundland and Labrador's curriculum descriptions of best practice in a kindergarten classroom. To understand how play-based learning might be implemented in classrooms in St. John's, studies that provide information about ways to implement play-based learning were reviewed. For instance, the continuum approach by Miller and Almon recommends a balance between child-initiated play

and teacher-directed activities. Moyles' (2010) provides a description of the play pedagogy, which emphasizes pure play, playful teaching, and playful learning. The profile approach suggested by Pyle and Bigelow holds that different teachers implement play-based learning in various ways depending on their perception of the role of play in children's lives. Their study highlighted three profiles or approaches to play-based learning. These include play as peripheral to learning, a vehicle for social and emotional development, or a vehicle for academic learning. These studies suggest that both child-initiated play and teacher-directed play are important components of play-based learning. Nevertheless, studies such as those conducted by Hoskins and Smedley identify time as a challenge to the implementation of play-based learning. Professional development and learning are also highlighted as issues in the implementation of play-based learning. Lack of support from school leadership may also be a barrier. Lack of adequate space, classroom support (early childhood educator), and materials/resources are identified as challenges teachers may experience as they implement play-based learning. Play-based learning directly affects the learning experiences of kindergarten children. In fact, the key argument from the provincial government is that children are more likely to find learning meaningful and authentic when they are taught through play. Studies such as those of Pyle and Bigelow and Pyle and Alaca explore the experiences of children with regards to play in full-day kindergarten in Ontario, while studies like Theobald et al. (2015) offer an Australian perspective as to children's experiences. These studies are necessary as they emphasize the notion that children are capable of communicating their perceptions of and experiences with play and learning in school. The studies discussed in this literature review have been thoughtfully and strategically selected to help me, as the researcher, understand and explore the current state of knowledge around the three questions, as the purpose of the current study is to explore the implementation of play-based learning in a Newfoundland and Labrador context.

The next section discusses universal design for learning as a theoretical/educational framework that influenced my study of play-based learning in St. John's, Newfoundland and Labrador. Universal design for learning provides a lens by which I, the researcher, can explore the concept of play-based learning from the teachers' and children's perspective.

Theoretical Framework

Universal Design for Learning

Newfoundland and Labrador, Department of Education (2018) reports that early years programs should consider children's differing experiences, abilities, family structures, interests, and cultural backgrounds when making decisions concerning approaches to teaching and learning. They, therefore, recommend that the principles of universal design for learning be "included in curriculum as it is renewed, and in the design of the learning environment, to produce more flexible learning opportunities for all learners" (Newfoundland & Labrador, Department of Education, 2018, p. 8). This is timely as my research adopts universal design for learning principles to understand play-based pedagogy. As practitioners, it is paramount to design instructional goals, assessments, methods, and materials that lead to accessible, meaningful, and challenging learning experiences for all students. One framework that seeks to provide concrete guidelines to make learning accessible and meaningful to all learners is universal design for learning. Universal design for learning is a "framework to improve and optimize teaching and learning for all people based on scientific insights into how humans learn." (CAST, 2018, para. 1). Universal design for learning is an educational framework, which includes a set of suggested guidelines that were developed in the 1990s by the Center for Applied Special Technology [CAST].

The concept of universal design for learning was adapted from the universal design movement in architecture, which proposed that when planning and designing physical structures and spaces, provisions for accessibility should be considered for a wide variety of users from the beginning to avoid retrofitting individual structures. Accordingly, this same level of consideration could be adapted in an educational curriculum. That is, by considering different students' learning capacities and preferences at the initial stage of curriculum design, barriers to students learning can be minimized, rather than seeking ways to accommodate individual students afterwards. Rose and Meyer (2002) in their book, *Teaching Every Student in the Digital Age*, articulated universal design for learning and its application in teaching and learning. According to them, "barriers to learning are not, in fact, inherent in the capacities of learners, but instead arise in learners' interactions with inflexible educational materials and methods" (Rose & Meyer, 2002, p.vi). Therefore, universal design for learning offers a framework that could ensure that all children have maximum access to curriculum content, which in turn makes learning meaningful. The theory seeks to promote the inclusion of diverse children.

Specifically, with regards to play-based learning, universal design for learning is an approach that can be used by kindergarten teachers to design instructional materials, methods, and assessments to meet Newfoundland and Labrador kindergarten curriculum goals, while minimizing barriers that may impede young children's learning, when they learn through play, by taking into account the diverse needs, learning preferences, and experiences of the young children in their classrooms.

According to the CAST (2018) website, the *Universal* in universal design for learning recognizes the uniqueness of every child due to differences in background, skills, interests, strengths, and needs. Thus, the curriculum should accommodate

each learner's uniqueness. According to Blum and Parette (2015), although universal design for learning is designed to cut across cultural barriers, practitioners should exercise caution because different "cultures and nation-states may have unique worldviews that influence their instruction of young children" (p. 179). Blum and Parette (2015) encourage practitioners to be familiar with both global and local contexts and philosophies regarding instruction and accessibility. CAST (2018) recommends that practitioners ensure that the learning environment is accessible to all children. This leads to the concept of *Design* in universal design for learning. By making the learning environment accessible to those within the margin (English as a second language, learning disabilities, behaviourally challenged), the practitioner is making the learning environment accessible and better for all students (CAST, 2018). The *Learning* in universal design for learning emphasizes the differences in how children learn (CAST, 2018). The curriculum needs to be designed to ensure that it accommodates the different ways children learn (CAST, 2018). This suggests that the various ways children learn should be considered when designing and implementing the curriculum through play-based learning (digital and non-digital).

Rose and Meyer (2002) and CAST (2018) propose that when three universal design for learning principles are used, depending on the content and context of specific learning goals, practitioners minimize barriers to learning and maximize children's learning. The three principles are engagement, representation, and action and expression, which are connected to the affective, recognition, and strategic networks of the brain, respectively. Table 1 provides a summary of the three principles (see Appendix A for a complete table with guidelines and corresponding checkpoints).

The first principle to be discussed is engagement. The principle of engagement is connected to the affective networks of the brain. It is concerned with

the “WHY” of learning. The affective network is responsible for monitoring the internal and external environment to set priorities, motivate, and engage learning and behaviour (CAST, 2018). For Brillante and Nemeth (2018), authors of *Universal Design for Learning in the Early Childhood Classroom*, being engaged goes beyond just being on task; it also involves the child desiring to “know more, do more, and be part of more” (p. 55). That is, engaged children display signs of curiosity about how the world works. Children who are intrinsically motivated are more persistent in dealing with difficulties or setbacks. CAST (2018) argues that learning engagement and motivation vary from one learner to another. This is due to a variety of factors such as neurology, culture, and background knowledge, which influence individuals differently. For instance, spontaneity and novelty, which may engage some learners, may disengage others, who may prefer a strict routine. Other learners may prefer to work independently rather than with peers and vice versa. Therefore, providing multiple means of engagement is necessary, as no one means of engagement will be ideal for all learners in all contexts. The goal of this principle is to develop learners who are purposeful and motivated.

To achieve this goal, CAST (2018) suggests that practitioners should provide options for recruiting interests, sustaining efforts and persistence, and self-regulation (see Appendix A for guidelines and specific checkpoints). For Brillante and Nemeth (2018), engagement is not just about focusing on children’s interest, but should also include their behaviour in the classroom. They believe that children who are engaged are curious and are more likely to handle setbacks and difficulties better.

In the context of this study, which focuses on play-based learning, kindergarten children may be allowed to select topics they are curious about or that interest them, and the teacher can plan lessons around those topics. It could also include providing ways in which kindergarten children can regulate their emotions,

such as providing charts for breathing or providing different media about emotions such as movies, songs, and books.

The way curriculum content is presented is fundamental because learners vary in the way they acquire and retain information and knowledge (Brillante & Nemeth, 2018; CAST, 2018; Hunt & Andreasen, 2011). How learners identify and categorize what they see, hear, and read can affect learning, if instruction is not delivered in a way that aligns with how they recognize and process information (Hunt & Andreasen, 2011). As such, practitioners are encouraged to use multiple means of representation to present information to accommodate all learners (CAST, 2018; Hunt & Andreasen, 2011). The principle of representation is connected to the recognition networks, which is responsible for the “WHAT” of learning. For example, learners with sensory disabilities, learning disabilities, language, and cultural differences may differ in the way they approach content. Some learners may prefer visual or auditory means. The recognition networks transform perceived knowledge into useful knowledge. According to Brillante and Nemeth (2018), learning occurs when the information is presented in ways that children can understand and connect to prior learning and experiences. The goal of presenting information in various ways is to produce learners that are resourceful and knowledgeable. This can be achieved by providing options for perception, language and symbols, and comprehension (See Appendix A for guidelines and corresponding checkpoints). A practical example provided by Brillante and Nemeth is teachers using information that the children can relate with to teach specific lessons. For example, they suggest that teachers should balance stories about farms with stories about cities as children may be more familiar with the city life.

On most occasions, “teachers and policymakers expect the end result or product of learning to occur in the form of written tests or other traditional measures.”

(Hunt & Andreasen, 2011, pp. 168-169). This may not work for all learners.

Therefore, multiple means of action and expression is needed to offer diverse learners' options to navigate the learning environment and express what they know (CAST, 2018, Hunt & Andreasen, 2011). This principle is connected to the strategic networks in the brain that are responsible for planning, organizing, and initiating purposeful actions in the environment. This principle describes the "WHY" of learning (CAST, 2018). Tasks are approached differently by learners with physical disabilities, impulse control issues, language barriers, and varying strategic and organizational abilities (executive function disorders) (Brillante & Nemeth, 2018; CAST, 2018). Therefore, learners should have options to participate and play with materials in the environment to learn new skills and to demonstrate what they know by employing various strategies that work for them (Brillante & Nemeth, 2018). The goal of the principle of action and expression is to empower learners to be strategic, goal-directed learners. This can be achieved by providing options for physical action, expression and communication, and executive function. In the context of this study, kindergarten children should be allowed to draw, dramatize, speak, write, and use other means to express their learning. For example, allowing one child to use a drawing app to describe their learning, while another child can verbalize what they learned. CAST (2018) recommends that practitioners should be responsible for providing models, feedback, and support because children have different levels of proficiency.

Furthermore, the universal design for learning guidelines are organized both horizontally and vertically. The three principles of universal design for learning: engagement, representation, and action and expression are organized vertically. These principles are further defined by guidelines, and each guideline has a corresponding checkpoint to provide specific suggestions to facilitate its

implementation. The universal design for learning guidelines are organized horizontally, and include access, build, and internalize. The “access” row includes the guidelines that suggest ways to increase access to learning by providing options for “recruiting interest”, “perception”, and “physical action”, and these guidelines have their corresponding checkpoints. The “build” row includes the guidelines that suggest ways to develop options for “sustained effort and persistence”, “language and symbols”, and “expression and communication. Lastly, the “internalize” row includes the guidelines that suggest ways to empower learners through providing options for “self-regulation”, “comprehension”, and “executive function” with their corresponding checkpoints.

Ultimately, these guidelines are intended to lead to the main goal of universal design for learning, which is to develop “expert learners” who are “purposeful and motivated”, “resourceful and knowledgeable”, and “strategic and goal-directed” (CAST, 2018, para. 3). The goals of universal design for learning align with the goals of the Newfoundland and Labrador, Department of Education and Early Childhood Development (2016) as they define play as “a vehicle through which learning occurs. It is an intrinsically motivated, voluntary activity that allows the child the opportunity to construct their own knowledge. When children are playing, they are truly engaged in their activity” (p. 10). In this definition, the principle of engagement is seen as children are intrinsically motivated. Means of representation can be achieved by providing opportunities for children to play, whether they are child-initiated or teacher-directed. When children construct their own knowledge, they are engaging in action and expression. Like the Newfoundland kindergarten goal, universal design for learning can help children become expert learners.

Table 1: Universal Design for Learning Guidelines

Provide multiple means of Engagement	Provide multiple means of Representation	Provide multiple means of Action & Expression
Provide options for Recruiting Interest (guideline7)	Provide options for Perception (guideline1)	Provide options for Physical Action (guideline4)
Provide options for Sustaining Effort & Persistence (guideline8)	Provide options for Language & Symbols (guideline2)	Provide options for Expression & Communication (guideline5)
Provide options for Self Regulation (guideline9)	Provide options for Comprehension (guideline3)	Provide options for Executive Functions (guideline6)

Adapted from CAST (2018). *Universal design for learning guidelines version 2.2 [graphic organizer]*. Wakefield, MA: Author.

It is important to note that the universal design for learning guidelines are not meant to be prescriptive. Rather, they are suggestions to help educators minimize barriers while optimizing learning opportunities for all learners. The guidelines can be ‘mixed and matched’ to meet specific learning goals. The guidelines serve as a tool to facilitate the design of goals, assessments, methods, and materials that lead to accessible, meaningful, and challenging learning experiences for all.

As I consider how universal design for learning can serve as a framework for exploring and understanding play-based learning within the Newfoundland and Labrador context, I turn to several studies that have applied this model to different contexts. Some studies have used universal design for learning as a lens to make curriculum content and design more accessible and meaningful for all learners. Several of these studies are theoretical, while others are empirical. These research

studies (Brillante & Nemeth, 2018; Gillis et al., 2012; Hunt & Andreasen, 2011; Sokal & Katz, 2015; Tomas et al., 2018) are discussed below.

Brillante and Nemeth provide practical examples of how universal design for learning could be adapted to implement developmentally appropriate practices (DAP) and DECAL (Different Experiences, Culture, Abilities, and Language) in the United States. An example of how the principle of engagement can be applied to children with different experiences is when the teacher takes into account that not all children may have experience with some play materials in the classroom. Therefore, playing with these materials may be difficult. As a result, teachers need to be cognizant of the different experiences of children and provide varied materials. Particularly noteworthy is the teacher's understanding of children's culture. For example, Brillante and Nemeth (2018) explain that "some cultures value being independent and some cultures value working together as a group, and that is important to understand in the classroom." (p. 58). Therefore, teachers need to be aware and considerate of individual children's cultural values.

In order to build children's comprehension, their cultures need to be represented in the classroom. For instance, instead of buying multicultural posters, teachers could ask the families of the children to bring photos that can be used to make posters to help the children make authentic connections. Brillante and Nemeth (2018) encourage teachers to gather play and learning materials that are culturally relevant from flea markets, yard sales, and families to build on children's prior knowledge or serve as visual or tactile examples.

Teachers can apply the principle of action and expression as they consider the different abilities of children in their classroom. For instance, they can "use collaborative projects that provide a meaningful role for each learner." (Brillante & Nemeth, 2018, p. 42). Teachers should be aware of the level of challenge for each

child as challenging behaviours may stem from facing too much or too little challenge in their school activities. The materials that are provided should be flexible enough to allow all students to learn from them. The principle of action and expression can be applied to children of different languages by creating a common classroom language using pictures and words written in both languages, in order for children to communicate with each other. Children should be given some time to process language as classrooms can seem overwhelming for a child learning a second language. Teachers are encouraged to learn the concepts and content in the child's home language, rather than making the child speak in English.

In a perspective article, Tomas et al. (2018) theorized about how universal design for learning could be used alongside the International Classification of Functioning, Disability and Health (ICF) (a health framework) to further include children with disabilities in Ontario, Canada. In their hypothetical argument, they demonstrated how the principles of universal design for learning could be complemented with ICF to help a child, named Daniel, to optimize his learning. For example, the ICF identifies Daniel's interest in basketball, which is a personal factor. The universal design for learning principle of engagement, specifically, the guideline for providing options for recruiting interest could be used to motivate him by designing assignments that allow him and other students to draw on the topic. In their article, the authors argue that different children, such as Daniel, may have individual needs and requirements in the classroom. Frameworks such as ICF are intended to identify the needs of individual children, while universal design for learning principles are designed to benefit all, thereby enhancing overall inclusivity within the classroom. As I consider how universal design for learning could help explore and promote the goals of play-based learning in this study, it is essential to make connections between activities and tasks, such as small group activities, and play centres, associated with

play-based learning to observe what universal design for learning principles, guidelines, and checkpoints are being used.

Hunt and Andreasen (2011), in an article on Middle School Mathematics in the United States, provide practical examples of how middle school teachers could use universal design for learning to improve mathematics lessons. They used a middle school lesson plan called *Feeding Frenzy*. The lesson plan involves rational numbers, ratios, and proportions. The task involves a recipe for cookies and determining quantities of each ingredient for different numbers of servings. For this lesson plan, the teacher, Ms. Torres, will need to review the learning goals, learning materials, instructional methods, and assessment. Ms. Torres job is to ensure that with these goals, materials, methods, and assessment, universal design for learning principles are reflected and to further identify potential barriers that may hinder students from understanding rational numbers, ratios, and proportions. For example, as the teacher considers the materials required by feeding frenzy, she may notice that the texts and graphics are fixed, which some students may not find engaging. To remedy this, she may provide options by using a Wiki with text- reading options as a choice not just for the six students in her class who have difficulties with reading, processing, language, or visual perception, but also for all students, to access the mathematics problems through alternate means instead of through paper and pencil only. They conclude by suggesting that even with lesson plans based on the universal design for learning principles, such as feeding frenzy, teachers still need to explore and reflect on how to further make materials universal design for learning compliant while anticipating and minimizing barriers. Consequently, identifying barriers will not only benefit those with special needs but every student.

Sokal and Katz (2015) conducted a quasi-experimental pre- and post-intervention study on the effects of the three-block model of the universal design on

183 students' engagement in a mid-sized, central Canadian city. The three-block model is an extension of the principle of engagement. It is a comprehensive guide for the implementation of universal design for learning that addresses social and emotional learning, inclusive instructional practice, and focuses on student autonomy. The researchers studied students' intellectual engagement, social engagement, academic engagement, and observed active learning. The findings indicate that the "three-block model of universal design for learning has a positive impact on students' perceived intellectual engagement in their learning as well as on their observed active learning and peer interaction" (Sokal & Katz, 2015, p.78) when compared to other students in classrooms that used traditional methods. However, the control group remained more academically engaged. They suggest that teachers and administrators adapt the three-block model to address Canadian's children's lack of engagement in their learning.

An article by Gillis et al. (2012) explored how a web-based technology called 'VoiceThread' can support the development of receptive and expressive language skills in early childhood education in the United States of America. Gillis et al. (2012) evaluated VoiceThread features. According to them, VoiceThread might be described as a multimedia slide show tool that displays images, documents, and videos. VoiceThread enables a child to create and explore slides and construct comments using voice, text, audio file, or video. Their article argues that universal design for learning is a useful theoretical framework in integrating VoiceThread in the classroom to promote young children's receptive skills, expressive skills, comprehension ability, and family connection. For example, the principle of action and expression is present as children are provided options to demonstrate their receptive language skills. Children could record their voices, type text, or record video to express themselves. The technology allowed for additional practice of targeted skills as children could

access the VoiceThread instructional activities both inside and outside the classroom. By using universal design for learning as a foundation for integrating VoiceThread, the authors were able to observe how VoiceThread was used by practitioners to engage children, allow children to express their learning, increase their comprehension ability, and get family members involved in their child's learning by providing access links to parents.

Although my study does not focus on technology in the kindergarten classroom, Gillis et al.'s (2012) article is an example of how digital and non-digital tools and materials can be used to enhance literacy skills, which is an integral aspect of a kindergarten curriculum. The article also demonstrates that various media can be used by kindergarten teachers to teach curriculum content, such as selecting appropriate apps to teach literacy skills or displaying and reading a variety of books on a topic to engage different learners. Another example of how teachers might use technology is by playing YouTube videos that address various curriculum content. The children could participate in the dance steps to demonstrate their number sense.

Regarding this present study, universal design for learning is beneficial as I explore teachers' understanding of and experiences with play-based learning, how play-based learning is implemented, and children's play and learning experiences in the Newfoundland context. There is currently minimal research evidence to support universal design for learning as a framework for understanding play-based learning. For example, universal design for learning might be beneficial in understanding how kindergarten teachers intentionally set up playful opportunities for engagement, representation, and action and expression. Additionally, universal design for learning can be used to observe child-initiated or teacher-directed activities to explore how information is presented to the children and how children express their learning through these activities. The universal design for learning framework is useful as I

consider the challenges that both the teachers and children encounter in the classroom.

Much of the literature I reviewed used hypothetical case studies and quasi-experimental designs. My study will contribute empirical knowledge to the current body of literature as it uses a qualitative, multi-case design to explore play-based learning with kindergarten teachers and children. Most of the literature on universal design for learning focuses on technology and its use in the classroom or the special needs of students. However, my study looks at the classroom without emphasis on technology or disability to help kindergarten teachers understand how to apply universal design for learning principles through their pedagogical practices which is new and innovative in this field. Much of the current research focuses on the application of the universal design for learning principles to address the needs of diverse learners. Few studies combine universal design for learning and play-based learning as my search indicated through several academic databases. This suggests that there is a need for research that focuses on universal design for learning and play-based learning in the early years. In particular, kindergarten, as much of the literature focuses on middle school, and higher education. This study will employ a universal design for learning framework and will allow for practical examples situated within an early years classroom to be added to the literature thus addressing this gap.

Chapter Two

Methodology

I do my grocery shopping at a supermarket, which is in the neighbourhood of the elementary school that served as my research site. There are also many eateries and my favourite is a Filipino restaurant located in one of the complexes on the opposite side of supermarket. On the street where the school is located, there is a community centre where many of the children who attend this school go for activities, such as swimming. Across from the school is a pond, where I go for walks (when I am not feeling too lazy). People often jog, walk, or walk their dogs around the pond. Kindergarten children at the school often go for walks with their teachers and peers around the pond as part of their outdoor activities. This is a familiar neighbourhood and an ideal research site, as I live within walking distance from the school. I know this close neighbourhood, as I often see the school children playing, when riding the bus, at the mall when I am shopping, or at church on Sunday.

Once I determined my study foci: understanding teachers' perspectives on, and experiences with, play-based learning, gaining insight into how it is implemented in kindergarten classrooms, and children's experiences with play and learning, I applied for ethics. I submitted an ethical application to the Institutional Review Board (Creswell, 2014; Leavy, 2017). After clearance was granted by Interdisciplinary Committee on Ethics in Human Research (ICEHR), I requested for permission from the Newfoundland and Labrador English School District (NLESD). The school district granted permission for my study to be conducted. Following this, information letters and consent forms were sent to several principals of kindergarten schools to gain access to their classrooms. The kindergarten teachers were provided with recruitment letters, information sheets and consent forms for themselves and the children (Creswell, 2014; Leavy, 2017) (see Appendix B, C, and D).

Fortunately, one principal enthusiastically responded, and this school served as my research setting. The research setting was an English/French Immersion elementary school located in the Avalon East regional zone, St. John's, Newfoundland and Labrador. The school serves approximately 540 students. Many of the students participate in the breakfast and lunch program. The school has a varied racial composition but is nevertheless predominantly Caucasian. On my first meeting with the principal, he told me he was delighted for me to see how the kindergarten teachers in his school implemented play-based learning. Initially, I assumed I would be working with two teachers, but the principal suggested that I invite a third teacher. The school administration and staff were very supportive. The third teacher confided in me that she was excited to be a part of my study because, in her seventeen years of teaching, she has never been part of a research study. To ensure that the identity of the school and participants (teachers and children) in this study are protected, confidentiality and anonymity of participants' details were ensured throughout the research process (Leavy, 2017). Pseudonyms were given to the school and participants. Any identifying features, such as names on the children's drawing, were redacted. I transcribed the interview records of the participants to ensure confidentiality. The research did not cause any harm to the participants (Creswell, 2014; Leavy, 2017).

Situating This Study Within a Qualitative Research Paradigm

As this study explores the implementation of play-based learning in a Newfoundland context primarily through a universal design for learning framework, it is therefore situated within an interpretative/subjective qualitative research paradigm. In qualitative research, the assumption is that there are multiple realities, and these are either complementary or contradictory, but equally valid (Mertens, 2010). This viewpoint recognizes that different perspectives are valuable because reality is

subjective and dependent on context (Cohen et al., 2017; McMillan & Wergin, 2002). Knowledge is considered as dynamic, complex, contextual, and intertwined (Creswell, 2014; Leavy, 2017).

Another assumption in qualitative research is that data collection methods are subjective and open to interpretation, and that data is contextualized and individualized (Cohen et al., 2017; Creswell, 2014). This subjectivity of qualitative research makes it difficult to generalize qualitative findings to a larger population. Nevertheless, the findings in qualitative research provide in-depth information concerning a phenomenon, which cannot be obtained through quantitative research (Merriam, 2009; Creswell, 2014).

Qualitative research provides the most appropriate ideas and methods to answer my research questions, which focus on the implementation of play-based learning in three kindergarten classrooms in St. John's. I believe that there are different perspectives because we all have different experiences and circumstances. As I explore play-based learning in classrooms located in St. John's, it is important for me to understand that kindergarten teachers will have different opinions, backgrounds, values, and beliefs that may affect how they implement play-based learning in their classrooms. Moreover, the opinions of kindergarten children about their play and learning experiences are explored. This ensures that my study explores the varied views and experiences of both children and their teachers.

Case Study Design

There are many designs in the qualitative research paradigm, including case study, ethnography, autoethnography, phenomenology, and narrative research. Each serves a purpose, depending on the research question. For example, a phenomenological design will not serve this research because phenomenology

involves “asking how people experience the topic under investigation” (Leavy, 2017, p. 129). I was not interested in teachers’ and children’s lived experiences with the implementation of play-based learning alone. Instead, I was interested in exploring and observing how play-based learning was implemented, for which a case study design was appropriate.

Case study is an in-depth exploration of a specific phenomenon based on comprehensive data collection. The phenomenon in question may be an individual, a group, an event or a program in which the researcher is interested in gaining insight (Creswell, 2012; Merriam, 1998; Merriam, 2009). Case study is a useful design when the researcher is interested in understanding contemporary events in which they cannot manipulate relevant behaviours (Yin, 2009). In this study, the phenomenon or case was play-based learning. I was interested in exploring how play-based learning occurs in different kindergarten classrooms in St. John’s, Newfoundland and Labrador and analysing the data through a lens of universal design for learning and contextualizing the data within relevant literature.

This research used a multi-case studies design because it involved conducting a study using more than one site (Merriam, 1998; Merriam, 2009; Yin, 2009). Multi-case studies are robust because they compare different cases to provide in-depth insight into a phenomenon (Creswell, 2014; Yin, 2009). Holistic multi-case studies allow researchers to look at one case or phenomenon across different contexts, rather than looking at different phenomena within different contexts (Yin, 2009). The study was conducted in three kindergarten classrooms within the same school. I used holistic multiple-case studies because this allowed me to look at play-based learning across different kindergarten classrooms.

Case studies, according to Yin (2009), have been criticized because researchers’ biases influence the direction of the findings and conclusions. Perhaps

these biases exist because the researcher selects what phenomenon to study and how to study it. This has made some researchers view case studies as a less desirable design for conducting research when compared to experiments and surveys. However, Yin (2009) argues that “what is forgotten is that bias can enter into the conduct of experiments and the use of other research methods such as designing questionnaires for surveys or conducting historical research” (p. 14). He recommends that every case study researcher must endeavour to work hard to ensure that all sources of evidence are reported fairly (Yin, 2009). I used different sources of data and member checking to avoid bias. However, my interpretation of the data may have been impacted by my role as a teacher, student, aunty, and Christian, which influences my worldview.

The multi-case studies design took place in three kindergarten classrooms. The three teachers have a combined forty-three years of teaching experience between them (Miss Scarlet 15 years, Miss Sharon 11 years, and Miss Suzan, 17 years) and they all hold Master’s degrees. However, regarding their kindergarten experience, Miss Scarlet has three years, Miss Sharon has four years, and Miss Suzan has two years of teaching experience. Miss Scarlet had sixteen children, Miss Sharon fourteen children, and Miss Suzan eleven children in their classes.

The three classrooms are similar in shape, size, and layout. Each classroom is organized into different working or activity centres’ areas. They all have the reading area, kitchen area, the block area, the mat area, and the writing area. They all have tables and chairs for the children, and they have large rugs for children to sit. The teachers have their own corners. The areas have physical boundaries, although these boundaries are sometimes moved. There are different shelves for storage. Materials and resources are placed in such a way that they are accessible to the children. Each classroom has a smartboard and a computer. The washrooms are

placed within the classrooms. Children's work and cut out alphabets and numbers are displayed on the walls and boards. Nevertheless, there are some differences. For example, Miss Scarlet's class has a garden area (see Figure 1), while Miss Suzan's class has a calming area (see Figure 2). Miss Scarlet introduces the garden in January yearly. She uses the garden to achieve curriculum outcomes like knowing where their food comes from. Miss Suzan sets up the calming areas to meet the socio-emotional needs of the children in her classroom. Additionally, the children's tables in the three classrooms are shaped differently. For example, the tables in Miss Scarlet's class are shaped like trapezoid.



Figure 1: Miss Scarlet's Garden Area: Miss Scarlet's Garden Area



Figure 2: Miss Suzan's Calming Area (within the classroom)

The children in the three classrooms had consent from their parents/guardians to participate in this study. It was important to include the voices of children in my research as play-based learning directly concerns them. According to Clark (2001; 2007; 2017), the lens chosen by adults to view young children determines whether young children's abilities are noticeable or invisible. For Clark, children are capable beings, possessing a unique perspective to communicate about their lives (Clark, 2007; 2017). Accordingly, I chose to view young children as experts concerning their lives regarding their play and learning experiences in kindergarten. Clark (2001; 2007; 2017) recommends using a Mosaic Approach to help listen to children's varying perspectives on issues that pertain to them. That is, employing different data collection methods to accommodate diverse ways children communicate their ideas, in this case, their kindergarten experience. For example, in a qualitative study in England, Clark (2001) used data collection methods, which included, interviews, mapping, tours, and photography to understand pre-schoolers views on their setting.

The objective of the Mosaic approach is to demonstrate the importance of understanding children's opinions of their everyday life "in the institutions they attend, as members of communities rather than consumers of education or users of a product." (Clark, 2017, p. 27). In this case, their lived experiences in a play-based, full-day kindergarten in St. John's. For Clark (2007; 2017), given that children are active participants, they should, therefore, play active roles in the research process. Clark links this idea to the right of children to express themselves on matters that affect them as stated in the United Nations Conventions on Rights of the Child. I will further extend this notion of children being active participants to the notions of universal design for learning, which maintains that children should be provided with

opportunities to express what they know by having options for physical action, expression and communication, and executive functions (CAST, 2018). The Mosaic approach involves gathering information from different sources to create a complete picture of children's perspectives (Clark, 2007). This study drew from different sources such as observations, interviews, drawings, and photographs to create a more complete picture of some kindergarten children's play and learning experiences.

The Researcher's Role

I was a grade one teacher prior to my coming to Canada. I currently volunteer in the nursery in my church. I have a passion for working with children, specifically early childhood education. I do not have any prior experience with play-based learning in my country. Therefore, this was a learning experience for me. The teachers trusted my background as a teacher and allowed me to help in their various classrooms, as needed. Creswell (2014) defines a participant observer as "an observational role adopted by researchers when they take part in activities in the setting they observe." (p. 214). For this study, I was a participant observer, as the children involved me in their activities. I was the human instrument in the process of data collection for this study. I intentionally left the interviews and drawing activities towards the end of data collection because I wanted to develop a relationship with the teachers and children. It was essential to me, to be able to identify every child by name and to get to know them. This approach made the teachers more comfortable with me, as I would have lunch with them in the staff room. This made the data collection process easier.

As I consider reflexivity in research, especially concerning the dynamics of power in research (Leavy, 2017), because of my position as a researcher, it is important to account for how I came to collect useful insights in this study. As

mentioned earlier, the teachers were aware of my prior experience as a teacher. I tried not to provide counsel on their teaching practices. In addition, I sent them copies of their transcripts to determine whether there were aspects they would like to edit (Leavy, 2017). As for the children, I asked for permission from the individual child before I interviewed them. For example, two children told me that they were not interested in being interviewed, and I did not insist. During the interviews, if a child responded “I don’t know” to any of the questions, I did not probe any further. In Miss Suzan’s class, she was absent on the day we were to do the drawing activity. The children were more familiar with me than the substitute teacher. Miss Suzan had scheduled the drawing activity as part of the children’s learning centre activities. Ideally, all the children would have participated in the drawing activity once it got to their turn. However, I chose to ask children that were interested in participating rather than require the whole class. Five children, of the eleven in the class, participated.

Another way I accounted for reflexivity in this study is to include children’s voices. As Leavy (2017) suggests, being attentive to the issues of voices is a necessary step in engaging in reflexive practice. For this study, the voices of children were listened to through their interviews and drawing activities. I have attempted not to add or subtract from what they had to say. My intention is to honour both the voices of teachers and children.

Data Collection Methods

In order to gain insight into teachers’ perceptions on play-based learning; how play-based learning is implemented, and children’s opinions on play and learning, several data collection methods were employed. Using different sources of data allows various aspects of the phenomenon to be explored (Patton, 2002; Yin, 2009). Various data collection methods were used to ensure triangulation, as using different methods strengthens the validity of qualitative studies, since findings are confirmed

through multiple sources (McMillan & Wergin, 2002; Yin, 2009). Data collection methods included direct observation, semi-structured interviews, drawings, and photographs. Data collection was done during a one-month period at the end of the school year, because I believed that the teachers would have had sufficient time to implement play-based learning during the school year. Furthermore, the children would have had time to process their play and learning experiences in full-day kindergarten. Therefore, I began data collection in the last week of May and finished in the last week of June. Although data were collected during a one-month period, I felt that my prior experience as a teacher helped me know what to observe and what data might be illuminating to my research objectives. I arrived at 9:30 a.m. and departed at 3:00 p.m. daily.

Initially, I intended to be a non-participant observer, but that did not happen. From day one, the teachers and children treated me like I was always part of their classroom. The children were asking for my help during their learning centre activities. Also, I was invited to participate in their play. I was a participant observer, as I became part of their kindergarten community. A participant observer is a researcher who takes part in the activities of their observed setting (Creswell, 2014). As such, I took part in the daily activities of the three kindergarten classrooms I observed by engaging in activities such as circle time and participating in their play centres set up by the teachers. My initial plan was to observe one class per week, but because the children wanted me present in their classrooms, I rotated classes daily. That is class A today, class B tomorrow, and class C the next day. I started data collection in Miss Scarlet's class, the next day, I collected data from Miss Suzan's class, then the third day, I collected data from Miss Sharon's class. This was the sequence of my data collection. This process afforded me the opportunity to get acquainted with every child, and by the third day in each class, I knew the names of

most of the children. This process also allowed me to catch up on activities and make connections that may have been missed if I observed one classroom per week. The teachers allowed me to help in class with the children, I followed the children for all their activities, and the children treated me as a teacher, asked me to help them with their work, and participate in their indoor and outdoor play. My data collection ended on the day before the last day of the school year.

Direct Observation.

According to Yin (2009), a case study should occur in the natural context of the case, and direct observations should be used to collect data. I collected data from the three classrooms by directly observing some practices of play-based pedagogy in Newfoundland and Labrador as outlined in the *Common Understanding – Play-based pedagogy*. This document serves as a guide into theoretical concepts and play-based pedagogy, such as, what is acceptable and unacceptable in a Newfoundland and Labrador kindergarten classroom (Newfoundland & Labrador. Department of Education & Early Childhood Development, 2016).

Direct observations were used to observe the implementation of four practices, out of eleven, listed as common practices that would be followed in a Newfoundland and Labrador play-based kindergarten classroom. These practices include how the classroom environment is set up to enhance literacy and numeracy learning; how much time is provided for children to play and explore; whether the activities are teacher-initiated or child-initiated; and how teachers stimulate children's activity and talk through sustained shared thinking. I recorded my observations on my phone (Samsung A5) on an app called "Samsung Notes" as I found this a more efficient way to manage the data compared to carrying a big notepad around. I also recorded my observations, through voice notes, on my phone during lunch breaks. At the end of the school day, when I returned home, I would consult my notes and write

a narrative about the events of the day. The observations from these recordings were used to inform and support the interview data.

In addition to observing the common practices, I observed the teachers' and children's daily routines. Direct observation can be time-consuming (Merriam, 2009; Yin, 2009). Merriam (2009) recommends a maximum of one hour of observation, particularly for beginning researchers as direct observation can consume time as it may be hard to observe everything you see over an extended period of time. Initially, I intended to observe three hours per day, but that did not happen. I ended up observing full days. I arrived at 9:30 a.m. and left by 3:00 pm daily (ninety hours of observation). This allowed me to understand their daily routines. If I had observed only the morning sessions, I would have missed the free play periods or other activities. Although my research focus was on what occurred within the classroom, I followed the children to music, gym, and the outdoors. I was there during their playtime (before the teachers returned) just after lunch and during recess.

Prior to my classroom observations, I re-read my literature review and my proposal as these served as a constant guide for my data collection. Occasionally, I accessed my proposal on my phone. I also took photographs with my phone to help me to recollect events. After the school day was over, I wrote down a detailed account of the events of the day. To help manage my data and provide rich descriptions, I selected one or two practices that would be observed for each day. I quickly realized that the practices were intertwined and integrated, as I was interested in understanding how these play-based practices were implemented in the classrooms. For instance, I would focus on observing episodes of sustained shared thinking and the inclusion of child-initiated activities and teacher-directed activities. Whilst I reviewed my fieldnotes at the end of the day, I would come to realize that as I was describing an occasion where the teacher had set up play centres to meet

curriculum outcomes such as recognizing the alphabet letters, I had observed episodes of sustained shared thinking. This was also achieved to address a weakness of direct observation highlighted by Yin (2009), which is the difficulty of covering a whole range of activities without more observers. By the last week of observations, I had reached data saturation (Merriam, 2009). Data saturation is described as when no new information is discovered during the research process (Merriam, 2009). I had several examples of the different practices without any new information.

Semi-Structured Interviews.

The interview method is an important source of case study information because the researcher can focus on the case study topics (Yin, 2009), in this case, play-based learning. The semi-structured interview allows for the researcher to ask questions pertaining to their study while allowing participants to respond in their own way (Cohen et al., 2017). The semi-structured interview provided insight (Creswell, 2014; Yin, 2009) from the teachers and children to help inform my observations. This study used semi-structured interviews to gather information from the three kindergarten teachers and fifteen children from their classrooms. The semi-structured interview allowed me to pursue a line of inquiry that was consistent with the research questions and purpose while allowing the teachers and children to provide answers to the questions without restrictions (Cohen et al., 2017; Merriam, 2009; Yin, 2009).

The three teachers were interviewed at the end of the school year to gain insight into their perceptions of, and experiences with, play-based learning. The interviews ranged between 15 to 40 minutes. The teachers were provided with the interview questions prior to the actual interview because I understood their demanding classroom schedule and wanted them to have time to process their thoughts. They selected the date and time that was convenient for them.

The teachers were asked eleven questions; one question was about demographics, while the others were on play-based learning. Questions covered their definition of play-based learning, benefits, challenges, their roles, preference for teacher-directed play versus child-initiated play, balancing teacher-directed activities and child-initiated activities, classroom environment, assessment, administrative support, and factors that would facilitate the implementation of play-based learning (see Appendix E). Some questions arose because of what was expressed in the literature. For example, Danniels and Pyle (2018) argue that based on the benefits, researchers and teachers may prefer child-initiated play or teacher-directed play. Thus, I asked, “Which do you prefer, child-initiated play or teacher-directed play?” The teachers were provided the opportunity to review transcripts of their interview before data analysis, and they clarified the areas I had highlighted.

Fifteen children were asked questions from the three classrooms: five from Miss Scarlet’s classroom, six from Miss Sharon’s, and four from Miss Suzan’s classroom. Three of the interview questions for this study came from the work of Pyle and Bigelow (2015): “What do you play in kindergarten?” “Do you learn anything while you are playing” and “Are playing and learning the same or different?” (p. 387) (see Appendix F for the complete list of questions).

Greig et al. (2013) recommend that researchers enter the world which the children are familiar with, to ensure they do not feel overwhelmed during data collection. For example, they suggest the use of stories, drawing, dolls, sand, and puppets to help them participate in research. Initially, my plan was to set up a news area in the dramatic play area during their free play time. However, that was not possible because of the noise level and classroom set up. Therefore, I interviewed the children in a quieter area near the washroom, which is located within each classroom. The children were not interviewed at the beginning of the data collection

process because I spent the first few weeks getting to know them and being the teachers' helper to build trust as Miss Chinwe. By doing this, I knew the names of all the children, and I was also able to gauge their conversation abilities. Nevertheless, I waited until the last week of observations to interview them. This made interviewing the children easy because they were comfortable with me. I was aware that the accuracy of their responses was dependent on their developmental capacities, which is why I used simple and clear language, avoided leading questions, and helped them understand the reason for the interview (Greig et al., 2013). For example, if a child answered, "I don't know", I did not probe them further. I also informed the children about what the interview was about because I observed that when I did not do that with the children from Miss Suzan's class, the children were unsure as to what I was asking of them. For instance, I said "Hello Peter, thank you for agreeing to answer some questions. I will be asking you questions about play, learning, and school".

Younger children are easier to engage when they are questioned in small groups or pairs (Greig et al., 2013; Pyle & Bigelow, 2015; Rengel, 2014). In my study, this was not the case. Although I interviewed four children from Miss Suzan's class in pairs, I had to interview the children in Miss Scarlet and Miss Suzan's class individually because Miss Suzan's children were a bit distracted. I also asked for permission from the children before interviewing them even though their parents had given their consent before the data collection process began. If the child said no, I did not interview them. An audiotape was used to record the interviews to provide a more accurate version of the interview (Merriam, 2009; Yin, 2009).

Photographs.

Holms (2014) explains that photographs provide the researcher with detailed information. That is, the researcher decides on what to photograph, how to set it up, and process it (Holms, 2014). According to Cohen et al. (2017), meanings and

reflections can be evoked by photographs. Doucet (2018) describes how her narrative of a family photograph changed as she considered analysing the photograph through “content narrative”. Doucet (2018) explains that “our conceptual narratives lead us to hear, coproduce, and write particular narratives; a shift in conceptual narratives will alter these specific narratives.” (p. 741). Therefore, the meanings and reflections that are evoked when we look at photographs are informed by our concepts, understanding, and explanation. Pyle and Bigelow (2015) used photographs to understand children’s perceptions of the activities they undertake in kindergarten. In addition, photographs provide information and factual data (Cohen et al., 2017). Photographs can be used to support other sources of data, or they can stand alone (Cohen et al., 2017). Photographs are time and research efficient because they can communicate more in a single image than many pages of texts (Cohen et al., 2017). In this study, photographs were used to capture the classroom environment and activities that occurred in the classrooms. The photographs provided details of the classroom environment and activities for my fieldnotes. The photographs were used to illustrate examples of the practices I observed. For example, the article by Platas (2017) had two photographs. One photograph showed children playing with connectors, and another photograph had an image of a boy seated who had a board game on the table. The photographs were used to illustrate themes in the article. Similarly, I used the photographs in this study to capture certain themes. Furthermore, photographs served as an actual data source, which were analysed to understand certain universal design for learning checkpoints. To avoid ethical issues, identifying information on the photographs were edited or redacted (Holms, 2014).

A critique of using photographs is the ambiguous nature of photographs. Some researchers argue that photographs show the truth, while others say this is not

the case. Critics argue that the researcher chooses what reality to capture in photographs (Holm, 2014). As a researcher, I ensured that the photographs taken reflected the arrangement of the classroom and activities, as it was essential to understand how play-based learning was implemented in the different classrooms.

Drawings.

As suggested by Clark (2017) and Greig et al. (2013), I included drawings as a data collection method to gain insight into children's views about their kindergarten classroom and experiences, and by extension, play-based learning. Drawings were used as data collection by Baroutsis et al. (2017) in a qualitative study to understand children's experiences with learning to write. Baroutsis et al. (2017) found drawings to be useful in representing children's views on their writing experiences. Therefore, in this study, the children were asked to produce drawings of their favourite and least favourite places, and activities. According to Baroutsis et al. (2017), drawings are a means of communication. Thus, the drawings were meant to serve as a representation of the activities they liked and disliked the most. The children were encouraged to label their drawings. As they drew, they were asked to explain their drawings of which I wrote what they described in an app on my phone. The drawings took place as whole group activities and small group activities. In Miss Scarlet's class, the four drawing activities were completed as whole group activities. In Miss Sharon's class, two drawings were completed as whole group activities, while the other two were completed during their learning centre activity. In Miss Suzan's class, only two drawing activities were completed as small group activities for those who were willing to participate.

Data Analysis

Play-based learning is the contemporary event that this study explored, and it was observed across three sites (classrooms) to gain an in-depth understanding from the teacher's, children's, and the researcher's perspective. The analysis of the data was intended to answer three questions, which are discussed in the next three chapters. The questions are: "What are the perceptions and experiences of some kindergarten teachers in St. John's regarding play-based learning?", "How is play-based learning implemented in some classrooms in St. John's?", and "What are some young children's experiences and perceptions of play and learning in a full-day kindergarten?"

To analyse multiple cases, Creswell (2014) recommends that each case be analysed individually and separately. The researcher can then conduct a cross-case analysis. I analysed each case of play-based learning in each classroom separately and then brought them together. For example, I analysed the observation fieldnotes for each class separately before bringing them together. I also analysed the fieldnotes separately from the interview transcripts. As I was interested in understanding play-based learning through the universal design for learning framework, the interview transcripts, fieldnotes, drawings, and photographs were analysed by reviewing the three principles of universal design for learning - engagement, representation, and action and expression, and coding data according to their corresponding checkpoints. See Table 2 below for universal design for learning principles, guidelines, and checkpoints that were used in the data analysis.

Table 2: Universal Design for Learning Principles, Guidelines, and Checkpoints

Multiple Means of Engagement	Multiple Means of Representation	Multiple means of Action and Expression
Provide options for Recruiting Interest (7) <ul style="list-style-type: none"> • Optimize individual choice and autonomy (7.1) • Optimize relevance, value, and authenticity (7.2) • Minimize threats and distractions (7.3) 	Provide options for Perception (1) <ul style="list-style-type: none"> • Offer ways of customizing the display of information (1.1) • Offer alternatives for auditory information (1.2) • Offer alternatives for visual information (1.3) 	Provide options for Physical Action (4) <ul style="list-style-type: none"> • Vary the methods for response and navigation (4.1) • Optimize access to tools and assistive technologies (4.2)
Provide options for Sustaining Effort & Persistence (8) <ul style="list-style-type: none"> • Heighten salience of goals and objectives (8.1) • Vary demands and resources to optimize challenge (8.2) • Foster collaboration and community (8.3) • Increase mastery-oriented feedback (8.4) 	Provide options for Language & Symbols (2) <ul style="list-style-type: none"> • Clarify vocabulary and symbols (2.1) • Clarify syntax and structure (2.2) • Support decoding of text, mathematical notation, and symbols (2.3) • Promote understanding across languages (2.4) • Illustrate through multiple media (2.5) 	Provide options for Expression & Communication (5) <ul style="list-style-type: none"> • Use multiple media for communication (5.1) • Use multiple tools for construction and composition (5.2) • Build fluencies with graduated levels of support for practice and performance (5.3)
Provide options for Self Regulation (9) <ul style="list-style-type: none"> • Promote expectations and beliefs that optimize motivation (9.1) • Facilitate personal coping skills and strategies (9.2) • Develop self-assessment and reflection (9.3) 	Provide options for Comprehension (3) <ul style="list-style-type: none"> • Activate or supply background knowledge (3.1) • Highlight patterns, critical features, big ideas, and relationships (3.2) • Guide information processing and visualization (3.3) • Maximize transfer and generalization (3.4) 	Provide options for Executive Functions (6) <ul style="list-style-type: none"> • Guide appropriate goal-setting (6.1) • Support planning and strategy development (6.2) • Facilitate managing information and resources (6.3) • Enhance capacity for monitoring progress (6.4)

Adapted from CAST (2018). *Universal design for learning guidelines version 2.2 [graphic organizer]*. Wakefield, MA: Author.

Data Analysis for Paper One.

The analysis process followed the recommendations provided by Creswell (2014) on analysing qualitative data. The first step is to organize and then transcribe data. Next, the data must be analysed by hand or computer. I achieved this by reading and re-reading individual transcripts from the three teachers and my fieldnotes from the three classrooms on my laptop. Then, I grouped responses from each interview question from the teachers into a Word Document. For example, the responses from the three teachers to the question “What do you understand about play-based learning?” were grouped together. In the margin of my Word Document, I wrote the teachers’ responses that answered my question.

The next step is exploring the data and developing codes, followed by theme development (Creswell, 2014), which was achieved for the transcribed interviews and fieldnotes. To generate codes, I used the universal design for learning principles, guidelines, and checkpoints (see Appendix A for Table A1). For instance, I highlighted responses such as “authentic”, “meaningful”, “know the children better”, “get to know their personalities”, “socialization”, Codes that overlapped, such as “authentic” and “meaningful” became “academic benefits”, which was a sub-theme, while “Benefits of play-based learning” was the main theme.

Looking more thoroughly and deeply into the data, I went through the grouped questions and began to code based on the universal design for learning principles. That is, I looked for responses that corresponded with universal design for learning principles and highlighted those sentences and used the comment feature on the Microsoft Word program to identify and explain which principle(s) the sentences represented. These responses were organised into a table for this study (See Figure 3 for a sample of the table). For example, part of Miss Sharon’s response to the question, “What do you understand by play-based learning?” was “When they’re

interested in it, they learn it better, and they retain it better", was coded as engagement. This response reflects providing options for recruiting interest, which include optimizing individual choice and autonomy, relevance, value, and authenticity. For paper one, relevant examples of these principles have been selected to understand three themes in the findings section, which reflect the literature review headings to provide an understanding of the three teachers' perceptions of and experiences with play-based learning. The themes that were developed for paper one to aid in my understanding of the three teachers' perspectives are: conceptualizing play-based learning, academic and socio-emotional benefits, and challenges of play-based learning. For example, the theme, conceptualizing play-based learning, contains both teachers' understanding of play-based learning and their roles in play-based learning. To further strengthen the analyses, I reviewed my fieldnotes to consider if there were examples of collaborating or contradicting the responses of the teachers.

Provide multiple means of Engagement	Provide multiple means of Representation	Provide multiple means of Action & Expression
<p>Provide options for Recruiting Interest (guideline7)</p> <p>Oh, of course. I don't think you can separate the two at all. I mean they learn from <u>each other</u>, they learn from situations, they learn from what they see, they role-play, oh my goodness, every outcome could be covered if they're given the right opportunities to play.</p> <p>it might not be exactly what we wanted to teach them, but they are learning something or learning social skills or their learning even curriculum materials or about being inquisitive or inquiring about things.</p> <p>I feel like it sorts of does it itself. It's so natural, they are natural players, they're so curious, they're so, you know, inquisitive. Yeah, it really takes on a life of its own. I don't sit there and check off, you know, what they've done because it's really intuitive.</p> <p>: I think that in September we do more loose play. it's about socializing the kids, getting them used to the rules and routines, the structure of Kindergarten but as the year progresses, we're adding more and more, what I would call, the kids think it's play but we're adding more</p>	<p>Provide options for Perception (guideline1)</p> <p>Oh, of course. I don't think you can separate the two at all. I mean they learn from <u>each other</u>, they learn from situations, they learn from what they see, they role-play, oh my goodness, every outcome could be covered if they're given the right opportunities to play.</p> <p>: I think that in September we do more loose play. it's about socializing the kids, getting them used to the rules and routines, the structure of Kindergarten but as the year progresses, we're adding more and more, what I would call, the kids think it's play but we're adding more structured play or the teacher's kind of set up, what we want the kids to learn. Yes, so as you go through the year, you're adding more things, more play-based centres that revolve around things you need to teach. But we also have time for free play and exploration.</p> <p><u>So</u> I'm chasing him around with foam letters, wooden letters and with curved and straight edges trying to get him, what's the letter in your name, your special letter? He will go L. I will be like ok let's build L or I have these little letter buckets, can you go get me the S bucket, just so I can get some letter identification from him.</p>	<p>Provide options for Physical Action (guideline4)</p> <p>and then like letter recognition and stuff like that like we go outside, and they'll make letters out of sticks. They will spell their names out of sticks. They'll use rocks and they'll spell some of our sight words. When they are in area play and like I have all the little writing pads all over the place, they'll just sometimes like take a sticky and they'll go around and like label stuff. This is huge with that learning and it's without me necessarily prompting them.</p> <p>There needs to be lots of different types of things for them to play with, lots of loose parts, lots of dramatic play things, maybe boxes, maybe things that they can use their imagination for and you'll get to know what they are into and that changes too. Like the beginning of the year they're into something and by the end of the year, they don't want to play with Peppa Pig for example right. But Legos are sort of constant and blocks are sort of constant and the puppets and the kitchen area is not as popular anymore, but I think it sort of exhausted itself. So, at the beginning of the year that was the place to go right. <u>So</u> you know, I guess that's it for that one.</p>

Figure 3: Coding teachers' responses by universal design for learning checkpoints

The photographs were analysed at face value. The photographs were used to demonstrate certain events that may provide more insight into the teachers' responses. For instance, as I analysed the teachers' responses to their understanding of play-based learning, I assigned codes, such as "still understanding", "letting go", "setting up opportunities", "unstructured", "not directed" under the comment section. Then, I grouped "unstructured" and "not directed" under the code of "free play" with little or no interference. The codes reflected the teachers' understanding of play-based learning as I had observed and revisited in the photographs. The photographs were used to provide examples of when the children were engaged in free play or when the teachers intentionally planned playful opportunities to meet curriculum outcomes, which were in my fieldnotes.

Data Analysis for Paper Two.

For this paper, I analysed each case separately. For the fieldnotes, I had four original or predetermined themes, which had subthemes. The predetermined themes were students are provided with extended periods of play, literacy and numeracy are integrated into every area of learning and the environment, teachers stimulate children's activity and talk through sustained shared thinking, and there is a mix of teacher-initiated and child-initiated activities throughout the week. Subthemes for teachers stimulate children's activity and talk through sustained shared thinking included: "building trust, confidence, and independence"; "social and emotional well-being"; "supporting and extending language and communication"; "supporting learning and critical thinking"; Then I discovered an unexpected theme, which was: *there is a mix of large group, small group as well as individual learning and child-initiated activities*, which was one of the practices included in the document, but I had not intentionally observed in the classroom.

To analyse each theme, I read and re-read the field notes. I made notes in the comment session that highlighted what events of the day fell under a universal design for learning principle. For example, if I observed the teacher explaining a concept by reading a book *Ten Black Dots*, I would write "numeracy and literacy integrated into learning" and "principle of representation, checkpoint 2 and 3". I also highlighted portions that illustrated the practices I observed, such as "integration of literacy and numeracy". Some portions overlapped. For instance, under extended periods of play, I may also have child-initiated activities or individual learning, which meant I had interconnected universal design for learning principles as well. I created a table where I placed different practices under engagement, representation, and action and expression (see Figure 4 for a sample of the table). Then, I typed each theme as a heading. Following this, I grouped examples from my fieldnotes from the three

classrooms that illustrated that theme. For instance, I had the theme “sustained shared thinking”. I brought together examples of when the teacher and children were engaged in conversations from the three classrooms. My initial plan was to provide examples of conversations. However, I read through, I generated codes, and would write, “child-child”, “teacher-child”. By generating these codes, I was able to generate sub-themes, such as social and emotional well-being, supporting and extending language and communication, supporting learning and critical thinking, and building trust, confidence, and independence. To further facilitate the analysis, I consulted the reviewed literature to determine whether my findings were corroborated.

Physical action (Vary the methods for response and navigation; and Optimize access to tools and assistive technologies)		
Interact with accessible materials and tools.	Miss Suzan had the manipulative Centre because she noticed that some of children had poor motor skills.	Miss Suzan and Miss Sharon had the chrome Centres to allow children select apps that taught concepts such as numbers, colours, alphabets, and patterns.
Guideline 5 Expression & Communication (Use multiple media for communication; and Use multiple tools for construction and composition; and Build fluencies with graduated levels of support for practice and performance)		
There is no medium of expression that is equally suited for all learners or for all kinds of communication. On the contrary, there are media, which seem poorly suited for some kinds of expression, and for some kinds of learning. While a learner with dyslexia may excel at <u>story-telling</u> in conversation, he may falter when telling that same story in writing. It is important to provide alternative modalities for expression, both to the level the playing field among learners and to allow the learner to appropriately (or easily) express knowledge, ideas and concepts in the learning environment.	Miss Suzan read the Black Dot book to the classroom before asking them to use black dots to create artefacts in a centre using loose parts, while Miss Scarlet read the book to the whole class and asked the children to work on individual projects that involved drawing.	A child using connectors to make 3-D objects and Miss Suzan using that to enhance understanding of 3D object. Using dominoes to learn numbers and addition. Miss Sharon using Comic strips to allow children tell their own stories.

Figure 4: *Snapshot of my fieldnotes organized by universal design for learning checkpoints*

The interview transcripts were analysed by transcribing what the teachers and the children said. Their responses were then used to understand the analysed fieldnotes from the observations. For example, the children's response as to why they liked or disliked a certain activity or place was used to understand how they viewed whole group activities, and this was reviewed under a lens of universal design for learning.

The photographs were analysed following the recommendations provided by researchers Cohen et al. (2017) on analysing visual data. These are content analysis and interpreting the image (Cohen et al., 2017). "Content analysis", according to Cohen et al. (2017), is "more concerned with the contents of the image" (p. 704). I first analysed the photographs through content analysis. That is, analysing the photographs at face value. Then, I used the 'interpreting the image' method to

analyse the photographs, which involves accompanying “the image with text. Text and photograph run together.” (p. 712). Also, Doucet (2018) explains the role of “concept narratives” when analysing images as a researcher. That is, the researcher relies on an understanding of concepts to interpret the image. The photographs were used to demonstrate certain events that may provide more insight into the practices that I observed. That is, they provided examples of the themes generated in this paper. For example, I used the photographs with the display of words to describe how Miss Scarlet provided options for the display of information and language, which demonstrates the principle of representation. She used colours to differentiate between the words that she wanted them to know and the words the children were required to learn in kindergarten. This illustrates how literacy is integrated into the classroom environment.

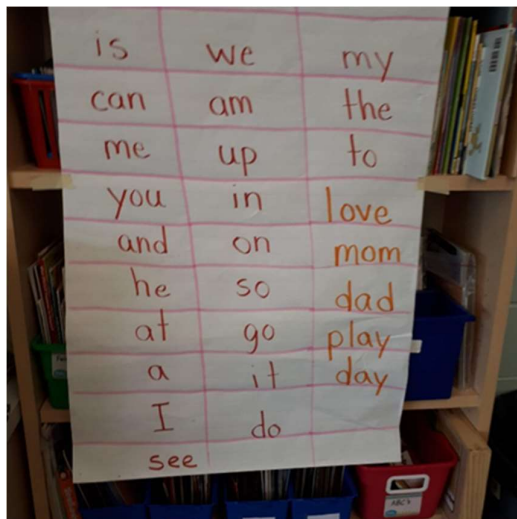


Figure 5: *Miss Scarlet's Words Display*

Data Analysis for Paper Three.

The analysis process for the third paper is similar to the analysis for the previous two papers. I followed Creswell's (2014) recommendations for analysing qualitative data, which includes: organizing and transcribing the data, analysing the data by hand or on the computer, and deeply reading the data in order to develop codes and themes. The semi-structured interviews of the fifteen kindergarten children were transcribed on my computer. I grouped the children's responses by questions. For example, the responses to the question "What do you like about kindergarten?" were grouped together in a Word Document. That way, I could observe similarities and differences in their responses. Next, I read through each response to identify what universal design for learning principle(s) corresponded with that response (see Figure 6). For example, "we get to learn and play" was coded as engagement and representation, because the teacher sets up centres to teach curriculum content and also, provides time for free play. This was followed by grouping themes that I believed were similar under a heading. Direct quotes from the children were used as the headings for the themes. For example, under the theme "To have fun and learn", I shared the children's description of play, whether they liked to play, and what they played in kindergarten, grouped together. A few examples were selected and discussed using a universal design for learning lens.

Me: do you know what play is? Can you give me an example?	
Ch: She is playing at the park.	
U: play? toys. Play with my friends in the classroom. I play with my friend's boat and octopus over the boat.	chinwe ogolo engagement
Ca: blocks.	chinwe ogolo Engagement
Cr: yes, I usually play with blocks and Lego and I make inventions with my Lego at home. Sometimes I give them names and they can talk. I gave my inventions a name called Lego builders.	chinwe ogolo Engagement and action and
Ab: no	
St: you play and you like build stuff and you can run around and stuff.	chinwe ogolo Action and expression
Car: to have fun and learn. I play after lunch. In the block area, iPad.	chinwe ogolo Engagement, representation
Cal:	chinwe ogolo Engagement
Sa: Yes. It's something.	
Z: play is like playing with toys and stuff.	chinwe ogolo engagement
Am: when you are playing with somebody.	chinwe ogolo engagement
W: when you ask someone if they want to play at the park. Playing at the park.	chinwe ogolo Engagement
P: play with stuff.	chinwe ogolo Engagement
L: play is when you use something that you want to use.	chinwe ogolo Engagement
Au: yes. You play nicely with your friends.	chinwe ogolo Engagement

Figure 6: *Coding of the Children's Transcript*

The fieldnotes were analysed by reviewing what examples support the universal design for learning principles reflected in the answers the children provided in their interviews and drawings. For example, demonstrations of children playing by themselves, with materials, and others were used to understand certain statements the children made. Content analysis was used to analyse the drawings (Cohen et al., 2017) as the drawings were analysed at face value. This is because I believe that the children can communicate their ideas through their drawings (Baroutsis et al., 2017). As such, the drawings were analysed through the responses the children provided concerning why they drew certain activities or places. The drawings were used to gain further insight into the responses the children provided during their interview session. This way, the analyses reflected both the ideas of the fifteen children and their kindergarten peers.

Initially, the drawings were organized by class and activity. For instance, the drawings of the children in Miss Scarlet's class were grouped separately from the drawings of the children in Miss Sharon's and Miss Suzan's classes. The drawings

for each classroom were then grouped under each activity. The drawings concerning their favourite activities were grouped together and listed. That way, I had a sense of the most recurring activities. For instance, playing with blocks was a popular activity the children enjoyed. Then the favourite activities of the classroom were grouped together, to help me understand whether these were child-initiated activities, or teacher-directed activities. Furthermore, the drawings were also used to illustrate certain aspects of a theme. For example, in applying the universal design for learning framework, barriers that may affect learning need to be considered. Lastly, the drawings were used to highlight certain limitations as the children drew their least favourite activities and places. Content analysis was also used to analyse the photographs (Cohen et al., 2017; Holms, 2014). The photographs taken of their daily activities were meant to provide evidence of the themes being discussed.

In sum, in order to make sense of the data during analysis, for the three papers, I used “data triangulation”. Leavy (2017) describes data triangulation as explicitly using “literature and/or theory to coax meaning out of your data and to put it in a framework for understanding.” (p. 153). I used literature and the universal design for learning framework to interpret the data from the fieldnotes, direct observations, transcripts of semi-structured interviews, images from drawings and photographs. By using data triangulation, I ensured the trustworthiness, of the findings, in this study.

Trustworthiness and Reliability

Suter (2015) notes that “the validity of qualitative research is often referred to as trustworthiness or credibility” (p. 346). In other words, can the findings of the study be trusted? The trustworthiness for this study was ensured by using multiple methods to collect data (Leavy, 2017; Yin, 2009), such as direct observations, semi-structured interviews, drawings, and photographs. This triangulation of using different data collection methods (Leavy, 2017) allowed me to look at the play-based learning

phenomenon from varying angles. The direct observations allowed me to observe play-based learning in real time within the three kindergarten classrooms. The semi-structured interviews provided opportunities to understand the three kindergarten teachers' and children's perspectives on play-based learning. The drawings were a source of rich data as the children were able to communicate their opinions on their activities and classroom environments. The photographs provided an additional source of data to understand play-based learning within the three kindergarten classrooms. Triangulation was also achieved in this study through the collection of different data sources (Leavy, 2017) in order to gain in-depth understanding of play-based learning in three kindergarten classrooms in St. John's. Three kindergarten teachers and forty-one kindergarten children contributed to the data for this study.

Additionally, I used member checking, which involves asking participants, in this case, three kindergarten teachers and children, to verify transcripts (Leavy, 2017; McMillan & Wergin, 2002). For instance, after I had transcribed the three kindergarten teachers' interviews, I highlighted portions in the Word Document that needed to be clarified. I sent each teacher their transcribed manuscripts to verify that the information included in the interviews were accurate and to clarify those highlighted portions for me. This way, the teachers agreed that I was representing their viewpoints properly. After I had transcribed some of the interviews from the children, I realized that because of the noise level during one of the interviews, I could not make out what one child had said. The next day, I asked him if I could ask him that question again. He gave me his assent and I was able to get his response. Also, after the data collection process, as I was analysing the data, I contacted two of the kindergarten teachers to provide their understanding of what the children meant when they expressed that they did not like it when other children hit them or their friends. The teachers were able to provide an explanation of what the children meant that helped me understand the socio-emotional development of the children better.

This study accounted for reliability in the research process by leaving an audit trail of the research process (Yin, 2009). Reliability, in this study, was achieved through a detailed accounting of the research process, which include:

- Extensive review of available literature (Creswell, 2014; Leavy, 2017) on different aspects of play-based learning in several contexts.
- Receiving ethical approvals from my institution (Creswell, 2014) and the Newfoundland and Labrador English School District.
- Recruiting participants (Cohen et al., 2017; Creswell, 2014) through sending emails to several principals.
- Describing the multi-case studies design (Creswell, 2014; Merriam, 2009; Yin, 2009) used to explore the play-based learning phenomenon in three kindergarten classrooms.
- Explaining the different data collection methods (Creswell, 2014; Merriam, 2009; Yin, 2009), such as semi-structured interviews, direct observations, photographs, and drawings.
- Providing a detailed review of the universal design for learning framework (CAST, 2018) used to analyse the data.
- Explaining how Creswell's (2014) recommendations for analysing qualitative data were used to analyse the data collected for this study.

I have provided this audit trail to ensure that researchers who choose to replicate the study may obtain similar results (Yin, 2009). Nevertheless, this study is contextual (Cohen et al., 2017; McMillan & Wergin, 2002). That is, it was conducted in three English kindergarten classrooms in St. John's. Therefore, there is no guarantee that replicating this study will achieve similar results or findings.

In this chapter, I discussed how this study is set within a qualitative, interpretative paradigm and that the research site is in an elementary school in St.

John's. The participants included three teachers and the children in their classrooms. This study used a multi-case studies design, which allowed me to explore play-based learning in three kindergarten classrooms in order to provide in-depth understanding of teachers' perspectives of play-based learning, how play-based learning is implemented in the three classrooms, and the children's experiences with play and learning. To achieve this, I explained how I used semi-structured interviews, direct observations, photographs, and drawings to collect data. Also, this chapter discussed how data was analysed from three classrooms to inform the manuscripts that explain the findings of this study.

The next three chapters explain how each research question was conceptualized, and the findings are discussed. For example, the first manuscript focuses on the kindergarten teachers' understanding of play-based learning. The second manuscript focuses on my observations, drawing from the teachers' and children's voices. The last manuscript emphasizes the children's experiences with play-based learning in a full-day kindergarten. Although the three manuscripts stand alone, they are, however, interconnected because this was a multi-case studies design research and the data from the three manuscripts are analysed through a universal design for learning lens.

Chapter Three

Capturing Three Kindergarten Teachers' Perceptions of and Experiences with Play-Based Learning

Abstract

Full-day kindergarten teachers in Newfoundland and Labrador, Canada, are expected to deliver curriculum content through play-based learning pedagogy. The aim of this study was to explore kindergarten teachers' perceptions of, and experiences with, employing a play-based learning pedagogy through observations in their classrooms over one month. The researcher conducted semi-structured interviews, direct observations, and used photographs as the primary data collection methods to investigate three kindergarten teachers' perceptions of play-based learning. The teachers' perceptions demonstrated a complex understanding of the relationship between play and learning, and that play-based learning benefits children academically and developmentally when analysed through a lens of universal design for learning. However, one key finding worth considering is the impact of particular challenges to the teachers' delivery of programming such as insufficient materials, classroom resources, and inadequate teacher education/development. The findings suggest that teachers may benefit from ongoing professional development on play-based learning.

Keywords: Play-based learning, full-day kindergarten, kindergarten teachers, universal design for learning

Introduction

Play-based learning is, “essentially, to learn while at play” (Danniels & Pyle, 2018, p.1). In Canada, the role of play in kindergarten differs from province to province as education is a provincial responsibility. This is due to the importance the government places on play in the curriculum document. Peterson et al. (2016) observe that teachers' values, experiences, backgrounds, and perspectives influence how they implement play-based learning. This conclusion was as a result of the examination of five Canadian provinces (British Columbia, Alberta, Saskatchewan, Manitoba, and Ontario). For instance, in the kindergarten curricula of Saskatchewan and Ontario, play was specifically required as an instrument for teaching and learning while this was only implied in the curriculum support and resource documents of Alberta, British Columbia, and Manitoba.

In 2016, the government of Newfoundland and Labrador transitioned from half-day kindergarten to full-day kindergarten. The kindergarten curriculum in Newfoundland and Labrador requires kindergarten teachers to deliver the curriculum through play and the curriculum documents provide guidance on how play can be beneficial to young children's learning and development in the classroom (Newfoundland. Department of Education, 2010; Newfoundland & Labrador. Department of Education & Early Childhood Development, 2016; Newfoundland & Labrador. Department of Education & Early Childhood Development, 2019). One recommendation from the government is that the early years programme should include universal design for learning (Newfoundland & Labrador. Department of Education, 2018). Universal design for learning is an educational framework that encourages practitioners to consider the needs of diverse learners (CAST, 2018). Despite this perceived value of play-based learning, there is still limited research on

how play-based learning is implemented in full-day kindergarten in the Newfoundland and Labrador context.

Fesseha and Pyle (2016) identified the lack of concrete definition offered by Ontario's Ministry of Education as one of the major issues reported by most of the kindergarten teachers in Ontario as the reason, they did not implement play-based learning in their classrooms. Fesseha and Pyle (2016)'s study was beneficial in understanding the present climate of play-based learning within the Ontario context, they, however, recommend that further research should be conducted to explore how policy and curriculum influence teachers' perspectives on play-based learning. Therefore, this study aims to explore Newfoundland and Labrador kindergarten teachers' perspectives on and experiences with play-based learning through a universal design for learning framework. This study will explore whether Newfoundland and Labrador kindergarten teachers face the same challenges, in addition to providing other useful insight into the existing climate of play-based learning in Newfoundland and Labrador.

The research question which guided this study is:

What are the perceptions and experiences of some kindergarten teachers in St. John's regarding play-based learning?

I begin by discussing universal design for learning and relevant literature to situate this study within current discussions concerning the conceptualization of play-based learning and the challenges associated with its implementation. Next, I discuss the methodology, which is intended to provide insight into how three kindergarten teachers in Newfoundland and Labrador perceive and experience play-based learning, using methods such as semi-structured interviews, direct observations, and photographs. This will be followed by the findings and discussions, which are centred

around the literature review and the analysis of the data collected from the interviews, observations, and photographs. Then, I conclude by providing recommendations as to how to further facilitate the implementation of play-based learning, through the framework of universal design for learning.

Theoretical Framework: Universal Design for Learning

Universal design for learning is an approach to teaching and learning that can be adapted in the everyday practical aspects of the classroom environment as it facilitates how curriculum goals can be achieved (CAST, 2018; Rose & Meyer, 2002). Curriculum goals can be achieved through universal design for learning by employing three principles, which are engagement, representation, and action and expression (see Appendix A), while anticipating barriers, and designing the learning environment to minimize these barriers. The universal design for learning approach encourages teachers to provide multiple means of engagement, which include providing options for self-regulation, sustaining effort and persistence, and recruiting interest (CAST, 2018; Rose & Meyer, 2002). Regarding the principle of representation, teachers are encouraged to provide options for comprehension: language, mathematical expressions, and symbols, and perception (CAST, 2018; Rose & Meyer, 2002). Teachers are encouraged to provide multiple means of action and expression by providing options for executive functions, expression and communication, as well as physical action. The objective of a universal design for learning approach is to produce expert learners (CAST, 2018). Universal design for learning provides a useful research lens as I consider teachers' perspectives on play-based learning. That is, it provides a framework on which kindergarten teachers' perceptions of play-based learning can be examined and understood in a more practical way, which is not limited to the conceptualization of play-based learning, but also to the benefits and challenges of the implementation of play-based learning (see Table 3 for

practical examples). In addition, few studies connect universal design for learning and early childhood education, especially regarding play-based learning. The universal design for learning checkpoints provided a framework for reflecting on kindergarten teachers' practices, which provides a view to what works in play-based learning and the limitations. Thus, universal design for learning provides the basis of a framework where kindergarten teachers can reflect on their practices. Therefore, this study contributes to current literature by considering how universal design for learning can be used as a framework and lens to examine the implementation of play-based learning in the Newfoundland and Labrador context.

Table 3: *Practical Examples of the Three Principles in a Kindergarten Classroom*

Engagement	Representation	Action & Expression
Providing opportunities for children's interests to be pursued, e.g. sea creatures	Displaying information through visual and auditory means. For example, showing alphabets with images that begin with those letters	Allowing children to demonstrate their learning during play.
Providing play opportunities through free play		Providing iPads for the children to access apps that promote literacy and numeracy skills.
Ensuring the environment is safe	Organizing centres that address learning numeracy and literacy skills	Demonstrating reading and counting strategies regularly
Varied materials and resources are available, such as blocks, toys, writing sheets	Playing games with the children to teach them social skills and numeracy skills.	Providing opportunities to monitor children's progress
Creating areas where children can calm their bodies and emotions	Asking the children whether they have experienced an event to make connections	

Adapted from CAST (2018). *Universal design for learning guidelines version 2.2 [graphic organizer]*. Wakefield, MA: Author.

The Challenge of Conceptualizing Play

A challenge in the implementation of play-based learning is the lack of consensus on its definition. According to Fesseha and Pyle (2016), a key issue in implementing play-based learning in Ontario kindergartens is the lack of consensus on the concrete definition of play-based learning in their school curriculum documents. This lack of consensus can be traced back to the difficulty associated with defining play (Fesseha & Pyle, 2016). For Moyles (1989; 2012), and Roskos and Christie (2013), the difficulty of defining play is due its complex nature, which is demonstrated in its different forms and qualities. These different forms and qualities of play make it especially difficult for practitioners to understand and analyse the benefits of play (Moyles, 1989; 2012; Pyle & Bigelow, 2015). Universal design for learning, as discussed above, can provide practical guidelines to examine, understand, and define the implementation of play-based learning in a kindergarten context.

There are several definitions of play, one of which was conceptualized by Froebel, who was the father of the kindergarten movement. Historically, Froebel (1896) defined play as “the highest point of human development in the child-stage. For it is the free expression of the child’s inner being” (Froebel, 1896, p. 30). For him, play “possesses high seriousness and deeper meaning” (Froebel, 1896, p. 31). As defined by Froebel, play should be used in children’s learning to make learning authentic. Recently, Peterson et al. (2017) offer another lens to consider play as they studied parents and grandparents of some kindergarteners in northern rural communities in one Canadian province. Peterson et al. (2017) assert that play is “a culturally constructed concept” (p. 2). For them, play should be understood through specific contexts, such as historical, sociocultural, and geographical contexts. For example, Brillante and Nemeth (2018) explain that Asian families view play and

academics as separate domains and that they place greater value on academics. Whereas, for most families in Europe, play and academic learning are equally important (Brillante & Nemeth, 2018). This suggests that, in some schools, play may be more valued in some cultures or societies than others, especially, as some cultures consider play, a non-academic activity. Considering a PAN Canadian perspective, the Council of Ministers of Education in Canada [CMEC] (2012) state that “play allows them [children] to actively construct, challenge, and expand their own understandings through making connections to prior experiences, thereby opening the door to new learning.” (para. 5). In Canada, play is considered as essential to children’s holistic success.

The Newfoundland and Labrador, Department of Education and Early Childhood Development (2016) defines play as “a vehicle through which learning occurs. It is an intrinsically motivated, voluntary activity that allows the child the opportunity to construct their own knowledge. When children are playing, they are truly engaged in their activity” (p. 10). The main idea behind what is considered as play by the Newfoundland and Labrador government echoes Froebel's notions of the value of play. Froebel argues that play provides avenues for children to express what they know, which in turn helps with their development. Consequently, play can be used in the classroom to facilitate children's learning (Froebel, 1896; Hoskins & Smedley, 2019; Manning, 2005). However, universal design for learning presents various means by which these play experiences can be facilitated by kindergarten teachers to produce expert learners by providing options of engagement, representation, and action and expression. Consequently, play in school will no longer be considered abstract but concrete and relatable.

Conceptualizing Play-Based Learning

According to Danniels and Pyle (2018), “play-based learning is, essentially, to learn while at play” (p.1). This definition aligns with the definition of play-based learning provided in the Newfoundland and Labrador curriculum. According to Newfoundland and Labrador Department of Education and Early Childhood Development (2016), “Play-based learning refers to early childhood learning opportunities that are rich in child-initiated play, especially when it involves the presence of a caring, engaged, and responsive adult” (p. 36). Play-based learning acknowledges that children are active participants in their learning. Therefore, in a Newfoundland and Labrador kindergarten classroom, teachers are required to provide ample opportunities and time for children to engage in child-initiated play. The universal design for learning framework offers ways for teachers to provide these opportunities while minimizing barriers.

As Peterson et al. (2017) observed, kindergarten teachers may implement play-based learning differently. Thus, an understanding of the various approaches to play-based learning is necessary. In this paper, three approaches to play-based learning will be considered (Miller & Almon, 2009; Moyles, 2010; Pyle & Bigelow, 2015). These approaches demonstrate several ways of implementing play-based learning. For instance, Miller and Almon (2009) developed a continuum model, Moyles (2010) recommends a playful pedagogy model, while Pyle and Bigelow (2016) recommend a profile model, which was developed from a qualitative study conducted in three Ontario kindergarten classrooms.

Miller and Almon (2009), in their report for the United States’ Alliance for Childhood, recommend that a healthy kindergarten classroom should neither encourage child-initiated play all the time without adult guidance nor teacher directed instructions, without any play. Rather, a healthy kindergarten classroom, should find a

balance between both. That is, children should explore their environments with the active guidance of their teachers, and furthermore teachers should find fun ways that help children learn curriculum content, which will be meaningful and authentic. Nevertheless, Miller and Almon (2009) explain that most teachers perceive that there is a dichotomy between play and learning, and as such, they struggle to integrate both in the classroom.

Moyles' (2010) playful pedagogy consists of pure play, playful learning, and playful teaching. Pure play involves child-initiated play, where the child begins the play and sustains it. Playful learning, on the other hand, can be started by either the child or the teacher, but must engage the child. This should reflect the child's natural disposition to play. Playful teaching involves instructing children in ways that the children find enjoyable. For Moyles (2010), a playful pedagogy can be used to meet curriculum objectives.

One of the challenges identified by some Ontario Kindergarten teachers in Lynch's (2014) netnographic study, in achieving curriculum goals through play, is that the play-based curriculum was viewed as a threat to children's academic achievement. Even the teachers that supported play in their classrooms were uncomfortable with describing their work as play. These teachers preferred to view their work as "structured play". The way the teachers felt in Lynch's (2014) research is reflected in Bulunuz's (2013) observation that there are few experimental and theoretical studies highlighting how to guide learning through play. Therefore, implementing play-based learning in the classroom can be difficult for some teachers.

Pyle and Bigelow's (2015) qualitative study found that teachers in three kindergarten classrooms in Ontario implemented play-based learning differently. From their findings they developed three profiles of how teachers implemented play-based learning, based on the teachers' perceived roles in integrating play in their

respective classrooms. The three profiles are, "play as peripheral to learning", "play as a vehicle for social and emotional development", and "play as a vehicle for academic learning" (Pyle & Bigelow, 2015, p. 388). These profiles were based on the teachers' understanding of the purpose of play, and their role when children play.

Academic and Developmental Benefits

An additional challenge associated with play-based learning is the differing recommendations of how play should be implemented in kindergarten. These differences are based on what researchers consider beneficial to the child. Play is argued to have academic benefits by deepening children's understanding of curriculum content (Bulunuz, 2013; Hoskins & Smedley, 2019; Pellegrini and Bohn-Gettler, 2013; Platas, 2017; Wajskop & Peterson, 2015; Wohlwend & Peppler, 2015). This argument was corroborated by a quasi-experimental study conducted by Bulunuz (2013). The study found that kindergarteners demonstrated a deeper understanding of scientific concepts, such as, colours, float/sink, when compared to those who were taught the same concepts through direct instructions.

Play helps in the socio-emotional development of children (Alliance for Childhood, 2018; Hoskins & Smedley, 2019; Lillard, 2017; Miller & Almon, 2009; Moyles, 2012; Platas, 2017; Powell et al., 2006). Powell et al. (2006) suggest that play can be employed as a tool for intervention to help toddlers and pre-schoolers manage challenging behaviours, such as, physical and verbal aggression, severe tantrums, and noncompliance. Forms of play, such as, role, cooperative, and dramatic plays can be used to facilitate young children's learning of social skills, which includes conflict resolution and developing friendship.

Researchers who focus on the developmental benefits of play emphasize the importance of free play (child-initiated or pure play), whereas teacher-directed play

(structured play) is emphasised by researchers who focus on the academic benefits of play (Danniels & Pyle, 2018). According to Danniels and Pyle (2018), these perceived benefits of play have affected how teachers implement play-based learning in their classrooms. The teacher plans activities, to engage children in learning particular concepts, in teacher-directed play (Education and Early Childhood Development, 2016; Moyles, 1989), whereas, in child-initiated play, children have autonomy over their play, especially, pretend play (Education and Early Childhood Development, 2016; Moyles, 1989, 2010).

Conversely, Lillard et al. (2013), and Lillard (2017), suggest there is inadequate evidence to establish a direct relationship between pretend play and children's development. They argue that most studies reporting the benefits of pretend play use weak methods or non-rigorous approaches. Nonetheless, Lillard (2017) suggests it is possible that self-regulation and understanding of social signals can be developed through pretend play. The universal design for learning guidelines are developed to meet both the socio-emotional and academic needs of students (CAST, 2018), and these guidelines can be applied to how teachers can use play to meet these needs, while possibly providing a means by which the benefits of play may be studied and understood.

Challenges of Play-Based Learning

Several challenges have been discussed in previous sections of this paper such as the lack of a concrete definition of play-based learning in Ontario's kindergarten document (Fesseha & Pyle, 2016), differing definitions concerning play (Fesseha & Pyle, 2016; Moyles 1989, 2012; Roskos & Christie, 2013), and child-initiated play versus teacher-directed play (Danniels & Pyle, 2018). Other challenges have been identified in several studies, which should be considered in regards to the difficulty surrounding implementing play-based learning, as some kindergarten

teachers perceive play and academic learning as two separate domains (Bulunuz, 2013; Lynch, 2014; 2015; Pyle & Bigelow, 2015; Scharer, 2017). For instance, some Ontario kindergarten teachers in Lynch's (2014) study viewed the play-based curriculum as a risk to the children's academic achievements.

Insufficient time was identified as one of the challenges associated with implementing play-based learning. This is because teachers expressed the difficulty of balancing academic and administrative commitments with thoughtfully organising playful activities (Fesseha & Pyle, 2016; Hoskins & Smedley, 2019). Hoskins and Smedley (2019), in a study involving practitioners from England, found that almost all the practitioners had difficulty providing opportunities for free flow play, because they had to focus more on school readiness, in line with the directive from the government. In addition, Fesseha and Pyle (2016), noted that some Ontario kindergarten teachers found it challenging to purposefully organise opportunities for playful learning to help children meet particular outcomes.

Support received from principals, administration, and colleagues is highlighted as a challenge kindergarten teachers have regarding implementing play-based learning (Fesseha & Pyle, 2016; Lynch, 2014). For instance, Fesseha and Pyle (2016), reported that some of the participants in their study expressed that their administration and colleagues do not view play as a means of achieving curriculum outcomes. Lynch (2015) noted that some American kindergarten teachers believed that they were inadequately educated to implement play-based learning. Class size, materials, and space (Fesseha & Pyle, 2016), and teamwork between kindergarten teachers and early childhood educators (Lynch, 2014) are considered as other challenges associated with implementing play-based learning. In Canada, teachers and early childhood educators are educated differently (Lynch, 2014). Teachers are educated on the broader classroom pedagogies rather than focusing on the

theoretical and practical aspects of early childhood development. In contrast, early childhood educators are educated with an emphasis on theoretical and practical areas of early childhood development, which include play (Lynch, 2014). In a universal design for learning approach, barriers or challenges, such as those previously mentioned, should be anticipated or minimized to produce expert learners (CAST, 2018).

Methodology

Research Design

This study was situated within a qualitative interpretative paradigm to provide insight into the participants' perceptions of play-based learning and perceptions of their experiences with play-based learning. It was important to understand the participants' conceptualization of play-based learning; the benefits they perceived play-based learning provided; and the challenges they faced as they implemented play-based learning. The qualitative lens allows for multiple realities, which are equally valid (Mertens, 2010). That is, different perspectives are valuable because reality is subjective and dependent on context (Cohen et al., 2017; McMillan & Wergin, 2002). Consequently, participants' perceptions of and experiences with play-based learning could be understood through their voices, the reviewed literature above, and the universal design for learning framework. The research design was a multi-case studies design as it provides in-depth insight into a phenomenon using more than one site (Creswell, 2014; Merriam, 1998; Merriam, 2009; Yin, 2009); multi-case studies design was used to gather data about play-based learning from three classrooms.

Participants

Purposeful sampling was used to recruit the three teachers who worked in the same elementary school as English kindergarten teachers in St. John's, Newfoundland and Labrador. The school offered both English and French immersion programs. The principal and the teachers in this school were interested in participating in this study because they believed that play-based learning was an appropriate pedagogy in the teaching and learning of kindergarten children. The teachers in this study felt it was a timely study, as no study had been conducted concerning play-based learning in a Newfoundland and Labrador context since its implementation in 2016. Various data collection methods such as semi-structured interviews, direct observation, and photographs were used to ensure triangulation (Creswell, 2014; Merriam, 2009). Data were collected at the end of the academic school year (May to June) because I believed that at the end of the school year, the teachers would have had the time to reflect on their practices and process their experiences regarding play-based learning, this may not be the case at the beginning of the school year. The three teachers have forty-three years of teaching experience between them. However, regarding kindergarten teaching experience, Miss Scarlet has three years, Miss Sharon has four years, and Miss Suzan has two years of experience. All three teachers have a Master's degree.

Methods

Semi-Structured Interviews.

The interview method is an essential source of case study information because the researcher can focus on the case study topics (Merriam; 2009; Yin, 2009). The case study for this study surrounded the implementation of play-based learning by three kindergarten teachers in one school. One of the several advantages

of semi-structured interviews, as a data collection method, is that it allows researchers to focus discussions on the topics of interest to their study, while also empowering participants to respond in ways they deem fit (Bell, 2010; Cohen et al., 2017). Although, there were some specific questions, the semi-structured interview allowed me to probe or ask other questions to better understand what the teachers were saying (Bell, 2010; Cohen et al., 2017). Semi- structured interview method, also, has the advantage of allowing participants to give you their opinion about certain question without having to worry about time constraints, and thus make the participants feel that their opinions are valuable (Bell, 2010). The semi-structured interview helped me have a conversation rather than an interrogation with the teachers. In addition, the teachers could answer as much or as little as they wanted.

The three teachers were interviewed at the end of the school year to gain insight into their perceptions of and experiences with play-based learning. The durations of the interviews ranged from 15 to 40 minutes and focused on eleven questions. The first question collected brief demographic details. The remaining questions explored the teachers' definition of play-based learning, their perceptions of the merits and challenges of implementing play-based learning, and the understanding of their roles in the implementation of play-based learning. The interview also explored the teachers' opinions about and preference for teacher-directed and child-initiated play, and balancing teacher-directed activities with child-initiated activities in the classroom, the classroom environment, administrative support and the various factors that could facilitate or hinder the implementation of play-based learning in their classrooms. Some questions arose out of findings expressed in the literature. Danniels and Pyle (2018) believe that based on the perceived benefits, researchers and teachers may prefer child-initiated play or teacher-directed play. As such, I deemed it necessary to ask the teachers which of

these two they prefer. The teachers were asked to review their scripts before data analysis, and they clarified the areas I had highlighted. It is important to note that the teachers were not explicitly asked questions about universal design for learning, rather, it was used as a lens to examine the data.

Direct Observation.

Yin (2009) recommends that direct observations are a useful source of data as a case study should take place in the natural context. The three teachers' daily routines and practices were observed directly. The fieldnotes were recorded on my phone on an app called "Samsung Notes" as it was less cumbersome than a big notebook. In addition, I used my phone to record my voice notes during lunch break. Once I returned home from data collection, I would write a detailed narrative of the events that took place. The observations are used to inform and support the interview data.

Photographs.

According to Holms (2014), photographs provide the researcher with detailed information: the researcher decides on what to photograph, how to set it up, and process it. According to Cohen et al. (2017), photographs can be used to evoke meanings and reflections. This is exemplified in Doucet's (2018) study where she used "conceptual narratives" to understand Indigenous family photographs across three generations as well as her own family photographs. Doucet (2018) notes that "conceptual narratives" about photographs are influenced by the researcher's concepts and explanations. Additionally, photographs can be used to provide information and data that are factual. Photographs can be used to support other sources of data or they can stand alone (Cohen et al., 2017). Photographs are time and research efficient because they can communicate more in a single image than

many pages of texts (Cohen et al., 2017). In this study, photographs were used to capture the classroom environment and activities that occurred in the classrooms. The photographs were useful in helping me remember the events of the day when I returned home. The photographs helped me capture events that were related to the practices I was observing. The photographs were taken with my Samsung phone. I used the photographs to write my fieldnotes and to make sense of some the responses from the teachers' transcripts.

Analysis

Creswell (2014) recommends the following process when analysing qualitative data. I used this suggestion to analyse the data from the interviews and observations. Organizing and transcribing the data is the first step. The interviews were transcribed and the fieldnotes from the observations were organized. The second step involves analysing the data by hand or computer. Individual transcripts from the three teachers and fieldnotes from the three classrooms were read and reread on my laptop. Next, I sorted the data by questions, as I grouped responses from each interview questions from the teachers. For example, the responses to the question "What does play-based learning mean to you?" were grouped together. In the margin of my Word Document, I wrote keywords and phrases identifying what the teachers were saying to answer my questions.

The third step involves exploring the data and developing codes, followed by theme development (Creswell, 2014), which was done for the transcribed interviews and fieldnotes. To generate codes for the challenges, I read through their responses. I highlighted responses such as "noise level", "messiness", "know their limits", "lots of different types of things for them to play with", "socialization", "we use a lot of different pieces all the time to put together to make things fun, so funding the resources", "letting go of what things should look like", and "not enough resources". Codes that

overlapped, such as “different types of things”, “different pieces”, and “not enough resources” became “not enough materials and resources” as a sub-theme, while challenges of play-based learning was the main theme. In addition, the responses of the teachers, such as more resources, space, and social experience, to the question, “If you could select just one thing to facilitate the implementation of play-based learning in your classroom, what will that be?” became codes which I attributed to the challenges theme.

In addition, I went through the grouped questions and began to code based on the universal design for learning principles, guidelines, and checkpoints (see Table 4). That is, I looked for responses that corresponded with universal design for learning principles and highlighted those sentences and used the comment feature to identify which principle(s) that sentence represented. For example, part of Miss Sharon’s response to the question “What do you understand by play-based learning?” was “when they’re interested in it, they learn it better, and they retain it better” was coded as engagement as it involved providing options for recruiting interest, which include optimizing individual choice and autonomy (checkpoint 7.1); relevance, value, and authenticity (checkpoint 7.2).

Table 4: *Universal Design for Learning Guidelines and Corresponding Checkpoints*

Multiple Means of Engagement	Multiple Means of Representation	Multiple means of Action and Expression
Provide options for Recruiting Interest (7) <ul style="list-style-type: none"> • Optimize individual choice and autonomy (7.1) • Optimize relevance, value, and authenticity (7.2) • Minimize threats and distractions (7.3) 	Provide options for Perception (1) <ul style="list-style-type: none"> • Offer ways of customizing the display of information (1.1) • Offer alternatives for auditory information (1.2) • Offer alternatives for visual information (1.3) 	Provide options for Physical Action (4) <ul style="list-style-type: none"> • Vary the methods for response and navigation (4.1) • Optimize access to tools and assistive technologies (4.2)
Provide options for Sustaining Effort & Persistence (8) <ul style="list-style-type: none"> • Heighten salience of goals and objectives (8.1) • Vary demands and resources to optimize challenge (8.2) • Foster collaboration and community (8.3) • Increase mastery-oriented feedback (8.4) 	Provide options for Language & Symbols (2) <ul style="list-style-type: none"> • Clarify vocabulary and symbols (2.1) • Clarify syntax and structure (2.2) • Support decoding of text, mathematical notation, and symbols (2.3) • Promote understanding across languages (2.4) • Illustrate through multiple media (2.5) 	Provide options for Expression & Communication (5) <ul style="list-style-type: none"> • Use multiple media for communication (5.1) • Use multiple tools for construction and composition (5.2) • Build fluencies with graduated levels of support for practice and performance (5.3)
Provide options for Self Regulation (9) <ul style="list-style-type: none"> • Promote expectations and beliefs that optimize motivation (9.1) • Facilitate personal coping skills and strategies (9.2) • Develop self-assessment and reflection (9.3) 	Provide options for Comprehension (3) <ul style="list-style-type: none"> • Activate or supply background knowledge (3.1) • Highlight patterns, critical features, big ideas, and relationships (3.2) • Guide information processing and visualization (3.3) • Maximize transfer and generalization (3.4) 	Provide options for Executive Functions (6) <ul style="list-style-type: none"> • Guide appropriate goal-setting (6.1) • Support planning and strategy development (6.2) • Facilitate managing information and resources (6.3) • Enhance capacity for monitoring progress (6.4)

Adapted from CAST (2018). *Universal design for learning guidelines version 2.2 [graphic organizer]*. Wakefield, MA: Author.

For this paper, relevant examples of these principles have been selected to understand three themes in the findings section, which reflect the literature review headings. The themes are conceptualizing play-based learning, academic and socio-emotional benefits, and challenges of play-based learning. For example, the theme, conceptualizing play-based learning, contains teachers' understanding of play-based learning and the role of teachers. To further help in the analysis, I reviewed the fieldnotes to consider if there were examples of corroborating or contradicting data that corresponded with the responses of the teachers. This was done for all the themes. Figure 7 below is an example of how a vignette was coded to understand teacher's conceptualization through a universal design for learning lens.

At the beginning of the school day, we all sat on a carpet in a circle because Miss Scarlet uses circle time for social-emotional well-being as children were encouraged to take turns, listen and not interrupt except for Miss Scarlet and Peter (her little helper for the day) who sat on rocking chairs. As we shared, Emerald informed us she was going to Disney World. A few hours later, after the lunch break, Miss Scarlet explained to her class that Miss Sharon's class would be joining them and they went over the rules. As scheduled, Miss Sharon led her children into Miss Scarlet's classroom, and the two teachers announced that every area was open for play. Children scattered everywhere, the noise level increasing, and bins were emptied of their toys. Miss Scarlet was at a table with a group of children engaged in conversation and drawing activities. Miss Sharon was in a corner, withdrawing individual children aside to complete their class activity. As the children played, two boys got two sets of chairs together and pretended they were on a motorcycle "going at a 100". Other children joined them, but they had a chair each and said they were going to Florida. These ones proceeded to move around in their chairs rather than stay static like the two boys. In the writing corner, Miss Scarlet was drawing pictures and helping the children spell words. When the other children said they were going to Florida, she told the children on the writing table with her that the children could not get there by road, that they will have to fly or go by boat. She explained that we are on an island and asked, "why are we on an island?". One child answered, "because we are surrounded by water".

chinwe ogolo 9 minutes ago
(principle of engagement, check point 8, especially 8.3, foster collaboration and community; checkpoint 8.1, heighten salience of goals and objectives as they went over the routines for the day, [checkpoint 9](#))

[Reply](#) [Resolve](#)

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Figure 7: Vignette coding for universal design for learning guidelines

The photographs were analysed following the suggestions of Cohen et al. (2017) on analysing visual data. These are “content analysis” and “interpreting the image” (Cohen et al., 2017). According to Doucet (2018), “our conceptual narratives lead us to hear, coproduce, and write particular narratives” (p.741). Our interpretation of photographs is impacted by our explanations and concepts. That is, we are not neutral when we analyse photographs, there are concepts that guide our analysis. I first analysed the photographs through content analysis. That is analysing the photographs at face value. Then, I used the interpreting the image analysis, which involves accompanying the photographs with text. The photographs were used to demonstrate certain events that may provide more insight into the teachers’ responses. For instance, as I analysed the teachers’ responses to their understanding of play-based learning, I assigned codes, such as “still understanding”, “letting go”, “setting up opportunities”, “unstructured”, “not directed” under the comment section. Then, I grouped “unstructured” and “not directed” under the code of “free play” with little or no interference. The codes provided different areas concerning their definition of play-based learning. The photographs were used to provide examples of when the children were engaged in free play or when the teachers intentionally planned playful opportunities to meet curriculum outcomes, which were in my fieldnotes. Furthermore, as I looked at the photographs through a universal design for learning lens, I could see images that supported the three universal designs for learning principles. For example, if this image (Figure 8) is analysed through content analysis; it shows two kindergarten children playing, one has a fish, and another has a rod (child-initiated/free play). But on further analysis, through a universal design for learning lens, the image can be interpreted as one child demonstrating the principle of action and expression as he 1) expresses his

understanding of activity around ocean and ocean creatures through using a fishing rod (checkpoint 5.1); and 2) engages in physical action by varying methods for response by using connectors to make a fishing rod and fishing with the rod (checkpoint 4.1 and 4.2).

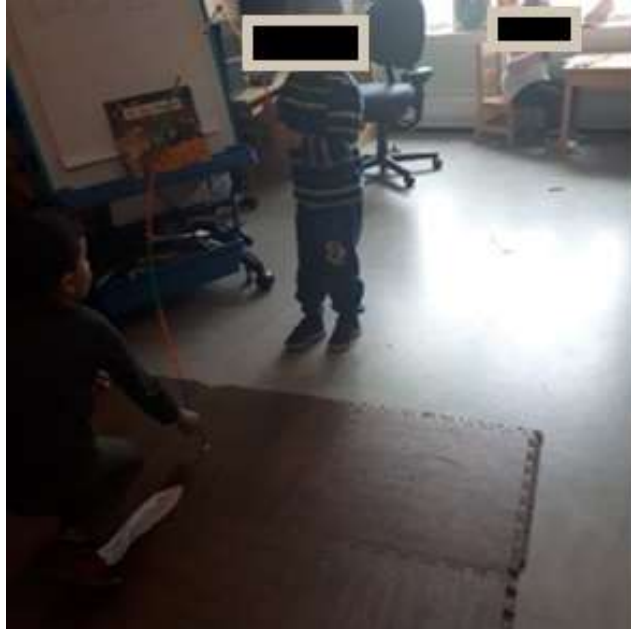


Figure 8: *Child Playing and Expressing His Knowledge About Fishing*

Findings

Conceptualizing Play-Based Learning

When considering the data from the three teachers' understanding of play-based learning the principles of universal design for learning were observed. Additionally, the teachers attempted to ensure that there was a balance between child-initiated and teacher-directed activities to make learning meaningful and experiential. I asked the teachers what they thought play-based learning is. Miss Scarlet is still grasping with what play-based learning is. For her, it has been a real learning curve, and this was her first year of letting go and not trying to control the noise level. For her, play-based learning involves allocated time for unstructured play where children can role-play, count, do letters, and mimic in dramatic play. Miss Scarlet said

For me that I've come to terms that I don't necessarily need to play with them, but I need to know when they capture what they're learning. So, I need to be listening not necessarily playing but I always need to be listening to see where they are or what they're doing or what they're saying.

As for Miss Sharon, play-based learning is

Kids finding their own way to the curriculum, letting it emerge by itself. I think instead of us being the sole provider of information where kids aren't really listening all the time, it allows them to figure out and stumble across the curriculum by themselves. And I think when I do it that way, when they're interested in it, they learn it better and they retain it better.

Like Miss Scarlet, Miss Suzan is still developing her understanding of play-based learning. For her, it is

Setting up opportunities for them to play. it's not directed, it's a little bit sometimes directed by me. Like there's certain opportunities I'll set up that I want them to try to do certain things, but it means for me the authenticity of

learning because when they're all sat down, say they all sat down at the tables with a pencil and a piece of paper and they're all doing the same thing, to me it's not authentic because, not that it's not authentic, it's more authentic when it comes from within and is meaningful to them.

She added:

I find the engagement through the play-based learning is that they are more excited about learning because when they trip over a learning moment, they're like ahhh, this is amazing. Whereas if they're sat in front of me or if they're sat on the mat listening to me teach, that same enthusiasm isn't there because they're not stumbling over the learning like they're not discovering it. I'm feeding it to them. So, I find, like that to me is my understanding. I think it's bringing out the meaningfulness of the learning experiences, it's creating excitement.

The teachers shared that although their understanding of play-based learning is still developing, they believed it involved setting up opportunities for the children to play and learn, which does not necessarily include their involvement in the children's play. Importantly, their observation of the children engaging in play helped them to capture what the children learn as they find their way into the curriculum. Their understanding highlights the principle of engagement, particularly checkpoint 7, which encourages the provision of options for recruiting interest, such as optimizing individual choice and autonomy (checkpoint 7.1) and optimizing relevance, value, and authenticity (checkpoint 7.2). Furthermore, principle 2 (representation) can be seen as they offer ways for children to learn by setting up opportunities (checkpoint 1 and 3). Principle 3 (action and expression) can be observed as they capture the children's learning in different ways (checkpoint 4.1 and 5).

The following vignette provides an example of the occurrence of play-based learning as children integrated what they heard during circle time during free play through a universal design for learning lens.

At the beginning of the school day, we all sat on a carpet in a circle except for Miss Scarlet and Peter (her little helper for the day) who sat together on rocking chairs. As we shared, Emerald informed us she was going to Disney World. A few hours later, after the lunch break, Miss Scarlet explained to her class that Miss Sharon's class would be joining them, and they went over the rules. As scheduled, Miss Sharon led her children into Miss Scarlet's classroom, and the two teachers announced that every area was open for play. Children scattered everywhere, the noise level increasing, and bins were emptied of their toys. Miss Scarlet was at a table with a group of children engaged in conversation and drawing activities. Miss Sharon was in a corner, withdrawing individual children aside to complete their class activity. As the children played, two boys got two sets of chairs together and pretended they were on a motorcycle "going at 100" miles per hour. Other children joined them, but they had a chair each and said they were going to Florida. These ones proceeded to move around in their chairs mimicking driving rather than stay static like the two boys. In the writing corner, Miss Scarlet was drawing pictures and helping the children spell words. When the other children said they were going to Florida, she told the children at the writing table with her that the children could not get there by road, that they will have to fly or go by boat. She explained that we live on an island and asked, "Why are we on an island?". One child answered, "Because we are surrounded by water".

From this vignette, we can see the three principles of universal design for learning are present. Examples of the principle of engagement can be seen when Miss Scarlet provided options for self-regulation (checkpoint 9), fostered collaboration and community (checkpoint 8.3), and heightened salience of goals and objectives (checkpoint 8.1) through circle time. The children were allowed to share their news and how they were feeling. They were encouraged to take turns and listen to one another and they were told the goals of the day, which included activities for the day, as well as rules of engagement with other kindergarteners. Other ways multiple means of engagement were provided was through time. That is, consciously carving

out time during the school day to allow the children from the two classrooms to engage in free play, which lasted more than an hour. In addition, the teachers provided various resources and materials (checkpoint 8.2), such as papers, pencils, colours, Legos, connectors, and toys. They were not worried about the noisiness or messiness produced in the classroom. They did not tell the children who to play with or what to play. Therefore, optimizing the child's individual choice and autonomy (checkpoint 7.1).

The principle of representation can be seen here with the children when they were provided options for comprehension by providing opportunities for them to activate background knowledge (checkpoint 3.1) when some of the children said they were going to Florida on their pretend motorcycles, drawing from what Emerald had said during circle time about Disney World. Miss Scarlet provided options for language, mathematical expressions, and symbols (checkpoint 2) when she engaged the children by drawing with them, spelling words, and expanding on their knowledge on transportation and living on an Island (checkpoint 3). Another way, the principle of representation was present is the teachers provided options for perception by providing an environment where children could display information in their own way (checkpoint 1).

The principle of action and expression can be seen as the teachers provided options for executive functions by planning different activities for the day achieved in (checkpoint 6). For example, Miss Scarlet's planning of the circle time to allow children to share their news, in addition to setting the learning goals and activities for the day. Miss Scarlet and Miss Sharon collaborating to join the two classrooms for free play to allow children to learn social skills, as well as transfer their academic knowledge in their play. The teachers optimized access to tools by announcing that all areas were open for play thereby addressing (checkpoint 4.2), that is allowing

children access to tools such as toys, writing materials, and drawing materials during play to enhance their learning. This allowed the children to use their imagination to substitute chairs for a motorcycle, which consequently led to a discussion about Florida. This vignette is a sample of the many ways the three teachers conceptualized play-based learning, especially when viewed through the universal design for learning lens.

When asked to define the teacher's role within the play-based learning model, Miss Scarlet said that she believes that although she sometimes plays with the children, her primary role is that of an assessor, because it helps her determine what they know, so that she can provide help for the areas they may not know. Miss Sharon and Miss Suzan believe they are facilitators but, Miss Sharon believes she is also a learner. From my observations, the teachers seldom involved themselves in the children's free play, but they did engage with the children during teacher-directed play, which is more directed towards meeting curriculum goals and outcomes. An example of learning that occurred during free play can be seen in Miss Suzan's class. During free play, Nelson proceeded to make a cube, then made two cubes. He placed the cuboid over his head, so that his body was in it and announced that he was a robot (see Figure 9). The teacher asked him what shape he had made when he made the first cube, and he said a cube. When he added extra, she asked him again and he said cube, she encouraged him to look at the shape again, he realized it was now a cuboid. She then encouraged him to bring a green rectangle prism object. She asked him about the shape, and he was able to tell her about the rectangle. He was able to name other shapes as well. By providing opportunities for free play, Miss Suzan provided options for recruiting interest (checkpoint 7) and because children had access to tools, such as connectors, Nelson was able to communicate his knowledge of 3D shapes addressing (checkpoints 5.1 & 5.2). Miss

Suzan was able to extend Nelson's knowledge of 3D shapes by observing his free play and asking guiding questions to provide options for comprehension by guiding information processing and visualisation (checkpoint 3.3). She did not tell Nelson that his robot was in the shape of the cuboid, she encouraged him to look at the shape again and this led him to realize that it was a cuboid.

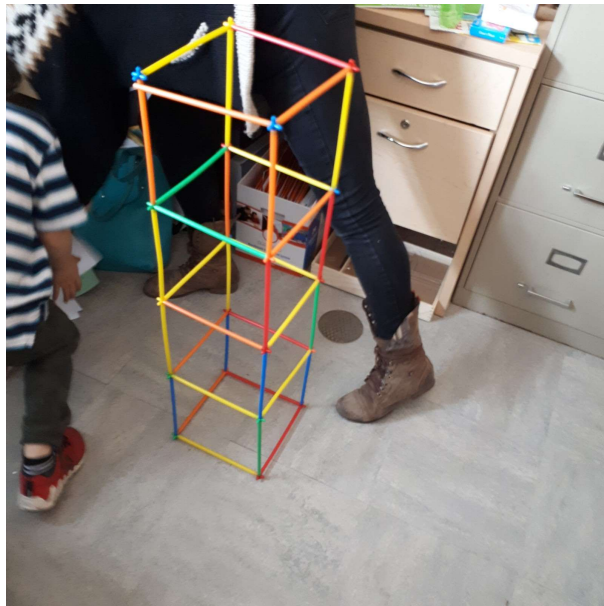


Figure 9: *Nelson's Robot*

The roles teachers enacted in this study intersected depending on the situation. For example, they were facilitators and assessors as they organized playful activities to help children learn curriculum strands, while they may take on the role of inquirer when the children are engaged in free play. The data suggest that the roles the teachers took on were influenced by their understanding of play-based learning, which, for them, was providing playful opportunities for children to play and learn and to capture their learning during play. Thus, the three teachers believed that children

learn when they play. The teachers in this study saw play as a vehicle for socio-emotional development and academic learning, and not as peripheral to learning.

Academic and Developmental Benefits

The three teachers, in this study, ardently believe that there is an intimate relationship between play and learning. They believe the two cannot be separated and that in fact, they are the same thing. According to them, children learn from each other, they learn from situations, they learn from what they see, they role-play, and they learn curriculum material. In the words of Miss Sharon, "Play is learning, and learning is play". After interviewing some children in Miss Sharon's class, she was concerned that the children did not understand that when they played, they were learning. She told me that she was to blame for this misunderstanding because she did not explicitly express to them that they were learning through play. Miss Sharon proceeded to ask the whole class if they thought that they learned, when they played. After a mixed response, she asked the children that when one of their classmates was playing with blocks and he said, "There is four here and there is four there and together they make eight", "Do you think he was learning while he was playing?" They responded, "Yeah". She then asked, "What about this morning when you were playing with the water, did you learn things about the water?" They said, "Yes". One child told her that he was playing with blocks by building a house. Miss Sharon told him he was learning to be an architect when he built the house. The three teachers mentioned that play-based learning benefited children socio-emotionally and academically, even though, the above example shows that, the children may not be aware of its benefits.

Socio-Emotional Benefit.

In the universal design for learning framework, it is important for a teacher to provide multiple means of engagement which include providing options for self-regulation (checkpoint 9). The three teachers agree that play-based learning has socio-emotional benefits. They all agree that it helps children to socialize, especially for children who are not familiar with structured environments such as a classroom. Miss Suzan's class was unique in the sense that of the 11 kindergarten children in her class, 7 of them had social and emotional needs, which was observed as children having severe tantrums, and showing verbal and physical aggression. Some children came from homes where the family unit was under duress. For example, Florence, at the time of my study, was taken away from her mother for 30 days, and was living with her aunt. Miss Suzan said that she could see positive changes in her behaviour while under her Aunt's care. These children had difficulties regulating their behaviour. Miss Suzan used play to navigate their social and emotional needs. Multiple means of engagement can be provided through routines and varying the social demands required for learning or performance. For instance, she dedicated Mondays to strictly child-initiated play to enhance social interactions and self-regulation after the weekend because she felt that many of the children spent their time watching TV with little interaction with adults or children, and when they returned on Monday, they found it difficult to regulate their behaviours.

Academic Benefit.

The principles of engagement, representation, as well as action and expression could be observed as the teachers described the academic benefits of play-based learning. A benefit of play-based learning according to the three teachers is that it makes learning authentic and meaningful (checkpoint 7.2) to the children because they are having fun, which aligns with the principle of engagement where

learning is optimized by recruiting interest (checkpoint 7). In addition, the teachers provided varying ways to teach children curriculum content (representation, checkpoints 1, 2, & 3). To achieve this, the teachers needed to also provide multiple means of action and expression by strategically planning classroom activities (checkpoint 1.2), which include play centres. As such, the teachers in the study perceived play and learning to be interconnected; they provided opportunities for children to engage in child-initiated play and they enjoyed teaching in a playful manner, although they argue that direct instruction, in the form of mini lessons, is necessary. Miss Scarlet felt that mini lessons help children learn how to be part of a whole group, which teaches them skills, such as, respecting the listener and looking at the speaker (checkpoints 9 & 8.3).

For example, Figure 10 shows the number tower centre set up by Miss Scarlet to facilitate children's understanding of numbers in an enjoyable way with MathLink cubes. For the number tower, she asked the children to stack up the cubes corresponding to the number on the paper and wherever the first group stopped, the second group would continue until it was completed achieving (checkpoints 8 & 9). The children went about doing their activities. She would circle the room to engage the children in counting out loud, while helping those children that were struggling addressing (checkpoints 6 & 8.4). At the end of the centre activity, she asked the children to gather around. Miss Scarlet, with the help of some children, began to join all the cubes together. She suggested they lay them horizontally, as stacking them vertically was proving to be difficult acknowledging (checkpoint 3). The children were excited about how long the cubes were, which is when she said, "I wonder how many kindergarteners will make up the line". Enthusiastic kindergarteners volunteered, and they began to lay down, starting at the base of the MathLink cubes as demonstrated in Figure 11 (checkpoint 4.1). This is one example, out of many, demonstrating how

the three teachers engaged children through providing playful opportunities for learning to occur, where by meeting the curriculum outcome for numeracy, which included number (writing the numbers on the paper and asking them to stack up corresponding cubes), patterns and relations (some children opted to use the same colour of cubes), shape and space (the numbers were placed within squares, the cubes are shaped liked squares).



Figure 10: *Number Tower Centre (Checkpoints 1,2,3,5,6,7,8, & 9)*



Figure 11:How Many Kindergarteners (checkpoints 1,2,3, & 4)

Child-Initiated Play Versus Teacher-Directed Play.

The three teachers, in this study, expressed that children learn through play both developmentally and academically. Therefore, all three teachers used child-initiated play and teacher-directed play. However, they preferred child-initiated play to teacher-directed play because they believed that it is more sincere to how children learn and more engaging for the children. Additionally, they retain information more, they explore more, and they are more engaged by something that they are interested in rather than what they, the teachers, are interested in, which aligns with the principle of engagement of providing options for recruiting interest (checkpoint 7).

For example, Miss Suzan explained that Uziel's interest in sardines created a week and a half of learning about habitats, which included learning about science,

art, and literacy. However, teacher-directed play is still necessary because it helps elevate the level of the children's play and exploration and it provides an understanding of the child's current level of knowledge.

The figures below demonstrate a balance between child-initiated play and teacher directed play from Uziel's interest in sardines. The figures below (Figures 12, 13, 14, 15, & 16) show how Miss Suzan looked up suggestions on the internet on how to create a school of sardines represented on a stick addressing (checkpoint 1). She introduced the children to books about ocean life (Miss Sharon lent Miss Suzan the books from her class library) (checkpoints 1, 2, & 3). Uziel sorted out different species of fish, especially octopuses (patterns and sorting), during free play achieving (checkpoint 3, 4, & 7). Daniel (who missed many classes because of behavioural challenges) created a fishing rod from connectors during free play and pretended to be fishing with Uziel addressing (checkpoints 3, 4, 5, & 7). And in the last figure, Miss Suzan organized a class activity where the children created their sardine on the fish achieving (checkpoints 3, 4, & 5). There were several other activities that the children engaged in and as the weeks progressed, Uziel's interest turned from sardines to octopuses. Miss Suzan engaged in the principles of engagement, representation, as well as action and expression by encouraging Uziel's interest, while providing learning opportunities for comprehension, language, mathematical expressions, symbols, and perception through books, writing, and drawing. She provided options for executive functions by strategically planning how to use Uziel's interest to meet curriculum goals. Daniel might not have been able to express his knowledge about the activities, if he had not had the opportunity to create a fishing rod from connectors and pretend to fish, by catching the paper fish. Providing time for free play, as well as materials and resources, provides opportunities for children like Daniel who may be considered not academically engaged to show their learning.

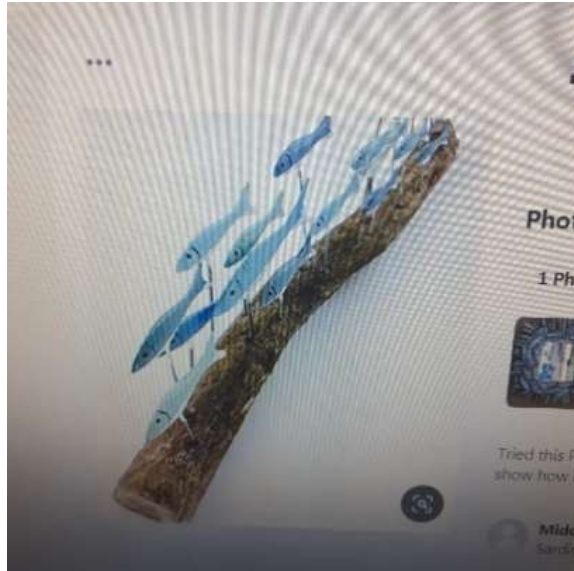


Figure 12:Miss Suzan's Internet Search for Sardine's activity

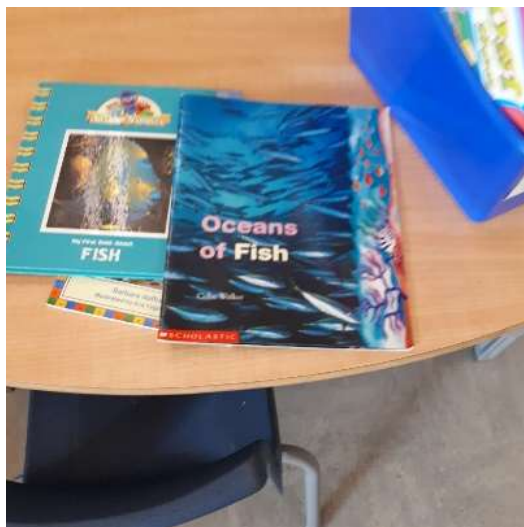


Figure 13:Display of Books on Ocean and Sea Life



Figure 14: *Uziel Sorting Fish, Especially His Octopuses*



Figure 15: *Daniel's Going Fishing*



Figure 16: *Class Activity of Making Sardine on a Stick*

An important aspect of the principle of action and expression is that it requires teachers to support planning and strategy development (checkpoint 6.2), which includes balancing child-initiated and teacher-directed activities. The teachers, in this study, expressed that they found balancing child-initiated and teacher-directed activities easy because they have the full day to implement a half-day curriculum. There is a lot of time for both activities. For example, Miss Sharon balances this by using half the day for teacher-directed activities and the other half for child-initiated activities. Whereas Miss Suzan balances the curriculum through the learning goals set for the week. She tries to be flexible to meet the learning outcomes, not only through her plans but also by accommodating children's interests. She says it makes her work a little bit harder because she has to return to consult the curriculum guide to see what other learning outcomes children's interests might cover.

Challenges of Play-Based Learning

A fundamental aspect of universal design for learning is that teachers anticipate barriers, in addition to minimizing these barriers. The three teachers identified insufficient resources as a major challenge in their implementation of play-based learning. For these teachers, to make learning authentic, a variety of resources need to be available at any given point. They admit that it takes funding to provide these resources. Miss Scarlet would like to have a variety of areas equipped with different resources, such as a vet area, hospital area, farm area, house area, and fire station, instead of using the dramatic area to address these needs.

Another challenge identified by these teachers is the inadequate physical space available for play-based learning to occur. The teachers would like more space to be able to have a variety of dramatic play areas, areas where children can have independent or solitary play. For example, Miss Scarlet expressed that every school year, she contemplates removing the tables from the classroom to create more space. In response, I asked where the children will sit to engage in their other activities. She responded, "That's the problem". This, for me, indicates a dichotomy between policy and practice. The way the Newfoundland and Labrador kindergarten classroom is described in the curriculum is not what is obtainable within the physical space provided in the actual classrooms I observed. For example, the curriculum guide suggests that the classroom should be divided into areas for wet, dry, active, quiet, clean, and messy activities. They also recommend that these areas should be in the classroom: large group meeting, reading, listening, writing, numeracy, science, technology, art, dramatic play, and block areas.

Lack of substantial professional development/education was identified by the three teachers. From my observations, I believed that the teachers implemented play-based learning admirably despite their perceived lack of substantial play-based

education. For example, Miss Suzan said that there was in-service training in 2016, but she was not a kindergarten teacher, therefore, she was not allowed to participate. She expressed that she has not received any professional learning focused on kindergarten pedagogies since she became a kindergarten teacher. The teachers would like to be provided with the specific skill sets to guide learning through play. They discussed how some other provinces, such as Ontario, have both a teacher and early childhood educator who bring different skill sets to the classroom and therefore, complement each other in the delivery of the curriculum. This type of teaching dyad is something these teachers would like to see implemented in Newfoundland and Labrador. Miss Suzan further expressed that every kindergarten classroom should have a student assistant in September and October to help identify the needs of all children.

Other challenges identified by the teachers in this study include letting go of some aspects of classroom management expectations. For Miss Scarlet and Miss Sharon, the noise and messiness that comes with play-based learning was at times a challenge to them on a daily basis. It was also important to the teachers that the children tidy up after themselves and return things to their rightful places because they feel the children need to learn about routines and responsibilities. For example, the children are often encouraged to tidy up after free play. The teachers may play a game of "spot the object", in which the children try to find the object the teacher describes. Another challenge identified by the teachers was helping the children to learn to socialize with other children. Teachers spoke about children coming to kindergarten with no prior experience with play nor playing with other children. This made it difficult for the teachers to implement play-based learning. Miss Suzan had to postpone teaching academic work until her children were ready because they needed a lot of social and emotional learning opportunities. Miss Suzan described to me how

at the beginning of the school year, the children were having issues regarding respecting the personal space of others on the rug. She took her concerns to the school leadership. The school leadership sent a counsellor to observe her classroom. The counsellor recommended that she changed the size of the rug in her classroom. The school leadership provided the funds to purchase a larger rug. After that, there were fewer incidents of physical aggression on the rug. The teachers also found enforcing rules challenging as children needed to learn about their limitations and understand boundaries. According to Miss Scarlet, “They need to know their limits. They need to know you can’t climb on the furniture. There are certain rules put in place for safety”.

Discussion

Conceptualizing Play-Based Learning

The purpose of this study was to understand kindergarten teachers’ perceptions of and experiences with play-based learning and how this influenced their implementation of play-based learning. Although the definitions of play-based learning provided by the teachers varied because they had to explain what it was in their own words, they all agreed that child-initiated play is a vital aspect. The researcher observed how the teachers implicitly highlighted principles of universal design for learning in their definitions, which in turn provides a practical foundation in understanding play-based learning. That is, by setting up learning opportunities for children to play, they were encouraging them to be expert learners (CAST, 2018), which is the goal of universal design for learning. The three teachers also recognized that children learn when they play. That is, the teachers’ definitions reflected aspects or elements of the definition of play-based pedagogy as proposed by the government (Newfoundland & Labrador. Department of Education & Early Childhood Development, 2016). The teachers in this study could not provide an explicit definition

of play-based learning, which is similar to the findings of Fesseha and Pyle (2016), where Ontario kindergarten teachers had varying definitions of play-based learning, and this affected how they implemented it. But unlike the Ontario kindergarten teachers, the three teachers implemented play-based learning to a large extent despite their varying definitions. Nevertheless, they admitted that there is always room for, and opportunity to improve their practice. I believe that by providing multiple means of engagement, representation, as well as action and expression, these kindergarten teachers were able to implement play-based learning in a more applicable way. Also, there were many instances of teacher-directed play, which suggest that the teachers' understanding of play-based learning is still emerging. Some of the activities that the teachers organized were geared towards meeting teacher-directed outcomes, such as the number tower activity. As such, professional development that focuses on understanding the process of play when children are engaged in child-initiated play is necessary.

Academic and Developmental Benefits

From my observations, the three teachers integrated play in the classroom environment. While some studies argue that kindergarten teachers may struggle to implement play-based learning because they believe that play and academic learning are two separate domains (Bulunuz, 2013; Lynch; 2014, 2015; Miller & Almon, 2009; Scharer, 2017), my study suggests the contrary. The teachers in this study believe that play and learning are intertwined and when children play, they meet curriculum goals, which includes numeracy and literacy and socio-emotional development. I observed them take thoughtful actions to set up playful opportunities, such as free play periods, to facilitate children's learning. Therefore, the teachers in the study did not experience the same challenge as other kindergarten teachers.

Play-based learning involves making learning meaningful, experiential, and enjoyable through play or other fun ways (Miller & Almon, 2009; Moyles, 2010; Pyle & Bigelow, 2015). The teachers in this study implemented playful pedagogy (Moyles, 2010; Newfoundland & Labrador. Department of Education and Early Childhood Development, 2016) by allowing child-initiated play, using centres (playful teaching), and allowing children to learn from each other. By providing opportunities for play, children like Daniel can express what they learned, as this may not be possible through a formal means in the classroom due to his behavioural challenges.

Teachers also taught curriculum content through direct instruction in the form of mini lessons which engaged more formal play where children gathered as a whole group, usually on the carpet. For example, using MathLinks to facilitate number sense and patterns. Although they prefer teaching through play, they believe direct instruction is also a necessity. The three teachers found ways to balance teacher-directed activities and child-initiated activities by reviewing the learning goals for the week or using the first part of the day for teacher-directed activities and the second part of the day for child-initiated activities, which is an important aspect of the universal design principle of action and expression. This entails that they strategically plan activities to meet curriculum goals. The teacher-directed activities were fun and enjoyable, for example, when Miss Scarlet used MathLink cubes to teach numbers. The teachers in the study were able to balance teacher-directed play and child-initiated play through these choices, despite the findings in the literature that revealed that teachers are likely to support one form of play-based learning for its academic or developmental benefits (Danniels & Pyle, 2018). The teachers talked about both the academic benefits such as making learning meaningful to the children, as well as the socio-emotional benefits, which include social interactions, identifying of emotions, and self-regulation. They implemented teacher-directed play through intentionally preparing resources and lessons, especially through play-based centres to teach children

curriculum content. In other words, they provided multiple means of engagement, representation, as well as action and expression. For instance, based on the socio-emotional needs in Miss Suzan's class, Monday was dedicated to child-initiated play to reacquaint the children with social skills and self-regulation. By providing routines or varying the social demands required for learning or performance (CAST, 2018), Miss Suzan provided options for engagement.

Challenges of Play-Based Learning

Universal design for learning encourages teachers to anticipate barriers, as well as minimize those barriers. According to the three teachers, insufficient resources is one of those barriers. They would like to have a variety of resources to make learning more authentic. The Department of Education needs to consider these needs for teachers to be able to offer the intended Kindergarten curriculum as outlined in the provincial document.

The teachers had to struggle with letting go and coming to terms with the fact that messiness is part of play-based learning experience as play invites children to make meaning from a variety of materials, but at the same time enhance children's responsibilities within the classroom. The teachers found the lack of socialization of the children prior to entering kindergarten challenging because they had to teach these children how to play with other children in a way that they all benefit from the engagement, before they could truly implement play-based learning. I am aware that the Newfoundland government has the KinderStart program to help young children transition into kindergarten (Newfoundland & Labrador. Department of Education & Early Childhood Development, 2019). Parents/guardians are encouraged to register their children in KinderStart a year prior to starting kindergarten. For example, if a child is to begin kindergarten in September 2020, then the child will begin KinderStart in September 2019. Children who are registered for KinderStart in 2019 are

automatically registered for kindergarten the following year. Perhaps the teachers may be able to identify children who may be lacking in some social skills during these visits and that, such information may be passed on to parents/guardians in a more formal way to help the children at home. In addition to providing socialization avenues prior to children attending kindergarten, teachers may also consider the environment as a contributing factor which impacts children's degree of self-regulation. In the case of Miss Suzan, a simple act of buying a larger rug drastically reduced the behavioural challenges that occurred on the rug.

Inadequate professional education/learning (Lynch, 2015) appeared to be a major issue because these teachers felt they need to have a certain skill set to facilitate children's learning through play. They also expressed a desire to learn how to assess children's learning when they play. Despite the fact that the teachers in this study were dissatisfied with the professional learning/development they received, they found that administrative support by the school leadership team played a major role in encouraging them to implement play-based learning. The Newfoundland government has partnered with the school board and highly qualified individuals to provide professional development workshops for kindergarten teachers throughout the summer in the past on how to guide learning through play-based learning. However, the government may consider a partnership with Memorial University's faculty of education to develop a course/program that addresses play-based learning, through a universal design for learning framework. Importantly, to develop teachers professional learning further, a platform where kindergarten teachers can correspond with each other, both physically and virtually, could be created. Here, they could share ideas about what works and what does not work and find collective solutions to problems. Although, a limitation of this research is that only three classrooms were studied, by looking at the teachers and their classrooms through one lens such as

universal design for learning, I was able to intricately observe that they were implementing play-based learning.

The teachers would like to have classroom support, like what is obtainable in Ontario, where there is a teacher paired with an early childhood educator, especially at the beginning months, such as September and October, to help them meet the needs of the children in their classroom, and also someone with whom to co-teach and exchange ideas. This would help the teachers better meet the needs of the children in their classroom. Another challenge, identified by the three teachers, is that the physical space is not big enough. Miss Scarlet said she often contemplates removing the tables from her classroom to create more play space. She said it would be nice to have more learning areas such as a vet clinic, a doctor's office, and a pretend school area, to help play-based learning be more authentic.

Conclusion

The Ministry of Education in Newfoundland and Labrador provides kindergarten teachers with the documents that emphasize the importance of play, what play-based pedagogy is and is not, and the practices expected for play-based pedagogy to be successful. Yet these three teachers expressed that they have not received substantial ongoing professional learning/development, as Miss Suzan shared in an interview that she is yet to receive in-service education since she became a kindergarten teacher. For instance, the participants struggle with aspects of assessment in the kindergarten classroom. I would suggest the government partner with Memorial University of Newfoundland to help develop a course on play-based learning to help potential elementary teachers understand how to implement play-based learning. The government could partner with some lecturers from the university to provide professional development for kindergarten teachers before the school year begins. The government could also create a website exclusively for

kindergarten teachers where they can connect with other kindergarten teachers and find practical resources to facilitate the implementation of play-based learning. Professional development focused on universal design for learning may be beneficial, as adopting the three principles may help teachers better implement play-based learning.

The government has not made the provisions for the physical space required for play to happen within the classroom environment. The classroom described in the Newfoundland and Labrador curriculum guide requires this type of physical space. Despite this being a newly designed school of five years, the physical space is still not adequate. These teachers have been able to meet curriculum outcomes because they still deliver a half-day kindergarten curriculum during a full school day schedule. However, it was noted that extra support in the classroom in the form of an assistant or early childhood educator to help them meet the various needs of the children in their classroom, especially at the beginning of the school year is needed. As this study explores the perceptions and experiences of three kindergarten teachers in St. John's, which may not necessarily represent the perceptions and experiences of other kindergarten teachers in Newfoundland and Labrador, I believe that future studies be conducted to examine challenges that may be identified by other teachers in varying contexts.

In this study, I have analysed play-based learning through a universal design for learning framework - these two approaches to curriculum content do not necessarily have to be mutually exclusive. Rather, universal design for learning can serve as an approach in which play-based learning can be made more concrete and applicable in the classroom environment. That is, kindergarten teachers can implement play-based learning by applying the principles of engagement, representation, and action and expression, as they anticipate barriers, and design the

classroom environment to minimize those barriers like the ones discussed in this study. It is my desire that by looking at three kindergarten teachers' practices through a universal design for learning lens, kindergarten teachers will begin a conversation on how universal design for learning may be useful in their practices, as the checkpoints are useful in reflecting on their current practice in the classroom.

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Chapter Four

Implementing Play-Based Learning in Three Full-Day Kindergarten Classrooms in St. John's

Abstract

Teaching through play-based learning is emphasized as a fundamental strategy in meeting full-day kindergarten curriculum objectives in Newfoundland and Labrador. Through a multi-case study design, this study began with the exploration of the implementation of four practices outlined as play-based pedagogy practices in Newfoundland and Labrador in three English classrooms. The practices included how the classroom environment was set up to enhance literacy and numeracy learning; how much time was provided for children to play and explore; whether the activities were teacher-initiated or child-initiated; and how teachers stimulated children's activity and talk through sustained shared thinking. However, during analysis, a fifth practice was included, which was not initially included in the predetermined observed practices. This was "there is a mix of large group, small group as well as individual learning and child-initiated activities". The findings reveal that the teachers in the three kindergarten classrooms found it easy to implement the outlined practices because they still used a half-day kindergarten curriculum within the full-day kindergarten as the Newfoundland and Labrador kindergarten transitioned from half-day to full day in 2016. Accordingly, they had enough time to implement these practices. The children had ample time to engage in free play; literacy and numeracy were integrated into every area of learning and the environment; teachers and children engaged in sustained shared thinking; there was a combination of teacher-directed and child-initiated activities; and there was a mix of large group, small group, individual learning, and child-initiated activities. I conclude by suggesting that the

teachers in the study might benefit from continuous professional development to further facilitate the implementation of play-based learning.

Keywords: play-based learning, universal design for learning, full-day kindergarten, teacher-directed activities; child-initiated activities, sustained shared thinking, play

Introduction

Play is an essential part of child development. It has academic benefits (Bulunuz, 2013; Hoskins & Smedley, 2019; Pellegrini & Bohn-Gettler, 2013; Platas, 2017; Wajskop & Peterson, 2015; Wohlwend & Peppler, 2015) and developmental benefits (Lillard, 2017; Miller & Almon, 2009; Moyles, 2012; Platas, 2017; Powell et al., 2006). For example, in a quasi-experimental study, Bulunuz (2013) reports that Turkish kindergarteners who were taught science through play understood scientific concepts (e.g. colours, float/sink) better than those taught through direct instructions. Another example is provided by Platas (2017), who argues that the two domains (academic learning and social and emotional development) are mutually supportive. For instance, when children play with dice and spinners, they learn numeracy skills like counting, and social skills like waiting their turn (Platas, 2017). This article reveals that when children play, they gain several benefits which are intertwined.

Play is considered the right of every child (Moyles, 1989; Souto-Manning, 2017; United Nations Convention on the Rights of the Child [UNCRC], 2010). Therefore, it should be integrated into every facet of their lives, including their education (Froebel, 1896; Moyles, 1989, 2010; Souto-Manning, 2017). Souto-Manning (2017), for instance, reasons that play is a right of every child, and not a privilege. She argues that although schools might want to favour academic rigour, this should not be at the detriment of play, because play helps to reduce inequalities by providing possibilities for children to learn curriculum content.

In 2016, kindergarten in Newfoundland and Labrador transitioned from half-day to full day. In Newfoundland and Labrador, young children between the ages of four and five are introduced to kindergarten. Young children are recognized as individuals, who are unique, have diverse needs, and develop differently (Kindergarten Program, 2008-2009; Newfoundland. Department of Education, 2010).

The kindergarten environment is designed to support young children's cognitive, socio-emotional, physical, spiritual, and moral development, such as creating a love for learning (Kindergarten Program, 2008-2009). Recommendations such as employing appropriate instructional strategies, a curriculum framework, and strategies for assessment are considered ways to support young children's development (Kindergarten Program, 2008-2009). Therefore, guiding learning through play-based learning is emphasized as a fundamental strategy in meeting kindergarten curriculum objectives (Newfoundland. Department of Education, 2010). However, little is known about its implementation within a Newfoundland and Labrador context. For instance, Fesseha and Pyle (2016) provided a snapshot of the play-based learning climate in an Ontario context, which they noted might represent a Canadian context. However, since little research has been conducted in the Newfoundland and Labrador context, this study aims to bridge that gap. This is because play-based learning may vary from one province to another, depending on the emphasis placed in the curriculum by the government on the role of play in kindergarten (Peterson et al., 2016). Therefore, research in Ontario may not reflect a Newfoundland and Labrador context.

Studies from Turkey and Canada reveal that there is often a gap between the theory, policy, and practice of play-based learning (Bulunuz, 2013; Fesseha & Pyle, 2016; Pyle & Bigelow, 2015; Scharer, 2017). This may be attributed to findings from studies that suggest that some kindergarten teachers are facing challenges reconciling play and learning, which causes them to experience difficulties in implementing play-based learning (Bulunuz, 2013; Pyle & Bigelow, 2015; Scharer, 2017). Another critical issue identified by Hoskins and Smedley (2019) is that, although the practitioners in England in their study valued play, most of them complained that there was insufficient time to focus on learning through play in their

setting as academic expectations took precedence. This study aims to explore whether the challenges of the dichotomy between play and learning and insufficient time are faced by Newfoundland and Labrador kindergarten teachers.

This study explores the implementation of play-based learning using universal design for learning as a framework, which provides practical guidelines through the principles of engagement, representation, and action and expression (CAST, 2018). These principles (engagement, representation, and action and expression) will be employed in understanding some outlined common practices in play-based pedagogy in Newfoundland and Labrador as to how play-based learning is to be implemented. The purpose of this study is to explore the implementation of play-based learning in St. John's, Newfoundland and Labrador. The research question to be addressed in this chapter is:

How is play-based learning implemented in some classrooms in St. John's?

Literature Review

Universal Design for Learning

As I consider the implementation of play-based learning in the Newfoundland context, I adopt universal design for learning as a framework. This is because universal design for learning is a framework which addresses the fundamental aspects of classroom practices in meeting curriculum outcomes (CAST, 2018; Rose & Meyer, 2002). In this case, how play-based learning can be used as a vehicle to meet kindergarten curriculum objectives. Universal design for learning is comprised of the three principles of engagement, representation, as well as action and expression (see Table 5 for practical examples & Appendix A for the comprehensive guidelines table), which provides the tools to achieve curriculum objectives while minimizing barriers to learning, in the classroom.

The universal design for learning approach encourages teachers to provide multiple means of engagement, which include providing options for self-regulation; sustaining effort and persistence; and recruiting interest (CAST, 2018). The principle of representation encourages teachers to offers various options for comprehension; language, mathematical expressions, and symbols; and perception (CAST, 2018). Regarding the principle of action and expression, teachers are encouraged to provide alternatives for executive functions, expression and communication, and physical action. The ultimate goal of the universal design for learning principles is to produce learners who are experts (CAST, 2018). Universal design for learning provides a valid framework to explore how play-based learning is implemented in kindergarten classrooms. That is, it provides a useful lens to examine some common kindergarten practices such as, how the classroom environment was set up to enhance literacy and numeracy learning; how much time was provided for children to play and explore; whether the activities were teacher-initiated or child-initiated; and how teachers stimulated children's activity and talk through sustained shared thinking, which can be examined and understood in a more practical way. In addition, there are few studies that connect universal design for learning and early childhood education, especially regarding play-based learning. The universal design for learning checkpoints can be useful tools for reflections on these kindergarten practices, as it helps to provide a good picture of the strengths and limitations of play-based learning. Thus, universal design for learning provides a basis on which kindergarten teachers can reflect on their practices. Therefore, this study contributes to the current literature by considering how universal design for learning and play-based learning can be used in tandem to facilitate the implementation of play-based learning in the Newfoundland and Labrador context.

Table 5: *Examples of the Principles from Three Kindergarten Classrooms*

Engagement	Representation	Action & Expression
Providing opportunities for children to engage in free play.	Using dice and snack cubes to teach about numbers, addition, patterns, and colours.	Allowing children to demonstrate what they know through play.
Providing opportunities that foster community and collaboration through circle time or centres.	Reading books, such as the black dots and making children create their own books or art using black dots.	Listening to their interactions with their peers.
Making rules that protect the right of every child.	Activating background knowledge by asking questions, such as “was there ever a time you saw a funny rock”	Providing charts to help children strategically self-regulate their emotions.
Playing movies, such as “inside out” to teach children about emotions.		Creating centres with multiple tools for construction and composition, such as beads, connectors or blocks.

Adapted from CAST (2018). *Universal design for learning guidelines version 2.2 [graphic organizer]*. Wakefield, MA: Author.

Children’s Play

Friedrich Froebel, Lev Vygotsky, and Janet Moyles concur that children learn through play (Froebel, 1896; Moyles, 1989; Vygotsky, 1978). They believe that play is vital in the cognitive, social, emotional, and physical development of young children. Froebel, Vygotsky, and Moyles accept that children are active participants in their learning and that rote teaching should be avoided. Therefore, allowing children to engage in play facilitates their active participation in their learning and makes learning more meaningful for them. The universal design for learning framework promotes the idea that children are active participants and teachers should find ways to recruit their interests (CAST, 2018), of which play can be considered one way to recruit children’s

interests. Next, I consider how Froebel (1896), Vygotsky (1978), and Moyles (2010) recommend that play be integrated into children's learning.

Froebel is considered the father of "kindergarten" which means "children's garden". Play was an integral part of his kindergarten. According to Froebel (1896), children are naturally inclined towards play, therefore, parents and caregivers should cultivate children's interests through play. Froebel believed that curriculum content should be taught through play in kindergarten (Froebel, 1896).

Vygotsky (1978) defined the zone of proximal development (ZPD) as "the difference between the child's actual development level as determined by independent problem solving and their potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers" (p. 86). He maintains that play is a means to achieving the ZPD because, compared to other activities, imaginary play serves as a lens to children's current knowledge level and capabilities.

Pure play, for Moyles (2010), is instigated by the child and continued by the child, for their own purposes. The adult or the child, can initiate playful learning, as long as, it holds the child's attention. This should mirror the child's disposition to play as much as possible, as suggested by Froebel. Playful teaching, on the other hand, is usually initiated by the teacher. However, the teacher has to use enjoyable means of instructions.

In order to gain insight into the implementation of play-based learning in some full-day kindergarten classrooms in Newfoundland and Labrador, universal design for learning in tandem with these three theorists provide a lens as to what play should look like in the classroom. For example, recognizing when curriculum content is

taught through play or when a child is helped by a more knowledgeable/capable other (teacher or peer) to understand a concept better while at play.

Types of Play

The goal of universal design for learning is to produce expert learners who are both academically and socio-emotionally sound (CAST, 2018). It is therefore important to provide options for academic and socio-emotional development (CAST, 2018). Child-initiated play (free play or pure play) is recommended by researchers who focus on the developmental benefits of play, while teacher-directed play (structured play) is preferred by researchers who advocate for the academic benefits of play (Danniels & Pyle, 2018). In teacher-directed play, the teacher is responsible for selecting the types of play children can engage in to learn specific concepts (Education and Early Childhood Development, 2016; Moyles, 1989). In contrast, children have agency over what types of play they want to engage in, with child-initiated play (Education and Early Childhood Development, 2016; Moyles, 1989, 2010). Lillard (2017) defines pretend play as “a signature behaviour in early childhood. Children pretend to be other people, that one object is another, and even that non-existent things exist – all apparently with full knowledge of what the real situation is” (p. 826). Moyles (1989) explains that pretend play provides opportunities for children to use their real and imaginary experiences, which consequently enhances their language and learning. According to Piaget (1962), symbolism is a vital aspect of pretend play. For Piaget, when children engage in pretend play, they can substitute one object for another. For instance, a child can use a banana to replace a mobile phone. This ability to substitute objects is essential for abstract thinking. This is expounded by Moyles (2012) who explains that pretend play is crucial in early literacy development as it enhances receptive and expressive language as it helps the brain to represent images and icons.

Despite the growing body of evidence indicating the connection between play and children's development, researchers such as Lillard et al. (2013) and Roskos and Christie (2013) hold contrary views. On the one hand, Lillard et al. (2013) argue that weak methods or non-rigorous approaches used in most of these studies on play weaken their findings and makes it impossible to assert any connection between play and children's development. Roskos and Christie (2013), on the other hand, hold that given the complexity of play in early childhood and the difficulty of defining or observing play, the suggestion that play enhances literacy is difficult to establish. Roskos and Christie (2013) point out that play varies across developmental periods, and has different forms, such as, free play, sociodramatic play, and thematic play. Moreover, differences in socio-cultural and historical contexts, also shape the forms and types of play (Roskos & Christie, 2013). Roskos and Christie (2013) suggest that to establish connections between play and children's literacy development, specific forms or types of play, or the play environment must be considered. In a critical appraisal report, they reported that children demonstrate literacy behaviours and experiences, such as reading and writing, when exposed to play environments that are rich in literacy content, such as, objects and prints. They also report that exposure to social resources, especially teachers and peers, further enhances these literacy experiences for children. Specifically, Roskos and Christie (2013) found that creative drama improves children's comprehension, and helps the development of meaning-making skills, and they consider this an important skill for children to develop in the multi-modal teaching and learning environment of a digital age. In addition, Lillard (2017) suggest there is a strong indication that pretend play helps children in the development of self-regulation and in the understanding of social signals.

To answer the call for rigorous studies regarding play and development, Germeroth et al. (2019) developed the Mature Play Observation Tool (MPOT) to measure the quality of mature play in pre-schools. Their longitudinal study found that children who score well on the MPOT performed better at skills such as literacy, numeracy, and self-regulation. Germeroth et al. (2019) recommend that make-believe play is essential in the cognitive and socio-emotional development of children, as it enhances their performance within their zone of proximal development and beyond.

Important Play-Based Learning Features

For play-based learning to be successful, teachers need to engage in child-centred activities. In a child-centred approach or practice, the teacher allows children to explore, inquire, and play. The activities that teachers select should make learning authentic (Miller & Almon, 2009). In addition, choices of activities should be made by the teacher and the children. The children should be encouraged to have conversations, expand on their thoughts, and actively participate in small group activities (Lerkkanen et al., 2012). This aligns with the principle of engagement which encourages practitioners to provide multiple options as learners differ in the way they engage with curriculum content and goals (CAST, 2018).

According to the universal design for learning approach, diverse learners perceive and process information in different ways; therefore, options should be provided for comprehension, perception, and language and symbols (CAST, 2018). Accordingly, classroom environments should be designed to support and encourage play because it provides the best context for children to practice, develop, and expand, emergent literacy and numeracy skills. Therefore, classrooms should be organised to promote play. Consequently, teachers should be intentional in their selection of classroom materials to support and promote instructional success (Morrow & Rand, 1991; Newfoundland. Department of Education, 2010).

Sustained shared thinking (SST) has been aptly defined by Siraj et al. (2002) as “an episode in which two or more individuals work together in an intellectual way to solve a problem, clarify a concept, evaluate activities, extend a narrative etc. Both parties must contribute to the thinking and it must develop and extend” (p. 8). The authors argue that sustained shared thinking must be considered a crucial and fundamental aspect of early childhood pedagogy. In addition, Siraj et al. (2015) explain that sustained shared thinking includes “building trust, confidence, and independence”; “social and emotional well-being”; “supporting and extending language and communication”; “supporting learning and critical thinking”; and “assessing language and learning”. Brodie (2016) argues that sustained shared thinking allows the child to become central as the teacher guides them towards enhancing their cognitive levels.

Play-Based Pedagogy in Newfoundland and Labrador

Play-based learning differs from one province to another in Canada. This depends on the importance that the government places on the role of play in the kindergarten curriculum. Peterson et al. (2016) analysed how play is represented in current and previous kindergarten curricula from five provinces: Alberta, British Columbia, Manitoba, Ontario, and Saskatchewan. They found that play was explicitly mentioned in kindergarten curricula in Ontario and Saskatchewan. However, in provinces like Alberta, British Columbia, and Manitoba, play was implicitly mentioned in the curricula. Peterson et al. (2016) explain that the implementation of play-based learning is influenced by the values, perspectives, experiences, and backgrounds of teachers. Meanwhile, in Newfoundland and Labrador, play is explicitly mentioned in the kindergarten curriculum and supporting documents. According to Newfoundland and Labrador, Department of Education and Early Childhood Development (2016), play-based learning is:

An approach where the teacher recognizes that children learn through an active, hands-on, playful environment. In a play-based classroom, the teacher makes decisions about and adjusts the daily schedule, the environment, the materials, interactions and activities based upon the strengths, needs, interests, and input of the students in the classroom, as required, to enhance learning opportunities (p. 35).

The Newfoundland and Labrador government explains that the reason they are advocating for a play-based pedagogy in kindergarten in Newfoundland and Labrador is that the opportunities for children to engage in play and play-based learning have reduced over time. Increased screen time, participation in adult activities, and time-crunched parents are cited as reasons why children's play has diminished. The government is concerned that children in kindergarten may lack the appropriate skills to initiate play on their own. Hence, it is essential to provide opportunities for young children to play (Newfoundland & Labrador. Department of Education & Early Childhood Development, 2016).

Methodology

Research Design

This study, which seeks to explore the implementation of play-based learning in three kindergarten classrooms in St. John's, Newfoundland and Labrador, is situated within an interpretative/subjective qualitative research paradigm (Leavy, 2017). That is, how play-based learning is implemented in kindergarten classrooms is interpreted through a universal design for learning framework and reviewed literature. In qualitative research, data collection methods are subjective and open to interpretation, and that data is contextualized and individualized (Cohen et al., 2017; Creswell, 2014). In other words, the researcher decides what data collection methods to employ and what type of data to collect. For example, what practices to observe and what questions to pose. In addition, the findings cannot be generalized to a large

population because it is about the implementation of play-based learning in some kindergarten classrooms in St. John's, which may not apply to all kindergarten classrooms in St. John's or Newfoundland.

A case study is a useful design when the researcher is interested in understanding contemporary events in which they cannot manipulate relevant behaviours (Yin, 2009). This study used a multi-case studies design because it involved more than one classroom (Merriam, 1998; Merriam, 2009; Yin, 2009). Multi-case studies are robust because they compare different cases to provide in-depth insight into a phenomenon (Creswell, 2014; Yin, 2009). The multi-case studies design provided useful insight on play-based learning, which is a contemporary educational event, in three kindergarten classrooms in a school in St. John's.

Setting

The elementary school that served as the research setting for this study is located in the Avalon East regional zone, St. John's, Newfoundland and Labrador. There are approximately 540 children in this school, and many of the students participate in the breakfast and lunch program. The school is racially diverse, although there are more Caucasians than other races. Three English kindergarten classrooms in the school served as my study sites. There was no prior relationship with the school or the participants, which was beneficial in avoiding potential researcher bias (Yin, 2009).

The three teachers have 43 years of teaching experience between them (Miss Scarlet 15 years, Miss Sharon 11 years, and Miss Suzan 17 years) and they all possess a Master's degree. Concerning kindergarten, Miss Scarlet has three years, Miss Sharon has four years, and Miss Suzan has two years of teaching experience. Miss Scarlet had sixteen children, Miss Sharon fourteen children, and Miss Suzan

eleven children in their classes. It was important to include the voices of children in my research as play-based learning directly concerns them. The Mosaic approach is suggested by Clark (2001) as a helpful framework to listen to children's different opinions on issues that concern them. This approach requires various data collection methods to be used to account for the multiple ways children express their ideas, in this case, their kindergarten experience. The children in the three classrooms had consent from their parents/guardians to participate in the study.

Methods

To gain insight into how play-based learning is implemented, data collection methods included direct observation, semi-structured interviews, and photographs. Three data collection methods were used to ensure triangulation as using different methods strengthens the validity/trustworthiness of qualitative studies because findings are confirmed through multiple sources (McMillan & Wergin, 2002; Yin, 2009). Data collection was conducted during a one-month period at the end of the school year because I believed that the teachers would have had sufficient time to implement play-based learning in a meaningful way during the school year. Therefore, I began data collection in the last week of May and finished in the last week of June. I arrived at the school at 9:30 a.m. and departed at 3:00 p.m. daily.

I was a participant observer as I became part of their kindergarten community. I rotated classes daily - class A today, class B tomorrow, and class C the next day. This process afforded me the opportunity to get acquainted with every child, and by the third day, I knew the names of most of the children. This process also allowed me to catch up on activities and make connections that may have been missed if I observed one classroom per week. The teachers allowed me to help in class with the children, I followed the children for all their activities, and the children

treated me as a teacher, asked me to help them with their work, and participate in their indoor and outdoor play.

Direct Observation.

Direct observation was used to collect data in the three classrooms. Since a case study should occur in the natural context of the case (Yin, 2009), I directly observed some practices of play-based pedagogy in Newfoundland and Labrador as outlined by Newfoundland and Labrador, Department of Education and Early Childhood Development (2016). The document provided information and guidance on how play-based learning should be implemented in a Newfoundland and Labrador context. The practices included how the classroom environment was set up to enhance literacy and numeracy learning, how much time was provided for children to play and explore, whether the activities were teacher-initiated or child-initiated, and how teachers stimulated children's activity and talk through sustained shared thinking. For example, I observed how the teachers displayed numbers and letters on the walls, I observed how much time was allocated to free play in the classroom, and I listened in on conversations between the teachers and the children or the children with other children. I recorded my fieldnotes on an app called "Samsung Notes", and I voice recorded my observations on the "Voice Recorder" app on my Samsung phone to help me remember what happened during the day.

Semi-Structured Interviews.

Semi-structured interviews afford the researcher with opportunities to ask questions concerning their study, while allowing participants to respond in their own way (Cohen et al., 2017). My observations were informed by the information gathered from the semi-structured interviews (Creswell, 2014; Yin, 2009). The teachers were asked questions that ranged from their experiences as kindergarten

teachers to how they implemented play-based learning daily. The teachers were also asked questions about events I observed daily in their classrooms. Children were asked questions concerning some drawing activities, which included their favourite and least favourite activities, and places in the classroom. This was to understand if the children considered playful experiences as activities they enjoyed. I wrote the children's responses on my Samsung Notes.

Photographs.

According to Cohen et al. (2017), meanings and reflections can be evoked by photographs. Information and factual data can also be gathered from photographs. Photographs can be the primary source of data or can be used to support other sources of data (Cohen et al., 2017). Furthermore, photographs can save the researcher time because they can express more in an image than multiple pages of texts (Cohen et al., 2017). Holms (2014) explains that photographs provide the researcher with detailed information. That is, the researcher has autonomy over what to photograph, how to set it up, and how to process it (Holms, 2014). In this study, photographs were used to represent the classroom environment and activities that took place in the classrooms. The photographs provided details of the classroom environment and activities for my fieldnotes. The photographs were used to illustrate examples of the practices I observed. To avoid ethical issues, identifying information on the photographs were edited or redacted (Holms, 2014).

Analysis

The data analysis process followed the recommendation of Creswell (2014) for analysing multiple cases. According to Creswell, multiple cases should be analysed individually and separately. This can then be followed by a cross-case analysis. Accordingly, I analysed each case separately. For example, I analysed the

observation fieldnotes for each class separately before bringing them together. There were four original or predetermined themes, which had subthemes from the fieldnotes. However, an unexpected theme was found, which was: *there is a mix of large group, small group as well as individual learning and child-initiated activities*, which was one of the practices included in the document, but I had intentionally not observed this practice in the classroom. To analyse each theme, I read and reread the fieldnotes. Notes were typed in the review pane that highlighted what events of the day demonstrated the principles of universal design for learning. For example, if I observed the teacher explaining a concept, I would write “sustained shared thinking” and “principle of representation, checkpoint 2 and 3” (see Table 6 for universal design for learning principles, guidelines, and checkpoints). I also highlighted portions that illustrated the practices I observed, such as “sustained shared thinking”. There were overlaps of some portions. For instance, under extended periods of play, I may also have sustained shared thinking, which meant I had interconnected universal design for learning principles as well. Then, I typed each theme as a heading. Following this, I grouped examples from my fieldnotes and from the three classrooms that illustrated that theme. For instance, I had the theme “students are provided with extended periods of play”. I brought together examples of when the children were playing from the three classrooms. My initial plan was to provide examples of the duration, but as I read through, I generated codes, and would write, “time or duration”, “pretend play”, “child-initiated play”. By generating these codes, I was able to generate sub-themes such as social interactions during play, pretend play, and integrating something they learned or heard in class in their play. I consulted the reviewed literature to determine whether my findings agreed or disagreed to further facilitate the analysis. Figure 17 provides a screenshot of how a vignette was analysed using universal design for learning checkpoints.

Table 6: *Universal Design for Learning Checkpoints*

Multiple Means of Engagement	Multiple Means of Representation	Multiple means of Action and Expression
Provide options for Recruiting Interest (7) <ul style="list-style-type: none"> • Optimize individual choice and autonomy (7.1) • Optimize relevance, value, and authenticity (7.2) • Minimize threats and distractions (7.3) 	Provide options for Perception (1) <ul style="list-style-type: none"> • Offer ways of customizing the display of information (1.1) • Offer alternatives for auditory information (1.2) • Offer alternatives for visual information (1.3) 	Provide options for Physical Action (4) <ul style="list-style-type: none"> • Vary the methods for response and navigation (4.1) • Optimize access to tools and assistive technologies (4.2)
Provide options for Sustaining Effort & Persistence (8) <ul style="list-style-type: none"> • Heighten salience of goals and objectives (8.1) • Vary demands and resources to optimize challenge (8.2) • Foster collaboration and community (8.3) • Increase mastery-oriented feedback (8.4) 	Provide options for Language & Symbols (2) <ul style="list-style-type: none"> • Clarify vocabulary and symbols (2.1) • Clarify syntax and structure (2.2) • Support decoding of text, mathematical notation, and symbols (2.3) • Promote understanding across languages (2.4) • Illustrate through multiple media (2.5) 	Provide options for Expression & Communication (5) <ul style="list-style-type: none"> • Use multiple media for communication (5.1) • Use multiple tools for construction and composition (5.2) • Build fluencies with graduated levels of support for practice and performance (5.3)
Provide options for Self Regulation (9) <ul style="list-style-type: none"> • Promote expectations and beliefs that optimize motivation (9.1) • Facilitate personal coping skills and strategies (9.2) • Develop self-assessment and reflection (9.3) 	Provide options for Comprehension (3) <ul style="list-style-type: none"> • Activate or supply background knowledge (3.1) • Highlight patterns, critical features, big ideas, and relationships (3.2) • Guide information processing and visualization (3.3) • Maximize transfer and generalization (3.4) 	Provide options for Executive Functions (6) <ul style="list-style-type: none"> • Guide appropriate goal-setting (6.1) • Support planning and strategy development (6.2) • Facilitate managing information and resources (6.3) • Enhance capacity for monitoring progress (6.4)

Adapted from CAST (2018). *Universal design for learning guidelines version 2.2 [graphic organizer]*. Wakefield, MA: Author.

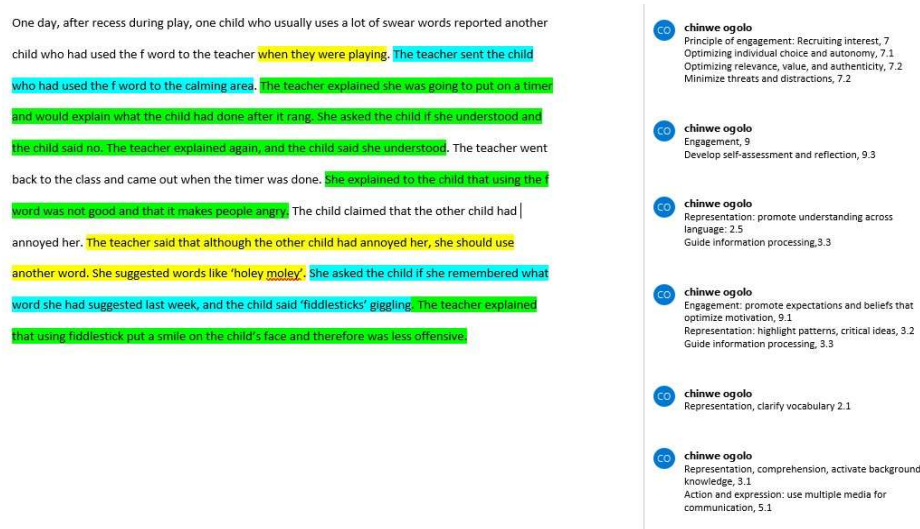


Figure 17: Screenshot of Vignette Analysis Using Universal Design for Learning

The teachers and children's interviews were transcribed. Their answers were used to understand the analysed fieldnotes from the observations. For example, the teachers' responses to the benefits of play-based learning were used to understand how much time they provided for playful opportunities in their classrooms, and this was reviewed under a universal design for learning framework.

Cohen et al. (2017) recommend various approaches to analysing visual data, in this case, photographs. These include content analysis and interpreting the image (Cohen et al., 2017). The researcher's understanding of concepts influences how photographs are analysed (Doucet, 2018). The photographs were first analysed through content analysis. That is analysing the photographs at face value. Then, I used the interpreting the image analysis, which involves accompanying the photographs with text. The photographs were used to depict certain events that may provide insight into the practices I was observing. That is, they provided examples of the themes generated in this paper. For example, I used the photographs with the

rocks to describe how Angel integrated something she had learned during free play time, which demonstrate the principles of action and expression as she used her play time to express her knowledge of rocks and numbers.

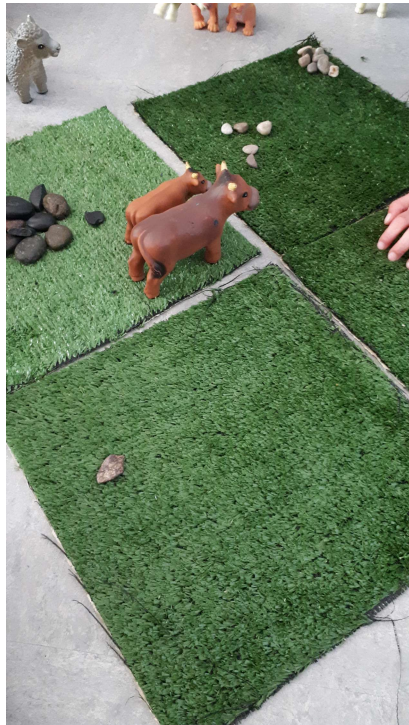


Figure 18: *Rock and Barn (checkpoint 4.1 and 5.1)*

Findings

Students Are Provided with Extended Periods of Play

“I like to play all day because it’s fun” was Zoe’s response when I asked her about her drawing concerning her favourite activity in class. Similar to Zoe’s answer, many of the children in the three classrooms enjoy activities around play, such as playing games, playing with blocks, and playing pretend. The principle of engagement encourages practitioners to provide options for recruiting interest (checkpoint 7) by optimizing individual choice and autonomy (checkpoint 7.1) and

optimizing relevance, value, and authenticity (checkpoint 7.2). The teachers in the three observed kindergarten classrooms provided ample opportunities for children to play both indoors and outdoors. Children in the three classrooms had free play an average of one hour and forty minutes daily.

During free play, children engaged in pretend play, social interactions, and integrated something they learned or heard in class. For instance, Figure 19 demonstrates an occasion, in Miss Scarlet's class, during free play, when I observed Roman and Angel playing with animals. They had the grass all laid out. Angel found a smooth rock with the number 5 on it. She told Roman, "This rock has a number 5". She also took out another rock and said, "This is a flat rock". The previous week the teacher had read the book about rocks to them. This illustrates the principle of action and expression, especially with regards to the use of media for communication (checkpoint 5.1) and varying the methods for response and navigation. Angel was able to express what she had learned in class (numbers and rocks) by using media such as rocks, artificial grass, and toy barn animals as she communicated with Roman. Play offered an opportunity for Angel to use a different method to show what she had learned. Through pretend play Angel was engaged in a relevant, valuable, and authentic experience (checkpoint 7.2) that kept her interested and helped her show her learning in a different way. The opportunity to play provided Angel with options to choose what she wanted to play and with whom she wanted to play (checkpoint 7.1). Pretend play enhances children's language and learning as it provides children not only with the opportunity to begin where they currently are in development but to use their real and imaginary experiences, as Angel did with the rocks. During pretend play, the children will role play with others, pretend one object is another and that non-existent things exist, while being aware that their imagined world is not reality.



Figure 19: *Playing Pretend with Rocks and Barn Animals (checkpoints 4.1 & 5.1)*

During free play in Miss Scarlet's class, Hazel selected a doll and asked me to play the mommy (see Figure 20). As I proceeded to participate, she put the baby in the sink. I asked her what she was doing. She said she was giving the baby a bath. She pretended to turn the blue knob and I asked her, "Wouldn't that be too cold for the baby?". She responded by turning the red knob and said that now it will be warm. She took two sheets of paper towel and said that that will be the baby's towel. She brought out the baby from the sink and said that the paper towel will be the mattress, then found a blanket to wrap the baby. She started folding the paper towel to be a diaper. She put a toy pony in the blanket with the baby. This child used a paper towel to represent a towel, mattress, and diaper.

In this example, Miss Scarlet recruited interest (checkpoint 7) by providing opportunities for free play. Hazel had autonomy as she chose to play with a doll and invited me to participate in her play addressing (checkpoints 7.1 & 7.2). Also, Hazel had access to tools (checkpoint 4.2), such as a baby doll, paper towels, a dramatic play area, and a pony. She was able to express and communicate her understanding

of water temperature (cold and warm) and engaged in symbolism as she substituted the paper towel to represent a mattress, a diaper, and a towel which is necessary for language development (checkpoints .3.2, 3.4, & 5.2).



Figure 20: *Hazel's Doll (checkpoints 7.1 & 7.2)*

The three teachers in this study agree that play-based learning is beneficial to the children's socio-emotional development and academic learning, which aligns with the principles of engagement (fostering collaboration and community and developing self-regulation strategies) and representation (customizing the display of information to allow learning to be authentic and meaningful). For them, allowing time for play and facilitating learning through play allows learning to be authentic and meaningful to the children (checkpoint 7.2) as they understand that play is the natural disposition of children (checkpoint 7), it should be used to teach curriculum content as it provides options for displaying information (checkpoint 1). To help them further implement play-based learning, the three teachers said that they would like more professional learning/development, space, varied materials and resources, and classroom

assistance, which could be considered as barriers to their teaching through play-based learning. To optimize learning, the universal design for learning framework encourages that barriers should be anticipated and minimized.

Literacy and Numeracy are Integrated into Every Area of Learning and

The Environment

Literacy and numeracy were integrated into every area of learning and the environment in the three observed classrooms. This integration was achieved through learning centres, whole group learning, and during play. This corresponds with universal design for learning's principle of representation as practitioners are encouraged to provide options for perception (checkpoint 1). For example, in Miss Sharon's class, during free play, I often observe Heather reading stories from a book, she would turn pages and keep reading. One day, I sat down to listen to her read. I realized that the stories she was telling had nothing to do with the book. I found her creativity impressive. Here, Heather was engaged in emerging literacy as she told her stories. She was familiarizing herself with print as she pretended to read from the book. By having books in the classroom, Miss Sharon provided options for language (checkpoint 2.2) and she provided options for optimizing individual choice and autonomy as Heather chose to pretend read a book during free play (checkpoint 7.1). Another example from Miss Sharon's class on emerging numeracy can be seen when during free play, Zoe and Emily poured out fish manipulatives in a play sink and one child was using a wooden stick (see Figure 21). Zoe said she was making fish stew. They proceeded to remove fish such as sharks and octopuses because they will not be good in their stew. Here children were engaged in sorting. By providing options for recruiting interest (checkpoint 7) through free play period and providing options for varied resources (checkpoint 8), Zoe together with Emily were able to express their knowledge about sorting by making stew (checkpoint 5.2). Therefore, the three

principles are interconnected, especially when the teacher had thoughtfully set up playful opportunities for the children to learn.

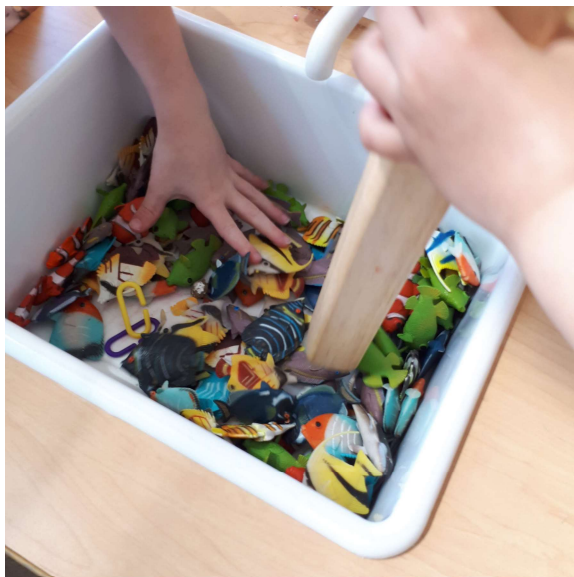


Figure 21: Zoe and Emily's Fish Stew (checkpoints 7, 8, & 5.2)

I noticed that the three teachers believed that encouraging emerging literacy skills was important. The three teachers often encouraged the children to use their sounds to make words. For example, writing can be “ritin” or Lego can be “legow”. The children were also encouraged to write their names on their work, which I believe develops a child’s connection to literacy.

Literacy and numeracy were integrated within the classroom environment. There are materials and resources provided in the different areas in the classroom to extend and enhance literacy and numeracy. There are books, games, manipulatives, and play areas all equipped to encourage conversations, interactions around literacy and numeracy. For example, the children in Miss Suzan’s class played, Hi-Ho Cheery Oh, a numeracy board game on one occasion. The children often write stories, draw, play jigsaw puzzles, sort manipulatives, use words during their play and all these are

geared towards extending literacy and numeracy skills. There are prints everywhere, letters of the alphabet, numbers on the walls. The numbers and letters are displayed in a way that is accessible to the children (checkpoints 1.1, & 1.2). For example, Miss Suzan has the alphabet at the bottom of the wall (Figure 22 demonstrates checkpoints 1.1, & 1.2). One day, Kim touched the letters and read them out loud (checkpoints 4.1). The teacher was surprised that Kim could say her alphabet because prior to this moment, Miss Suzan had problems assessing her. If Miss Suzan had not placed the alphabet letters boldly written at the bottom of the wall, she may have missed Kim's knowledge of the alphabets and Kim would not have been physically able to touch the alphabet letters as she read them out loud. There are materials and resources provided in the different areas in the classroom to extend and enhance children's literacy and numeracy (checkpoint 8.2). There are books, games, manipulatives, and play areas all equipped to encourage conversations and interactions around literacy and numeracy (checkpoint 1).



Figure 22: *Alphabets on the Wall in Miss Suzan's Class (Checkpoints 1.1, & 1.3)*

Teachers Stimulate Children's Activity and Talk Through 'Sustained Shared Thinking'

The universal design for learning guidelines encourage practitioners to provide options for perception (checkpoint 1); language and symbols (checkpoint 2); comprehension (checkpoint 3); physical action (checkpoint 4); expression and communication (checkpoint 5); recruiting interest (checkpoint 7), and self-regulation (checkpoint 9). The data revealed that all these checkpoints were represented in the practice of sustained shared thinking. There were different kinds of sustained shared thinking taking place in the observed kindergarten classrooms. The teachers encouraged self-regulation and social development; choices and independent play; and planned for small group and individual interactions in their classrooms.

An example of sustained shared thinking regarding building trust, confidence, and independence can be seen in the following vignette:

On one occasion when the children in Miss Sharon's class were preparing to go outside to play, she had a conversation with them about the rules. She asked them what a big problem was and what was a little problem. She would ask "Is tattling a big problem or a little problem?". The children responded, "Little problem". She asked, "Is your friend not wanting to play with you a little problem or a big problem?" The children answered, "Little problem". She then asked, "If your friend doesn't want to play with you what should you do?" One child said, "Play with someone else". Another child said, "Ask why" and Miss Sharon said, "That's good, it is good to ask what the problem is". Another child suggested "Play with yourself", and Miss Sharon asked the children, "Is it okay to be independent?" They responded yes. She gave an example of a big problem. She asked Samson what happened to him at lunch. He explained that someone tried to hit him at lunch. Miss Sharon continued, "Someone tried to hit him, and he told Miss and Miss reported the child to the principal. Now that is a big problem. Tell Miss the big problems because Miss wants to keep you safe."

In this vignette, Miss Sharon provided options for comprehension (checkpoint 3) by guiding information processing (checkpoint 3.3) by asking questions about big problems and little problems. She developed the children's knowledge of fostering collaboration and community (checkpoint 8.3) by agreeing with the child who said that you should ask why by adding that it is good to know what the problem is thereby providing instances for negotiation, which is necessary for social interactions. Also, Miss Sharon provided options for engagement (checkpoint 7) by letting the children know that it is not all the time someone will want to play with them and that that is okay. By doing this, Miss Sharon provided options to optimize individual choice and autonomy (checkpoint 7.1) as she shared ways needed for the children to build positive relationships and Samson was trying to optimize his individual choice and autonomy in how he plays and when his choices did not suit another child's desires he was threatened by another child. She was sharing that this was not acceptable to the school's expectations of respect of personal choices.

The teachers also supported and extended language and communication in several ways. Miss Suzan, for example, built curriculum around a two-week period to extend language and communications around Uziel's interest in sardines (checkpoint 7). She encouraged children to read and look up words in books about the sea and ocean (checkpoints 1 & 2). She had a conversation about the ocean and the colours of the ocean (checkpoints 1 & 2). Miss Suzan used food colouring to create dark water (checkpoint 1). She created a display wall where the children drew about the ocean and sea creatures (checkpoints 4, 5, & 6.3). She encouraged the children to use sticky notes to label their drawings (checkpoints 5.1, & 5.2).

In Miss Sharon's class, the children coloured their characters, which Miss Sharon had printed, cut, and pasted on a large sheet of paper (checkpoints 6, & 8.2). Each character had a speech bubble (see Figure 23). She encouraged the children to

write something that the comic character was saying in the speech bubble (checkpoints 1.1, 1.3, 3.1, 4.1, 5.1, 5.2, & 7). One child that had the Paw Patrol wanted to spell “Paw Patrol”; the teacher helped sound the letters out so that the child could spell what she wanted to say (checkpoint 2.1). One child’s Toopy character said “Yahoo” which he spelt as “euao”. He said when Toopy goes somewhere, such as, to his closet or under his bed he says, “Yahoo” (checkpoints 4.1, & 5.1). Miss Sharon reminded him that she kept singing the song “Toopy Binoo, Toopy and Binoo” the previous day (checkpoints 3.1 & 7). The child started singing the song as he continued to write. I believe that by having options to respond and communicate, the child that spelt yahoo as “euao” was able to express his knowledge about his cartoon character even though he had misspelt the word. By allowing him to not just write but verbalize his answer was a good way to assess his learning. Miss Sharon thoughtfully planned an activity around individual children’s interest, thereby supporting them in achieving higher cognitive levels. Miss Sharon told me that it was important to include children’s popular culture interests as they develop literacy skills.



Figure 23: Comic Activity (checkpoints 1.1, 1.3, 2.1, 3.1, 4.1, 5.1, 7.1, & 7.2)

The teachers supported learning and critical thinking by introducing new words, asking questions, and encouraging the children to share their ideas (checkpoints 2 & 3). For instance, as Miss Scarlet read the book *"If Rocks Could Sing"*, she began by asking the children, "Has there ever been a time when you went out playing, and you saw a rock that looked like a certain shape, or you saw a rock that looks like something other than a rock?" (checkpoint 3.1). One child said he had seen a rock that looked like an eye. She continued to engage them in questioning. Then, she proceeded to read the book (checkpoint 1). On the first page, there were rocks shaped in the letters of the alphabet, and the children sang the ABCs song as she pointed to each letter (checkpoints 3, 4.1, & 5.1). She suggested that when they go outside, they should look for rocks that are a little bit unique. For example, when

they got to Z, she asked, “Z is for? What number is this?”. The children said zero. Someone said, “Zero means no, just like in Numberjacks zero doesn’t like doing anything”. The teacher said, “Zero is really important. It’s not worth anything, but it means a lot”. Another child asked, “Why does zero mean no?” She answered, “Just think about it. If I gave you one dollar”, she wrote 1 on the board and asked, “What if I add a zero?”, she then wrote the 0 after the 1, and the children said 10. She enquired, “So isn’t that zero worth something? Zero is really important”. Another child said, “When you add another zero, we have 100” (checkpoint 3). Miss Scarlet was able to extend learning and critical thinking by asking questions, listening to the children’s responses, and extending their understanding of the number zero.

An example worth mentioning occurred in one of the centres in Miss Sharon’s class. Figure 24 demonstrates how one child at a centre formed the letters D, X, a, p, d, b. She was asking her centre mates why p, b, and d were different when they have similar shapes (checkpoints 2.1, 3.2, 3.3, & 5.2). Another child answered that they make different sounds (checkpoints 3.2 & 5.1). The other children were interested in looking at the alphabets. These children had achieved a level of zone of proximal development as they considered how the letters of the alphabet, although similar in shape, were different because of the sounds they make as they played around with manipulatives. This interaction and learning would not have occurred if the teacher had not intentionally set up opportunities for the children by engaging in playful teaching activities.



Figure 24: Manipulatives Centre (Checkpoints 4.1 & 5.2)

There Is A Mix of Both Teacher-Initiated and Child-Initiated Activities Throughout the Week

Given that all learners differ, therefore, there is not just one means of engagement that will be optimal for all learners. I observed that the teachers combined both teacher-initiated and child-initiated activities throughout the week. Most days, the teachers did activities around the centres before lunch, and after lunch, they allowed the children to engage in free play. After the children tidied up to get ready to leave, the teacher would play songs, stories, or other videos for the children to watch on the screen (checkpoint 1). In Miss Suzan's class, Mondays were typically filled with child-initiated activities to allow children to re-acquaint themselves with one another, alongside the classroom routines because she believed that they

spend most of their time at home in front of screens with little, or no social interactions (checkpoints 7, 8.3, & 9).

Teacher-initiated activities included the news sharing during circle time when the teacher and children shared their news (checkpoints 7, 8.1, 8.3, & 5.1). The teacher's circle time was an opportunity to check on the children's socio-emotional health. The children were allowed to share about things that interested them, such as what they did over the weekend. It was also an avenue for children to learn social skills because they learned to listen to others and wait their turn. The teachers also used the circle time to go through the day's routine to provide some form of structure for the children. Teachers set up centres in which the children participated in activities (checkpoints 1, 2, 4, 5, 7, 8, & 9). In these centres, teachers provided opportunities for information on curriculum content to be displayed in ways children can connect to curriculum content in enjoyable ways. For example, the water centre facilitated children's understanding on words such as 'more than' and 'less than', and taught children about capacity, and different sizes of containers by using a smaller container to fill a bigger container. Furthermore, teacher-initiated activities included reading storybooks (checkpoints 1, 2, & 3), playing select video content to engage the children (checkpoints 1, 2, & 3), at times encouraging children to look for items outside the school such as sticks and rocks related to curriculum content explored in class (checkpoints 4, 5, & 6), and encouraging children to tidy up after play (checkpoint 8.1).

Child-initiated activities mostly occurred during free play both indoors and outdoors when the children could choose what, who, and how they wanted to play (checkpoint 7). These activities included pretend play, writing, drawing, and reading. At times, at the children's request, the teacher would play a video on the screen or play a story that the children were interested in hearing.

The teachers in this study provided opportunities for teacher-directed and child-initiated activities in their classroom. In their interviews, the teachers expressed that balancing child-initiated activities and teacher-directed activities was easy because they still operated a half-day kindergarten curriculum in a full-day school schedule kindergarten. Nonetheless, Miss Suzan acknowledged that it is more work as she must constantly consult the curriculum document to ensure that she is meeting curriculum outcomes (checkpoint 6). The teachers also agreed that learning is more meaningful to the children when it is geared towards their interests (checkpoint 7). The three teachers said, although they prefer teaching through play, there is also a place for direct instruction (checkpoint 1). For example, Miss Sharon said, “I think not often do children come across like letters sounds, that is, the phonemes of words, and I think that sometimes we need small amounts of direct instruction for that”.

When the children were asked about their favourite and least favourite activities through drawings, there were mixed responses (as the children included both child-initiated and teacher-directed activities, although child-initiated activities seem to slightly prevail). For example, five of the children (Kate, Eddy, Chase, Alexa, and Samson), in Miss Sharon’s class, like to play with iPads. Eddy said he likes the iPad because he learns about letters, colours, and plays games (see Figure 25) (checkpoint 1, 7). This may be considered as a teacher-directed activity because Miss Sharon usually allows the children to use the iPads, in the tech centre, as part of their classroom activities. It is possible that these children drew that they like using the iPad because children are drawn to screens for various reasons. However, the kindergarten classroom provides options for children to engage in various forms of play which may not necessarily involve screens.



Figure 25: Ethan's Drawing of His Favourite Activity (Checkpoints 1&7)

There Is A Mix of Large Group, Small Group as well as Individual Learning and Child-Initiated Activities

Children engage with learning in different ways; therefore, it is important to provide options that can accommodate diverse learners (principle of engagement). This also means that the practitioners need to thoughtfully provide opportunities that support planning and strategy development (checkpoint 6). For the observed period, there was a mixture of large group, small group, individual learning, and child-initiated activities.

Large group activities usually occurred during whole class instructions. In a child-centred approach, children are encouraged to engage in conversations,

elaborate on their thoughts, and participate in small group activities that encourage peer interactions. The teachers, in this study, usually read storybooks or instructions books to the whole class before asking them to engage in smaller or individual group activities. Miss Suzan read the *Black Dot* book to the classroom before asking them to use black dots to create artefacts in a centre (checkpoints 1, 2, 4.1, & 5.2), while Miss Scarlet read the book to the whole class and asked the children to work on individual projects (checkpoints 1, 2, 7, & 4.1). Four children in Miss Sharon's class drew and explained that they did not like circle time because it was boring, other children were talking, and it took too long because they wanted to play. Miss Sharon explained to me that she uses the circle time to give whole group instructions. She was surprised that they did not like it and said she would try to look for a better way to approach circle time in the next school year. A fundamental idea of universal design for learning is to minimize barriers that may hinder optimal learning. In this case, some children considered circle time as a barrier rather than an option for engagement. If the children had not been given the opportunity to use drawings to express their feelings, the teacher would have continued to assume that all the children in her classroom benefited from circle time. Large group activities can also include two classes coming together for an activity (checkpoint 8.3). For example, on one occasion, Miss Scarlet's and Miss Sharon's classes came together for free play. At another time, Miss Sharon's and Miss Suzan's classes were combined for a movie activity.

Small group activities were usually achieved through the centres where a small number of children work together. For example, the MathLink cube activity where children would roll the dice and add corresponding cubes along a rectangular object needs a minimum of two children (checkpoints 1, 2, 3, 5.2, & 8). This activity was shared in both Miss Scarlet's and Miss Suzan's classes. In Miss Sharon's class,

she had a slapping centre. She had written all the words that the children needed to learn boldly on two large sheets of paper stapled together. The children were to take turns calling out the words, while their centre mates used a long plastic hand to slap on the word once recognized (checkpoints 1, 2.1, 2.5, 4.1, 8, & 9). These activities foster collaboration, self-regulation, meeting curriculum goals, customizing the display of information, illustrating language and symbols through multiple media, and highlighting patterns and relationships. In addition to providing options in which children can express what they know in a playful manner.

Individual learning occurred in different ways, such as learning individually at their centres (checkpoints 7 & 9). For example, children sorted manipulatives individually in the sorting centre set up by Miss Scarlet. Children in Miss Sharon's and Miss Suzan's classes learned individually at the tech centre because the chrome book could only be used by one child at a time, even though there were three to four children at the centre. For example, at the comic centre set up by Miss Sharon, she used each child's favourite comic to set up the centre. Each child knew which comic they had selected and were responsible for writing words in the speech bubble of their comics. Although there were about four children at the centre, each child worked on their comic individually.

Child-initiated activities were achieved mainly through free play indoors and outdoors. Most of the time, the teacher would tell the children that all the centres were open for play, and that the materials were available for their use. In Miss Suzan's class, the children joined Uziel in his interest in sardines, which led to learning about the sea and ocean by the whole class.

Discussion

Students Are Provided Extended Periods of Play

The purpose of this study was to explore how play-based learning was implemented in some classrooms in St. John's. The findings support the universal design for learning guidelines, as well as the work of Froebel (1896), Moyles (1989; 2010), and Vygotsky (1978) because as children engaged in either teacher-directed or child-initiated play, they demonstrated social interactions which were used to explain learning and relationship building with their peers, to regulate their interactions, and to express what they had heard or learned in school. Pretend play was a major influence as children navigated their play with others and themselves, especially regarding turn-taking, sharing, and symbolism which is necessary for literacy and numeracy skills (Lillard, 2017; Moyles, 1989, 2012; Piaget, 1962). According to the teachers, providing opportunities for the children to play was not challenging as they were still using a half-day kindergarten curriculum within the full-day schedule. Miss Scarlet believed that when children play, it provides a deeper insight into the child's personality and current knowledge, which may be missed if they were not given opportunities to play, which is what Froebel, Vygotsky, and Moyles explain in their work. By providing multiple means of engagement, representation, as well as action and expression (CAST, 2018) through play, the teachers were able to engage the children which in turn made their learning more authentic and meaningful. Children also had other ways of expressing their knowledge through drawings, writing, speaking, and other tactile means.

The findings support the reason provided by the Newfoundland and Labrador government for why they were encouraging play-based learning, as some children do not have play opportunities at home and may have difficulty engaging in pretend play because they may spend most of their time in front of screens or participate in adult

organized activities (Newfoundland & Labrador, Department of Education & Early Childhood Development, 2016). The teachers identified children's socialization skills as presenting both benefits and challenges of play-based learning. The teachers said that play-based learning was beneficial in helping the children learn social skills, but it also posed a challenge as some of the children at the beginning of the school year had no prior experience with playing outside or with others, because most of their time was spent indoors watching television. The teachers also said some parents could not afford to pay for their children to attend day-care centres that may help them play with other children. Two of the teachers recommended that the Newfoundland and Labrador government make it compulsory for children starting kindergarten to have had prior socialization experiences through pre-school or day-care. The KinderStart program was developed by the Newfoundland and Labrador government to help young children transition into kindergarten. Young children are expected to register for KinderStart a year prior to beginning kindergarten. Perhaps, the government needs to create more awareness about the program.

Literacy and Numeracy are Integrated into Every of Learning and The Environment

As suggested by Morrow and Rand (1991), and Newfoundland, Department of Education (2010), numeracy and literacy were integrated into every area of learning and the classroom environment in the three observed classrooms. This aligns with universal design for learning guidelines of providing options for perceptions, as not all children process information the same (CAST, 2018). The centres, videos, activities, and even the free play periods were set up to provide children with opportunities to develop literacy and numeracy skills. Children were encouraged to write stories in their mini books. They were encouraged to play board games, put together jigsaw puzzles, label their drawings, and sign their drawings. Miss Suzan created a display

board on the wall, where children were encouraged to draw things about the sea, including sea creatures, and provided sticky notes to label their drawings. The teachers in the three classrooms encouraged children to use phonics to spell words. For instance, Angel spelled writing as 'ritin'.

Teachers Stimulate Children's Activity and Talk through Sustained Shared Thinking

There were multiple instances of sustained shared thinking occurring between the teachers and children and amongst children. As suggested by Siraj et al. (2015), both parties must contribute to thinking, and it must develop and extend for sustained shared thinking to happen. Sustained shared thinking also supports children in achieving higher levels of cognition (Brodie, 2016). At times, sustained shared thinking occurred when the teachers were going through the rules of playing outside, when they were teaching new concepts, or when they were checking the social and emotional wellbeing of the children. Sustained shared thinking happened between children when they were playing or working at their centres. For example, a child at a centre formed the letters D, X, a, p, d, b. She was asking her centre mates why p, b, and d were different when they have similar shapes. Another child answered that they make different sounds. The other children were interested in looking at the alphabets. These children had achieved a level of ZPD (Vygotsky, 1978) as they considered how the letters of the alphabet, although similar in shape, were different because of the sounds they make as they played around with manipulatives. By providing options for perception, language and symbols, and comprehension through this centre, Miss Sharon had set up opportunities for her children to express what they know and to help one another. The teachers in this study provided options for recruiting interest, sustaining efforts and persistence, self-regulation, perception, language and symbols, comprehension, physical action, expression and

communication, and executive functions (CAST, 2018), and these allowed for sustained shared thinking to occur.

There Is A Mix of Teacher-Initiated and Child-Initiated Activities

The teachers in this study managed to balance teacher-directed activities and child-centred activities. Most of the teacher-directed activities were accomplished in enjoyable and fun ways, as suggested by Moyles' (2010) playful pedagogy. The teachers also used activities that made learning meaningful and experiential (Miller & Almon, 2009), such as encouraging children to dance and clap to songs and reading storybooks in engaging ways. The teachers allowed children to explore, inquire, and play. Children were encouraged to engage in conversations, elaborate on their thoughts, and participate in small group activities that encouraged peer interactions (Lerkkanen et al., 2012).

There Is A Mix of Large Group, Small Group as well as Individual Learning and Child-Initiated Activities

As recommended by Newfoundland and Labrador, Department of Education and Early Childhood Development (2016), there was a mixture of large group, small group, individual learning, and child-initiated activities. The teachers in the class were able to balance these different groups. When I interviewed some of the children in Miss Sharon's class about their drawings, four of the children mentioned that they did not like circle time. This demonstrates that some activities that the teacher may consider beneficial are not enjoyable to all learners (CAST, 2018). Therefore, it is important to have varied means of teaching and learning to ensure that diverse learners are accommodated.

The findings in this study suggest that the three teachers did not experience the same challenge identified by Hoskin and Smedley (2019), which is insufficient

time to provide opportunities for children to learn through play. The teachers in this study had enough time to provide opportunities for play, whether through free play or teacher-directed play. The teachers in this study did not share the challenge of perceiving play and learning as separate domains, which affects kindergarten teachers' implementation of play-based learning as suggested by previous researchers (Bulunuz, 2013; Lynch, 2014; Lynch, 2015; Pyle & Bigelow, 2015; Scharer, 2017). On the contrary, my findings suggest that because these teachers believe that play and learning are interconnected, they thoughtfully created play opportunities to enhance and extend learning.

Although the teachers in this study to a large extent implement play-based learning, there remains a gap between the theory, policy, and practice of play-based learning (Bulunuz, 2013; Fesseha & Pyle, 2016; Scharer, 2017). My findings suggest that the teachers may benefit from more ongoing professional development. For instance, how to trust in the process that children engage as they play rather than focus on the end product that results from their play or how to further assess learning that occurs when children are playing. The teachers said they would like to have more professional development/learning, space, varied resources and materials, and professional assistance (early childhood educator) in the classroom.

Conclusion

Universal design for learning is a useful framework for the implementation of play-based learning as its guidelines provide practical checkpoints, which teachers can use to reflect upon in their practice. Although the three teachers in my study did not have difficulty implementing play-based learning due to insufficient time, further research needs to be conducted to explore whether other kindergarten teachers experience this challenge of not enough time in a Newfoundland and Labrador context. Research also needs to be conducted in French immersion kindergarten

classrooms. In addition, further research on the other practices outlined as play-based pedagogy, such as teachers' practice of documentation and reflective practice; teachers' use of the physical environment, both indoors and outdoors, to provoke, extend, and enhance learning; and teachers' use of observation and conversation as the basis for their documentation of learning in the classroom, needs to be more closely observed. A study that observes the implementation of play-based learning from the beginning of the school year to its end may be beneficial. The Newfoundland and Labrador government should consider providing continuous professional development to facilitate the implementation of play-based learning in full-day kindergarten classrooms, as it is a beneficial way to meet curriculum goals as this study has demonstrated.

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Chapter Five

Children's Perceptions of Kindergarten in Three Kindergarten Classrooms in St. John's

Abstract

Young children who are between the ages of 4 and 5 are required to attend full-day kindergarten in Newfoundland and Labrador, Canada. The delivery of the kindergarten curriculum is through play-based learning. This study explored kindergarten children's experiences with play and learning in St. John's, Newfoundland and Labrador, through a framework of universal design for learning. The study focused on three English kindergarten classrooms in one elementary school. Over the period of one month, the researcher conducted semi-structured interviews, direct observations, and collected drawings and photographs as the primary data collection methods for investigating kindergarten children's learning in these three classrooms. The findings illustrate that although children enjoy playing and believe that they learn when they play, they found it difficult to reconcile play and learning as one and the same.

Keywords: Play-based learning, play, learning, full-day kindergarten, kindergarten children, universal design for learning

Introduction

The inspiration to include kindergarten children in this study, which explores Kindergarten children's perspectives on play and learning in St. John's, can be partially attributed to the work of Pyle and Alaca (2018) and Pyle and Bigelow (2015) in kindergarten classrooms in Ontario. Pyle and Bigelow (2015) conducted a qualitative study, which employed in depth interviews and classroom observations as data collection methods to explore how play-based learning was implemented in three public kindergarten classrooms in one school in Ontario. This included collecting data through observations and semi-structured interviews from children in small groups of two and four, who were participating in a photo elicitation interview protocol that focused on their views on play. Pyle and Bigelow posed questions in their study to the children such as, "What do you play in kindergarten?"; "Do you learn anything while you are playing"; and "Are playing and learning the same or different?". These interview responses culminated in the creation of a book about kindergarten written by Pyle in 2013.

In Pyle and Bigelow's (2015) study, the children's perspectives were integrated with that of their teachers. The findings from their study revealed that there were three class profiles of play-based learning approaches: "play as peripheral to learning", "play as a vehicle for social and emotional development, and "play as a vehicle for academic learning" (Pyle & Bigelow, 2015). These profiles were created based on the teacher's opinion on educational purpose. In addition, the teachers and students shared perspectives on the role of play in a kindergarten learning environment, the enactment of play within each classroom, and the role of the teacher in play. Consequently, each teacher's implementation of play-based learning influenced the children's perspective on play in the classroom. For example, the students, with the teacher who perceived play to be peripheral to learning, described

the development of academic skills as fundamental, which was also reflected in their photographs that captured their participation in academic learning activities such as sight words display and samples of their writing (Pyle & Bigelow, 2015). Hence, these children viewed play as a break from learning.

An extension of Pyle and Bigelow's work was conducted by Pyle and Alaca (2018). This qualitative study focused on 134 full-day kindergarten children's opinions on play and learning in Ontario. The findings suggest that children's perspectives on the connectedness of play and learning were impacted by the classroom environment and their teacher's presence during play. Children who believed that play and learning were connected were in classroom environments where different types of play were employed, and where teachers often participate in the children's play. A good example of this will be teachers participating in play-based centres. Whereas children who expressed there was a dichotomy between play and learning belonged to classroom environments where the teacher often differentiates between play and learning activities and rarely participates in children's play. An example of this is when the teacher withdraws some children during free play to focus on their literacy or numeracy skills (Pyle and Alaca, 2018). This idea aligns with the findings from Australian researchers, Theobald et al. (2015) who investigated pre-schoolers' perceptions of play and learning in school. Their findings reveal that the children's perception of play contrasted with the ideas of the adults on play. That is, children in their study associated play with activities that they had autonomy and agency, while activities where the teachers were involved were described as learning. According to Peter Gray in an ECETP (2018) interview and Hewes (2018), characteristics of play are that it is self-chosen and self-directed, intrinsically motivating, more process focused than product focused, structured by the child or children, and it is

imaginative. This explains why children regard play as activities that allow them to have individual choice and autonomy.

This study focused on the perspectives of kindergarten children on their play and learning experiences in full-day kindergarten, in St. John's, Newfoundland and Labrador. Although research has been conducted on the opinions of full-day kindergarten children in Ontario regarding play, little research has been conducted concerning children in Newfoundland and Labrador, who may have different experiences. This is because what is obtainable in one context, may not necessarily reflect other contexts. For example, the support of the school's leadership staff may affect how teachers implement play-based learning in their classroom in St. John's, which may influence how children view play. The literature review, below, discusses studies that focus on play-based kindergarten experience such as Froebel (1896), Manning (2015), and the Newfoundland and Labrador kindergarten curriculum document. Also, studies such as Bulunuz, (2013) and Scharer (2017) identify the perceived dichotomy between play and learning as an issue with some kindergarten teachers. Another issue highlighted by Danniels and Pyle (2018) is the debate on whether to implement child-initiated play or teacher-directed play for the benefit of the child. This will also be discussed below. These studies are discussed following a description of universal design for learning as this serves as a theoretical framework in which the literature is understood.

This study explores the implementation of play-based learning in three full-day kindergarten classrooms in St. John's, and employed universal design for learning as a framework to examine *young children's experiences and perceptions of play and learning in three full-day kindergarten classrooms in St. John's*.

Theoretical Framework: Universal Design for Learning

Universal Design for Learning is an educational approach that emphasizes the importance of understanding the needs, interests, abilities, and experiences of diverse learners (Brillante & Nemeth, 2018; CAST, 2018). Universal design for learning encourages practitioners to provide multiple means of engagement, representation, as well as action and expression to produce expert learners, while anticipating and minimizing barriers to learning (see Table 7). These expert learners are to be purposeful and motivated, resourceful and knowledgeable, and strategic and goal directed (CAST, 2018). Brillante and Nemeth (2018) believe that engagement should include children's interests, as well as their behaviours in the classrooms. As I consider kindergarten children's experiences with play and learning in the context of a full-day kindergarten, it is important to understand what these children consider engaging and what they consider barriers to their learning. Employing universal design for learning as a framework contributes to the current literature on universal design for learning and play-based learning as it focuses on children's perspectives on how they view play and learning regarding recruiting their interest, social interactions, self-regulation, processing and understanding information, and how they communicate what they know. There is little research combining universal design for learning and play-based learning as frameworks that can work in tandem in implementing teaching and learning practices that can enhance and extend children's learning.

Table 7: Universal Design for Learning Guidelines (Practical Examples)

	Provide multiple means of Engagement	Provide multiple means of Representation	Provide multiple means of Action & Expression
Access	<p>Provide options for Recruiting Interest (guideline7)</p> <p>Allowing children to choose activities that interest them. For example, creating inventions.</p> <p>Allow children choose who, when, and how they want to play</p> <p>Use strategies like writing a story to develop literacy skills</p> <p>Ensure there is no bullying</p> <p>Ensuring that play areas are safe</p>	<p>Provide options for Perception (guideline1)</p> <p>Provide options in the form of visual and auditory information. For example, YouTube Videos.</p> <p>Use comics that each individual child prefers to help them with their literacy skills.</p> <p>Allow the children to use the iPad to access numeracy and literacy lessons</p> <p>Displaying charts to teach children about different techniques to manage their emotions</p>	<p>Provide options for Physical Action (guideline4)</p> <p>Children should be allowed to touch alphabets or numbers to show their learning.</p> <p>Children should have access to writing materials such as crayons, pencils, paper</p> <p>Children can use technology apps to show their learning.</p>
Build	<p>Provide options for Sustaining Effort & Persistence (guideline8)</p> <p>Providing varying resources such as blocks, dominos, baby dolls, manipulatives, and books</p> <p>Playing with friends</p> <p>Allowing apps that provide feedback</p>	<p>Provide options for Language & Symbols (guideline2)</p> <p>Children using phonics when they want to spell</p> <p>Displaying words around the classroom, on the walls and in the dramatic play area.</p> <p>Labelling items</p> <p>Using games to teach numeracy skills</p> <p>Using vocabulary that the children may not be aware of, such as baseline, patterns, capacity</p> <p>Using the smartboard, in addition to the whiteboard</p>	<p>Provide options for Expression & Communication (guideline5)</p> <p>Children can express their learning through apps</p> <p>Allowing children to use drawings to communicate</p> <p>Providing blocks, such as Legos to allow children discuss patterns, numbers, and colours</p> <p>Providing options such as storytelling to communicate literacy skills</p>
Internalize	<p>Provide options for Self Regulation (guideline9)</p> <p>Learning to identify and regulate their emotions, such as frustration and anger</p> <p>Learning to wait their turn</p>	<p>Provide options for Comprehension (guideline3)</p> <p>Ask children questions about whether they have experienced something related to the book</p> <p>Hold the book, and point to items, or numbers and have the children participate</p> <p>Tell them to look for items such as sticks or rocks that are unique when they go outdoors</p>	<p>Provide options for Executive Functions (guideline6)</p> <p>Children planning how they want to deal with an emotion</p> <p>Placing information, which are accessible to the children</p> <p>Regularly addressing reading strategies</p>

Adapted from CAST (2018). *Universal design for learning guidelines version 2.2 [graphic organizer]*. Wakefield, MA: Author.

Literature Review

Researching children's perspectives on education is particularly important in Newfoundland and Labrador as the province recently transitioned from half-day kindergarten to full-day kindergarten in 2016. The delivery of this new curriculum is through play-based learning in full-day kindergarten. Historically, early childhood theorists such as Froebel (1896) advocated for the inclusion of play in children's education. For Froebel, play is the natural disposition of a child and is a child's way of working and growing. Play makes learning more authentic and meaningful. Therefore, through play experiences, learning can be enhanced at school (Froebel, 1896; Manning, 2015). More recently, play-based learning was defined by Danniels and Pyle (2018) as "essentially to learn while at play" (p. 1). Newfoundland and Labrador, Department of Education and Early Childhood Development (2016) define play-based learning as:

An approach where the teacher recognizes that children learn through an active, hands-on, playful environment. In a play-based classroom, the teacher makes decisions about and adjusts the daily schedule, the environment, the materials, interactions and activities based upon the strengths, needs, interests, and input of the students in the classroom, as required, to enhance learning opportunities (p. 35).

However, little is known about the implementation of play-based learning in full-day kindergarten in Newfoundland and Labrador, including children's views on how play-based learning affects them, particularly through a universal design for learning lens. The universal design for learning framework encourages practitioners to use multiple means of engagement, representation, and action and expression to meet the learning needs of diverse learners with varying backgrounds, interests, abilities, and needs (CAST, 2018). Accordingly, research should examine activities that children consider engaging, what resources and materials are relevant to them,

ways in which they think curriculum content is being represented to them and examine activities they feel offer them ways to communicate and express their learning and opinions. Research needs to examine whether children recognize that they are learning, as teachers intentionally set up the playful learning opportunities for them to engage with materials and the environment to meet curriculum goals. The goal of the universal design for learning framework is to anticipate and minimize barriers to learning (CAST, 2018). Thus, research needs to be conducted on the barriers children experience in full-day kindergarten that may minimize their learning experience.

One challenge identified in the literature is that there is a perceived dichotomy between play and learning (Bulunuz, 2013; Lynch, 2014; Lynch, 2015; Pyle & Bigelow, 2015; Scharer, 2017). Scharer (2017) notes that prospective British Columbia early childhood education teachers were concerned that parents would not view play as a means of instructing curriculum content. Therefore, it would be difficult for them to implement play-based learning, as play and learning are perceived as different. Consequently, this study aims to explore whether kindergarten children perceive this dichotomy between play and learning. As Pyle and Alaca (2018) and Pyle and Bigelow's (2015) study suggest, children's view on play may be influenced by how the teacher engages with and implements play within each classroom.

There is a debate about what type of play is beneficial to the child (Danniels & Pyle, 2018). Researchers who advocate for child-initiated play argue that it benefits children's development, while researchers that support teacher-directed play maintain that it enhances academic skills (Danniels & Pyle, 2018). Activities are planned by the teacher, in teacher-directed play, to instruct children concerning specific concepts (Education and Early Childhood Development, 2016; Moyles, 1989), while in child-initiated play, children exercise autonomy in their play, particularly, pretend play

(Education and Early Childhood Development, 2016; Moyles, 1989; 2010). Miller and Almon's (2009) report, for the United States of America, Alliance for Childhood, recommend that a healthy kindergarten classroom should maintain a balance between child-initiated play and teacher-directed play to aid children in their exploration of the world. This in turn promotes learning that is rich, focused, and experiential. Regarding the recommendation of Miller and Almon (2009), a balanced kindergarten classroom in St. John's should have both teacher-directed play and child-initiated play.

Given that diverse learners perceive and process information in different ways, options should be provided to allow information to be represented through multiple means. This can be achieved through the design of the physical environment (CAST, 2018). Consequently, classroom environments should be designed to support and encourage play because it provides the ideal context for children to practice, elaborate, and extend emergent literacy and numeracy skills such as numbers, letters, and patterns. That is, classrooms need to be arranged in a way that promotes play. According to Education and Early Childhood Development (2016), "a well-designed, play-based classroom is like having another teacher in the room" (para. 10). As such, a careful selection of classroom materials is essential to instructional success, particularly concerning the themes being studied (Morrow & Rand, 1991; Newfoundland. Department of Education, 2010). Therefore, a kindergarten classroom in St. John's should be organized in a manner that promotes play and provides children access to materials and resources that maximize their learning, while minimizing barriers. For instance, placing materials/resources within children's reach to promote independence.

Methodology

Young children's views can be noticeable or invisible, depending on the lens employed by adults (Clark, 2007). A fundamental tenet of the Mosaic Approach proposed by Clark (2007; 2017) is that children are capable beings who have a unique way of expressing their experiences. In light of this, I chose to regard young children as experts in matters concerning their play and learning in kindergarten. Therefore, this study is situated within an interpretative/subjective qualitative research paradigm (Leavy, 2017), as it explores some kindergarten children's play and learning experiences in three full-day kindergarten classrooms in St. John's, Newfoundland and Labrador. In qualitative research, data collection methods are considered as subjective and open to multiple interpretations. As such, qualitative data is context-specific and rich in meaning (Cohen et al., 2017; Creswell, 2014). As the researcher, I decide what data collection methods to employ and what type of data to collect from the children. For example, what drawings the children should produce and what questions to ask. In addition, the findings cannot be generalized to a larger population because it is about some kindergarten children's play and learning experiences, in three classrooms, in one elementary school, in St. John's, which as the universal design for learning approach maintains may be different from that of other children.

Yin (2009) recommends using a case study design to investigate contemporary events where the researcher is not able to manipulate the relevant behaviours. It is also a design used by researchers from disciplines that work with children because it affords flexibility in the way the research project is conducted as the researcher employs various data collection methods (Greig et al., 2013). This study used a multi-case studies design because it involved using more than one site (Merriam, 1998; Merriam, 2009; Yin, 2009), that is, three kindergarten classrooms.

Multi-case studies are robust because they compare different cases to provide in-depth insight into a phenomenon (Creswell, 2014; Yin, 2009). The multi-case studies design provided useful insight on children's play and learning experiences through the implementation of play-based learning, which is a contemporary educational event, in three kindergarten classrooms in a school in St. John's, Newfoundland and Labrador.

Consent, Access, and Human Participants Protection

Children are considered a vulnerable population. Therefore, special attention is needed when doing research with them. Ethics approval to conduct this study was obtained from the Interdisciplinary Committee on Ethics in Human Research (ICEHR) and from the Newfoundland and Labrador English School District (NLESD). The kindergarten teachers were provided with recruitment letters, information letters, and informed consent for themselves and their students (Creswell, 2014; Leavy, 2017). The children in the three classrooms had consent from their parents/guardians to participate in this study. Children indicated their assent at each point of the data collection. The participants in this study were granted confidentiality and anonymity (Leavy, 2017). Pseudonyms were given to the school and to the children. Any identifying features such as names on the children's drawings were redacted. I transcribed the interview transcripts of the children to ensure confidentiality. I ensured that no harm came to the children during data collection (Creswell, 2014; Leavy, 2017).

The Setting

An English/French Immersion elementary school in the Avalon East regional zone, St. John's, Newfoundland and Labrador served as the research setting. The school's population is approximately 540 students, with a majority of them

participating in the breakfast and lunch program. The school has a varied racial composition but is nevertheless predominantly Caucasian. Purposeful sampling was used to select the setting as play-based learning was implemented in a full-day kindergarten context. Three English kindergarten classrooms in the school served as my study sites. The principal of this elementary school was supportive of play-based pedagogy as he had attended some conferences about Reggio Emilia practices. There was no prior relationship with the school or the participants, which was beneficial in avoiding potential researcher bias (Yin, 2009).

In regard to the classroom environment, the three classrooms have similar shapes, and they are organized into different areas. The classes are sectioned into areas such as reading, kitchen, block, rug, and writing areas. The classes have tables and chairs for the children, and they have large rugs where children can sit. The teachers' corners include a desk, a computer, a filing cabinet, and a space where they can store their possessions. Each area has physical boundaries although these boundaries are sometimes moved. There are different shelves for storage. Materials and resources are placed in such a way that they are accessible to the children (pencils, crayons, and papers are placed within reach). Each classroom has a smart board and a computer. Children's work and cut out alphabets and numbers are displayed on the walls and boards. The washrooms are accessible within each classroom. Nevertheless, there are some differences. For example, Miss Scarlet's class has a garden area, while Miss Suzan's class has a calming area. Additionally, the children's tables in the three classrooms are different in shape. For example, the tables in Miss Scarlet's class are shaped like trapezoids. There were sixteen children in Miss Scarlet's class, fourteen children in Miss Sharon's class, and eleven children in Miss Suzan's class.

It is important to include the voices of children as play-based learning directly concerns them. Clark (2001; 2007; 2017) recommends using a Mosaic Approach to help listen to children's varying perspectives on issues that pertain to them. That is, employing different data collection methods to accommodate diverse ways children communicate their ideas, in this case, their kindergarten experience. For Clark (2007; 2017), given that children are active participants, they should therefore play active roles in the research process. Clark links this idea to the right of children to express themselves on matters that affect them as stated in the United Nations Conventions on Rights of the Child. I will further extend this notion of children being active participants to the notions of universal design for learning, which maintains that children should be provided with opportunities to express what they know by having options for physical action, expression and communication, and executive functions (CAST, 2018). The Mosaic approach involves gathering information from different sources to create a complete picture of children's perspective (Clark, 2007; 2017). This means drawing from different sources such as observations, interviews, drawings, and photographs to create a complete picture of some kindergarten children's play and learning experiences.

Data Collection Methods

As suggested by the universal design for learning framework (CAST, 2018) and in the works of Clark (2001; 2007; 2017), I thought it necessary to gather several sources of data to understand some kindergarten children's experiences. This not only included how the children might express themselves, but how I, as a researcher, may be able to represent my research ideas to the children to help them comprehend what the study was about, and to help them engage in the research process. Greig et al. (2013) recommend that researchers enter the world in which children are familiar with to help them not to feel overwhelmed during the research process. I decided to

hold off on interviews and drawing activities until the children were comfortable with me. This I achieved by showing up daily in their classrooms and participating in their activities both indoors and outdoors. I learned the name of every child and tried to get to know them to establish some form of relationship.

As a researcher, I considered the dynamics of power because of my position (Leavy, 2017). Therefore, it is important to account for how I came to collect useful insights in this study. I asked individual children for permission before I interviewed them. For example, two children told me that they were not interested in being interviewed, and I did not insist on their participation. During the interviews, if a child responded “I don’t know” to any of the questions, I did not probe any further. In Miss Suzan’s class, she was absent on the day we were to do the drawing activity. The children were more familiar with me than the substitute teacher. Miss Suzan had scheduled the drawing activity as part of the children’s learning centre activity, that is, a group of children move from one activity to the next until they have participated in all the activities. However, I chose to ask children that were interested to participate in the activity rather than the whole class. Five of the eleven children in the class participated.

I also accounted for reflexivity in this study by including children’s voices. As Leavy (2017) suggests that being attentive to the issues of voices is a necessary step in engaging in reflexive practice. For this study, the voices of children were listened to through their interviews and drawing activities. I have attempted to accurately represent what they had to say. My intention is to honour their voices. Therefore, data collection methods included direct observations, semi-structured interviews reported verbatim, drawings, and photographs.

Direct Observation.

Direct observation was used to collect data concerning the children's play and learning experiences. As a case study should occur in the natural context of the case (Yin, 2009), I directly observed how the children carried out their activities throughout the day. I arrived at 9:30 am every day and left by 3:00 pm resulting in about ninety hours of observation. This allowed me to understand their daily routines. For example, I would join them on the rug for their daily news and share my news for the day. Initially, my plan was to observe the same classroom for a week, then move on to the next. However, I rotated and observed Miss Scarlet's class one day and Miss Suzan's class the next day before proceeding to observe Miss Sharon's class. This was partly because the children invited me to be a part of their learning experience in their classrooms.

Although my research focus was on what occurred within the home classroom, I followed the children to music, gym, and outdoors. I was there during their additional playtime just after lunch and during recess. I recorded my observations on my phone because it was less bulky than carrying a large notebook around. I also took pictures with my phone to help me to recollect events. Once I got home, I wrote down a detailed account of the events of that day. The observations were intended to help me make sense of their drawings and interview responses. The observations helped me better understand the classroom environment.

Semi-Structured Interviews.

This study used semi-structured interviews to gather information from the children. The semi-structured interview was used to pursue a line of inquiry that was consistent with the research question and purpose while the children responded to the questions without restrictions (Cohen et al., 2017; Merriam, 2009; Yin, 2009).

Fifteen children from the three classrooms were asked questions: five from Miss Scarlet's classroom, six from Miss Sharon's, and four from Miss Suzan's classroom. Three questions were adapted from the work of Pyle and Bigelow (2015): "What do you play in kindergarten?"; "Do you learn anything while you are playing"; and "Are playing and learning the same or different?" (p. 387).

Greig et al. (2013) suggest that for children to feel comfortable during data collection, researchers should endeavour to enter the world which the children are familiar. For instance, they recommend the use of stories, drawing, dolls, sand, and puppets to help children participate in research. Initially, I planned to set up a news reporter desk area in the dramatic play area during their free play time to collect data. However, the noise level and classroom set up made it impossible to hear the children. As a result, the children were interviewed near the washroom with the door ajar, which is located within each classroom, as this area was quieter and provided a bit of privacy. My priority was getting to know the children, so I did not interview them until the end of the data collection process. By the second observation of their respective classroom, I knew each child by name, which helped assess their ability to engage in conversation. However, the interview process was conducted on my fourth observation of their classrooms. This, in turn, made for an easy interview process, as they had already become familiar with me. As suggested by Greig et al. (2013), I used simple and clear language, avoided leading questions, and helped them to understand the reason for the interview. For example, if a child responded, "I don't know", I did not probe any further. After interviewing children from Miss Suzan's class, the other children were made aware of the objective of the interview, as the children from Miss Suzan's class often went off topic. For instance, to counter this issue, I started with "Hello Ariel, thank you for agreeing to answer some questions. I will be asking you questions about play, learning, and school".

Younger children are suggested to do better when interviewed in small groups or in pairs (Greig et al., 2013; Pyle & Bigelow, 2015; Rengel, 2014). However, this was not the case in this study. I observed that children fared better when I interviewed them individually than in pairs, because they were not distracted by their peers. Permission was requested from the children before they were interviewed, although their parents already consented. If the child did not want to be interviewed, I did not insist. The interviews were audio recorded to provide an accurate representation of the interview (Merriam, 2009; Yin, 2009).

Drawings.

Greig et al. (2013) recommends using drawings as a source of data collection when including children in the research process. Consequently, I used drawings to collect data to better understand the kindergarten children's perspectives on their kindergarten experience. I used drawings to gain insight into their play and learning experiences in the classroom, and by extension, play-based learning. Baroutsis et al. (2017), used drawings as a data collection method, in a qualitative study to understand children's experiences with learning to write. Baroutsis and colleagues noted that drawings were useful in representing children's views on their writing experiences. Thus, children, in this study, were asked to create drawings to depict their favourite and least favourite places and activities. According to Baroutsis et al. (2017), drawings are a means of communication. Therefore, the drawings were meant to help me understand what the children liked and disliked the most. The teachers encouraged the children to label their drawings. As they drew, they were asked to explain their drawings which I wrote in an app on my phone. The drawings were accomplished as whole group activities and small groups activities. In Miss Scarlet's class, the four drawing activities were completed as whole group activities. In Miss Sharon's class, two drawings were finished as whole group activities, while

the other two were done during their learning centres' activities. In Miss Suzan's class, only two drawing activities were completed, and they were achieved as small group activities for those who were willing to participate.

Photographs.

Holms (2014) notes that photographs provide the researcher with detailed information: the researcher decides on what to photograph, how to set it up, and how to process it. According to Cohen et al. (2017), meanings and reflections can be recalled through photographs. Pyle and Bigelow (2015) used photographs to understand children's perceptions of the activities they undertake in kindergarten. Furthermore, photographs are a source of factual information (Cohen et al., 2017; Holms, 2014) and can be used to support other sources of data or they can stand alone (Cohen et al., 2017). The photographs, for this study, provided details of the classroom environment and children's activities for my fieldnotes. The photographs were used to illustrate themes in the findings section. Identifying information were edited or redacted on the photographs to avoid ethical issues.

Analysis

The analysis process followed the recommendations provided by Creswell (2014) on analysing qualitative data. The first step is to organize and then transcribe data. This is followed by analysing the data by hand or with the aid of a computer. The next step is exploring the data and developing codes, followed by theme development (Creswell, 2014). The semi-structured interviews of the fifteen kindergarten children were transcribed on my computer. I grouped the children's responses by questions. For example, the responses to the question "Do you learn when you play?" were grouped together. This helped in observing similarities and differences in their responses. Next, I read through each response to identify what

universal design for learning principle(s) (see Table 8 for universal design for learning checkpoints) corresponded with that response. For example, “At the centres, we do that some days” was coded as representation, because the teacher sets up centres to teach curriculum content. This was followed by grouping themes that I believed were similar under a heading. I used direct quotes from the children as the headings for the themes. For instance, under the theme “When people hit each other”, I had children’s responses of what they did not like about kindergarten, their least favourite thing and activity in the classroom. Several examples were chosen and discussed using a universal design for learning framework.

Table 8: *Universal Design for Learning Checkpoints*

Multiple Means of Engagement	Multiple Means of Representation	Multiple means of Action and Expression
Provide options for Recruiting Interest (7) <ul style="list-style-type: none"> • Optimize individual choice and autonomy (7.1) • Optimize relevance, value, and authenticity (7.2) • Minimize threats and distractions (7.3) 	Provide options for Perception (1) <ul style="list-style-type: none"> • Offer ways of customizing the display of information (1.1) • Offer alternatives for auditory information (1.2) • Offer alternatives for visual information (1.3) 	Provide options for Physical Action (4) <ul style="list-style-type: none"> • Vary the methods for response and navigation (4.1) • Optimize access to tools and assistive technologies (4.2)
Provide options for Sustaining Effort & Persistence (8) <ul style="list-style-type: none"> • Heighten salience of goals and objectives (8.1) • Vary demands and resources to optimize challenge (8.2) • Foster collaboration and community (8.3) • Increase mastery-oriented feedback (8.4) 	Provide options for Language & Symbols (2) <ul style="list-style-type: none"> • Clarify vocabulary and symbols (2.1) • Clarify syntax and structure (2.2) • Support decoding of text, mathematical notation, and symbols (2.3) • Promote understanding across languages (2.4) • Illustrate through multiple media (2.5) 	Provide options for Expression & Communication (5) <ul style="list-style-type: none"> • Use multiple media for communication (5.1) • Use multiple tools for construction and composition (5.2) • Build fluencies with graduated levels of support for practice and performance (5.3)
Provide options for Self Regulation (9) <ul style="list-style-type: none"> • Promote expectations and beliefs that optimize motivation (9.1) • Facilitate personal coping skills and strategies (9.2) • Develop self-assessment and reflection (9.3) 	Provide options for Comprehension (3) <ul style="list-style-type: none"> • Activate or supply background knowledge (3.1) • Highlight patterns, critical features, big ideas, and relationships (3.2) • Guide information processing and visualization (3.3) • Maximize transfer and generalization (3.4) 	Provide options for Executive Functions (6) <ul style="list-style-type: none"> • Guide appropriate goal-setting (6.1) • Support planning and strategy development (6.2) • Facilitate managing information and resources (6.3) • Enhance capacity for monitoring progress (6.4)

Adapted from CAST (2018). *Universal design for learning guidelines version 2.2 [graphic organizer]*. Wakefield, MA: Author

Me: do you know what play is? Can you give me an example?	
Ch: She is playing at the park.	
U: play? toys. Play with my friends in the classroom. I play with my friend's boat and octopus over the boat.	chinwe ogolo engagement
Ca: blocks.	chinwe ogolo Engagement
Cr: yes, I usually play with blocks and Lego and I make inventions with my Lego at home. Sometimes I give them names and they can talk. I gave my inventions a name called Lego builders.	chinwe ogolo Engagement and action and ▼
Ab: no	
St: you play and you like build stuff and you can run around and stuff.	chinwe ogolo Action and expression ▼
Car: to have fun and learn. I play after lunch. In the block area, iPad.	chinwe ogolo Engagement, representation ▼
Cal:	chinwe ogolo Engagement ▼
Sa: Yes. It's something.	
Z: play is like playing with toys and stuff.	chinwe ogolo engagement ▼
Am: when you are playing with somebody.	chinwe ogolo engagement ▼
W: when you ask someone if they want to play at the park. Playing at the park.	chinwe ogolo Engagement ▼
P: play with stuff.	chinwe ogolo Engagement
L: play is when you use something that you want to use.	chinwe ogolo Engagement
Au: yes. You play nicely with your friends.	chinwe ogolo Engagement

Figure 26: *Coding of Children's Transcripts*

The fieldnotes were analysed by reviewing what examples could corroborate the universal design for learning principles reflected in the answers the children provided in their interviews and drawings. For example, demonstrations of children playing by themselves, with materials, and with others were used to understand certain statements the children made. I used content analysis to analyse the drawings (Cohen et al., 2017) as the drawings were analysed at face value. This is because I believe the children can express their ideas through their drawings. The responses the children provided when they were asked why they depicted certain activities or places were used to analyse the drawings. The drawings helped me to better grasp the responses the children provided during their interview session. Consequently, the ideas of the fifteen children who were interviewed, and the other kindergarten children are reflected in the analysis.

The drawings were initially organized by class and activity. For instance, the drawings of the children in Miss Scarlet's class were grouped separately from the drawings of the children in Miss Sharon's and Miss Suzan's classes. The drawings

for each classroom were then grouped under each activity. The drawings concerning their favourite activities were grouped together and listed. That way, I had a sense of the most recurring activities. To provide insight into whether they were child-initiated activities or teacher-directed activities, the favourite activities of the classroom were grouped together. Also, the drawings were also used to illustrate certain aspects of a theme. For example, in applying the universal design for learning framework, activities that may recruit interest need to be considered, such as playing with blocks. Thus, the drawings were used to consider what the children consider as their favourite activities and places. Content analysis was also used to analyse the photographs (Cohen et al., 2017; Holms, 2014). The photographs were meant to provide evidence of the themes being discussed.

Findings

“To Have Fun and Learn”

The interviewed children were unanimous in their response to the question “Do you like to play”. In his response, Uziel said “Yes because toys are so many and so much fun”. The children’s drawings regarding their favourite activities to do in class, involved play, mostly child-initiated play. For example, Ella, Bart, Alexandria (Miss Scarlet’s class) liked playing with Legos. Ella liked playing “Stuff” and Bart likes them because “They are fun to play with. I like towers” (See Figure 27).

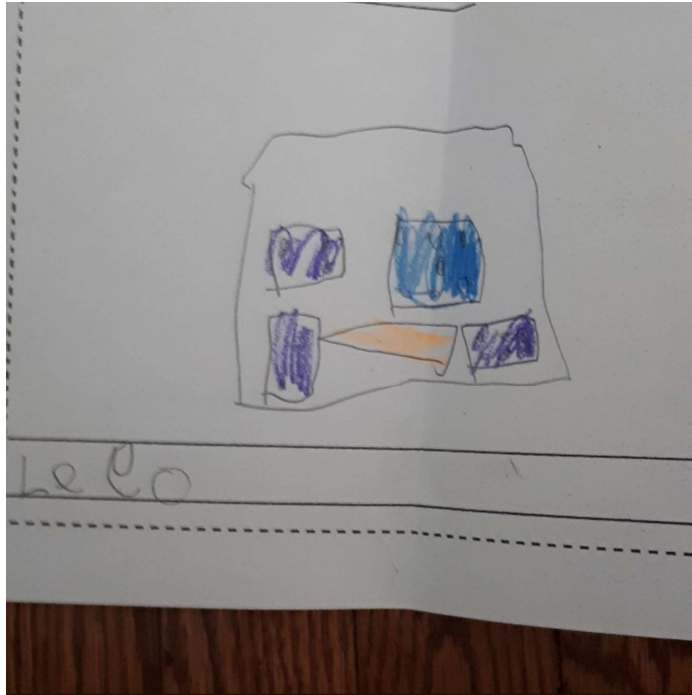


Figure 27: *Bart's Drawing of His Favourite Activity (Lego)*

The principle of engagement in the universal design for learning framework states that options should be provided, to recruit interest (checkpoint 7), vary demands and resources (checkpoint 8.2), foster collaboration and community (checkpoint 8.3), and for self-regulation (checkpoint 9). These checkpoints can be perceived in the children's attempts to define play by providing examples. Many of the interviewed children described play, as something they played with, something they did by themselves, or with others. To elaborate on the principle of engagement, Ariel expressed that play for her meant when she played nicely with her friends, which may be considered as developing social skills, which fosters collaboration and community (checkpoint 8.3). These social skills also require some level of self-regulation (checkpoint 9). For Carl, play is "To have fun and learn. I play after lunch. In the block area, iPad". Moreover, the principle of sustaining effort and persistence, which includes fostering collaboration and varying demands and resources, can be

seen when the children described play as something they played with or people they played with. In this regard, items, such as, blocks and an iPad may be considered resources that Carl played with.

During the drawing activity about their favourite activity, five of the children (Kate, Eddy, Chase, Alexa, and Samson) drew that they liked to play with iPads (see Figure 28). For Eddy, he likes the iPad because he learns about letters, colours, and can play games. Alexa likes to play games as well. Miss Sharon incorporated the use of technology in her instructions, centres, and break times. This probably explains why the children in her classroom selected going on the iPad as their favourite thing to do. On my first observation visit to her classroom, Miss Sharon told me that she feels that some of the apps that she had purchased were helpful in teaching the children and that technology was part of their daily lives, so she felt it was appropriate to include its use in her classroom (see Figure 29). In Figure 29, Zoe was playing a number game about the multiples of 10. If she jumped on the wrong number, she would start again. After about three attempts, Zoe was able to complete the game. The game apps on the iPad offered ways for Miss Sharon to customize information on numeracy skills (checkpoints 1.1 & 1.3). The game also offered Zoe a means of expressing her understanding of multiples (checkpoint 5). I often saw the children go to where Miss Sharon keeps the iPad during free play.



Figure 28: Eddy's Favourite Activity (iPad)

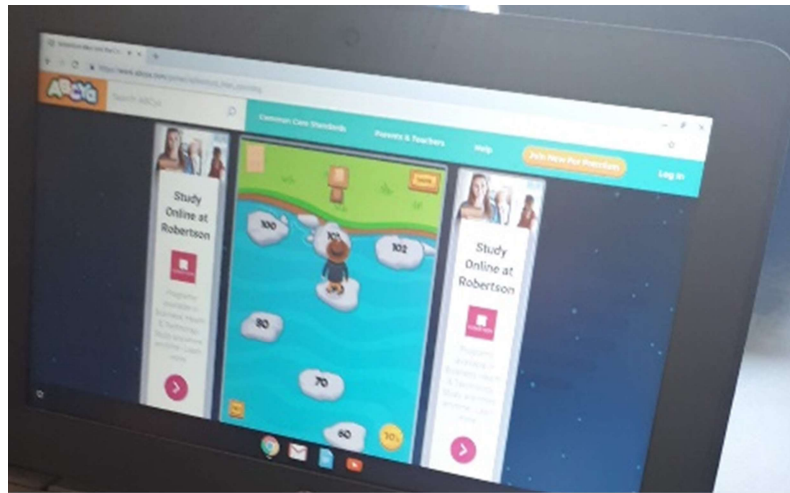


Figure 29: Zoe Playing A Math Game

Chris, another child, in his interview, responded "Yes, I usually play with blocks and Legos and I make inventions with my Legos at home. Sometimes I give them names, and they can talk. I gave my inventions a name called Lego builders," as he described his definition of play (see. Figure 30). This response collaborated with his drawing activity, where he drew blocks as his favourite activity. On one

occasion, when Miss Suzan was away, Chris had made his inventions with Lego blocks. Uziel took apart the invention because it was clean up time. Chris was not happy. He walked up to me and said: “Miss Chinwe, I’m feeling frustrated”. I asked him why, and he told me that he was frustrated because Uziel had taken his invention apart and that he would like to go to the calming area (the calming area was an area set up by Miss Suzan outside the classroom to help children manage their emotions). A few days prior to this incident, in his interview response to what he would do if he was a teacher for a day, Chris had said he would make a rule about not breaking people’s inventions. This shows that children can know what they are passionate about. This example demonstrates how, in the absence of his teacher, Chris was able to identify his emotions and to try to regulate them (checkpoint 9) during play. The teacher had explained the importance of managing emotions (checkpoint 8.1) and provided resources to help him manage his emotions (checkpoint 8.3). Miss Suzan had also provided options for customizing the display of information regarding self-regulation with charts, chairs, and a timer (checkpoint 1.1). This led to Chris being able to identify what he was feeling (checkpoint 3), and ultimately being able to communicate what he was feeling to me (checkpoint 4.1). He planned how he was going to deal with his emotions (checkpoint 6) and executed that plan (checkpoint 6). In this example, we see how the goal of the universal design for learning guidelines was experienced by Chris to become an expert learner. Chris was purposeful and motivated as he created his inventions during play time, he understood that his emotions were not under control, and sought to do something about them. He was resourceful to identify the emotions he was feeling as 'frustration' and knowledgeable about available resources, in this case, the calming area, that could help him manage his emotions. Chris was strategic and goal directed as he planned and strategized on ways to keep his emotions under control and was able to monitor his own progress.



Figure 30: *One of Chris' inventions*

During the interviews, the children were asked, "What do you play in kindergarten?", and their responses ranged from "Everything" to "Playing with my friends". The most popular form of play cited by the interviewed children was blocks; followed by the writing area, where they could write or draw; and playing with others. Six of the interviewed children identified playing with blocks as what they played in kindergarten; Camille replied "Blocks because you can build with them. Like towers and also kind of toilets". The children's responses correspond with the universal design for learning guidelines of physical action, which include optimizing access to tools (checkpoint 4.2), such as blocks (Legos, wooden blocks), and writing materials (crayons, pencils, and paper), which allow children to express themselves and their learning (checkpoint 5). For the children to play with these materials in kindergarten, it implies that the teachers ensured that there are varied resources available (checkpoint 8.1). During the drawing activity, in Miss Scarlet's class, Alexander, Esther, and Brittany drew that they do not like playing with Peppa Pig (see Figure 31). Brittany does not like Peppa Pig because of the characters, and Esther does not like Peppa because she jumps in muddy puddles a lot. The teacher and I were surprised that the girls selected playing with Peppa Pig as their least favourite activity

because she said the children played with the characters a lot during the previous term. This highlights the importance of varying resources and providing options for recruiting children's popular culture interests, because as children grow in experiences so does their interest in new things, so it can be assumed that children showing interest in something, does not mean they will continue to be interested in those resources. Although some children drew that playing with Peppa Pig was their least favourite activity, it is necessary to consider that there may have been other reasons why they chose to draw this character (possibly influenced by others in the classroom especially their friends), it does point to the need for kindergarten teachers to be aware of children's likes and dislikes so that they can be responsive in their selection of play materials and activities.



Figure 31: Esther's Drawing of Her Least Favourite Activity (Peppa Pig)

Playing with other children requires some level of self-regulation (checkpoint 9) to ensure appropriate social interactions with peers (checkpoint 8.3). It can also be implied from their responses that they learn early literacy and numeracy skills (as they draw, write, and use blocks), and fine motor skills (as they write and build with blocks), which can be related to the principle of representation. These activities provide options for perception (checkpoint 1), language and symbols (checkpoint 2), and comprehension (checkpoint 3). These activities, though varied, are providing these kindergarten children with opportunities to construct their own knowledge.

“When You Are Playing and Learning It’s Kind of The Same and Kind of Not the Same”

In attempting to understand whether children viewed play and learning as different, I asked them to tell me about a time they thought they were learning in kindergarten. Some of the children discussed beyond learning that occurred in the classroom to describe in their own words learning that occurred in other spaces such as the gym and cafeteria. Carl said he learned how to make puddles in the Minecraft game at lunch, while Charlize learned how to do cartwheels during gym. For others, they learned sight words and colouring, learned about octopuses and butterflies, alphabets, numbers, shapes, colours, and how to make friends. Amber related her learning to one of the activity centres that Miss Sharon had set up. She said, “We were learning about like if the stuff is full in the water centre”. She connected her learning to an activity she had done at the water centre that day (checkpoints 1, 2, & 3). In addition, Uziel, who had got his teacher and whole class interested in sardines, and had graduated into learning about sea creatures, said he was learning about the octopus, as this had been going on for over a week (checkpoints 1, 3, & 4). An aspect of learning we may neglect is the social aspect. For Ariel, one of the things she learned in kindergarten is how to make new friends. This is important because these

children are taught how to listen to others when they are talking and how to bounce ideas off each other (checkpoints 8.3 & 9).

The interviewed children seem to relate learning with activities that are most likely to be directed by the teacher such as letters, numbers, and shapes, which aligns with the principle of representation, such as providing options for language and symbols (checkpoint 2). These are curriculum requirements for kindergarten children to learn before transitioning to grade one. During observations, the kindergarten teachers set up centres, and many of the items the children mentioned in the interviews are the set objectives of those centres. In the case of Uziel, the teacher tried to be flexible while still meeting curriculum objectives to allow him to pursue his inquiry, which began with an interest in sardines. Miss Suzan said that they covered curriculum content such as arts, numeracy, science, and language through Uziel's growing curiosity.

The children were asked "Do you learn when you are playing?" to further understand whether they believed there was a difference between play and learning. Some children said yes, while others said no. For example, Carly said "Yeah. When we go outside, we see stuff outside and learn about the things outside". Three of the "yes" responses were related to the social aspect of learning. For instance, Amber said, "Yes. Learn how to play nice". Some children who originally replied yes to whether they learn through play changed their minds as they, were unable to provide examples of whether they learn when they play. Zoe answered "Sometimes. Like I learn and play lots of times, but sometimes I don't". Most of these kindergarten children believed they learned when they played, although many of them could not explicitly express what that meant; they felt there were times they learned while playing, and other times, they felt that they were not learning when they played.

From my observations, many of the children were learning while they were playing. Perhaps because play was shrouded in the guise of learning, they could not recognize it. For example, the three kindergarten teachers often use playful teaching to instruct the children. Figure 32 demonstrates how Miss Scarlet used a dice and snack cubes to guide emergent numeracy such as counting numbers, addition, patterns, and colours. She demonstrated the activity to the whole group and allowed the children to take turns throwing the dice before dividing them into pairs for learning centre activities. The children had fun rolling the dice and counting out the numbers with their partners.



Figure 32:*Rolling the Dice for Snack Cubes*

When asked whether they thought playing and learning are the same or different, majority of the children felt they were different. For example, Zoe answered “Different. Because playing is playing with toys and learning is listening to the

teacher". Two children thought they were the same. Steward answered, "The same because you colour, and you play so you can run around and play and you get to draw". Peter was the only child that tried to say they were the same and different; he responded saying, "Because when you are playing and learning it's kind of the same and kind of not the same. Because sometimes we are learning, and we are playing (*the same*). Because we play and we do stuff (*different*)". Carl said they were different "Because playing is having fun and learning is important". However, when asked to define play, his response was "To have fun and learn. I play after lunch. In the block area, iPad".

The interviewed children believe that playing and learning are mostly different. Play is considered something fun, while learning is linked to doing something more serious. We can assume that they considered play as an activity that recruited their interest (checkpoint 7) as they had autonomy and agency with little or no involvement of the teacher, rather than an activity that helped them learn numeracy, literacy, patterns, self-regulation amongst other things (checkpoints 1, 2, & 3). While learning is considered an activity that dealt more with their comprehension, learning about numbers, letters, colours, and patterns (checkpoints 1, 2 & 3). Consequently, the children had trouble linking play and learning. After I had interviewed the children in Miss Sharon's class, the teacher posed the question to the whole class. Some children answered yes, while others responded no. She explained to the children that many times they were learning while playing. She told them that at the water centre, they were playing with the water but were learning about capacity. John added that he was playing with blocks by building a house. Miss Sharon responded by telling him that he was learning to be an architect when he built the house. Miss Sharon told me that she thinks it was her fault that the children perceived playing and learning as

separate because she never explicitly explained to them that as they played, they were learning.

“We Get to Learn and Play”

The goal of universal design for learning is to produce expert learners by providing options for engagement, representation, and action and expression. I felt it necessary to ask the children what they liked about kindergarten as the kindergarten environment is supposed to help children learn both academic and social skills and transition into Grade 1. Learning and playing were the popular answers provided by the children. Half of the children identified learning as one of the things they liked about kindergarten. For example, Charlize answered “I like when we are going on a field trip. A field trip we go on the bus. Last time we went on two field trips. We went one in winter, and we went one in spring”. The last field trip was to the botanical gardens. While Uziel said he liked going to the gardens, but it takes too long on the bus. Many of the children also identified play as what they liked about kindergarten. For example, Alexa said she likes it when she plays, and Zoe said, “They have toys and stuff”. Many of the children had a mixture of both. Chris answered “The blocks and writing. And the new markers because we used up all the markers, but Miss brought new markers...” and for Carly “We get to learn and play”. Some children like the social nature of kindergarten. For example, Ariel replied “I like about kindergarten that I make lots of new friends in kindergarten and all my friends make friends with me. And apparently according to one of my cards that I got at home says I make the classroom a better place” and Wesley responded, “When we sit down and do the news”. As part of the morning routine, his kindergarten teacher (Miss Scarlet) will select her helper for the day and the other children will sit in a circle. She will ask them if they had any news to share, and she would share hers. This was a way for her to check on the socio-emotional health of her children. In Figure 33, Ariel drew

that her favourite place was the carpet area where she, other children, and the teacher gathered to share their news because she liked it when they shared their news. From the interviewed children's responses, the things they like about kindergarten correspond to the objectives outlined in the Newfoundland curriculum documents. They were learning, playing, and socializing with one another. Their kindergarten routine allowed for teacher-directed activities and child-initiated activities in the three classrooms. The teacher-directed activities and child-initiated activities also allowed for social-emotional development.

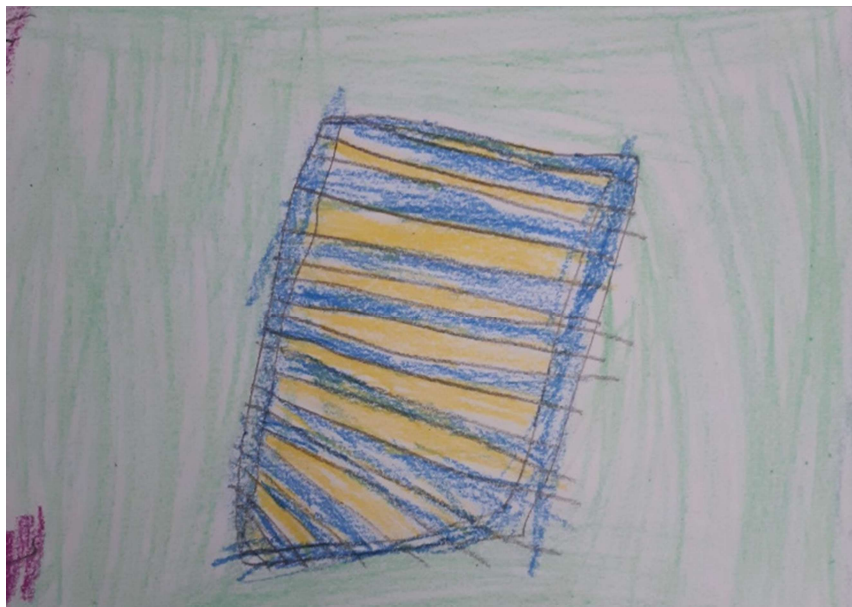


Figure 33: *Ariel's favourite place is the carpet area where the class shares their news*

"When People Hit Each Other"

The children were asked what they do not like about kindergarten. One of the objectives of employing a universal design for learning framework involves, minimizing barriers. The most common answer was related to children not liking when other children hit them or others. Steward replied he did not like "When Beatrice gets upset because she throws stuff". Samson said, "I don't like when Carl

hits me”; Zoe responded when “some people hit me”; Amber answered, “When people hit each other”; Lambert said, “I do not like when people push me”; and Ariel replied “I don’t like about kindergarten if anyone bullies me. I don’t like if they bully me”. One of the classes I observed had seven of the eleven children with behavioural challenges who on occasion would use foul language, throw things, and hit other children. The teacher in that class used many approaches, such as play to assist with helping children to regulate their behaviours. She also used a calming area outside the classroom and in other areas in the classroom where children could choose to have quiet time or time away from others. The kindergarten teachers in this study recommend that children should be involved in programs such as KinderStart before coming to a kindergarten setting to learn some necessary social skills. Some of the children due to challenges in their home situation did not attend KinderStart. Also, children should participate in childcare and other activities to be socialized into more formal settings.

As part of their drawing activity, the children were asked to draw their least favourite thing or activity in the classroom. Various activities were selected such as blocks, reading books, writing, drawing, playing pretend pregnancy, and doing homework. In Miss Sharon’s class, Samson, Carly, Brandy, and Carl drawings indicated that they do not like circle time (see Figure 34). The children said that it takes so long, it’s boring, people are talking, and they just want to play. Carly explained that, “I don’t like to be in circle because you have to sit down for a long time to do other things and people are talking” and Carl said, “It’s just boring and I want to play”. Miss Sharon was surprised to learn that four children did not like circle time. They expressed these opinions individually. These children were not in close proximity to each other when they drew their pictures. She explained to me that perhaps she overdid it the previous day. She had read four books to the children in

the course of the day. She also said it was good to know because she would have to do things differently in the coming term.

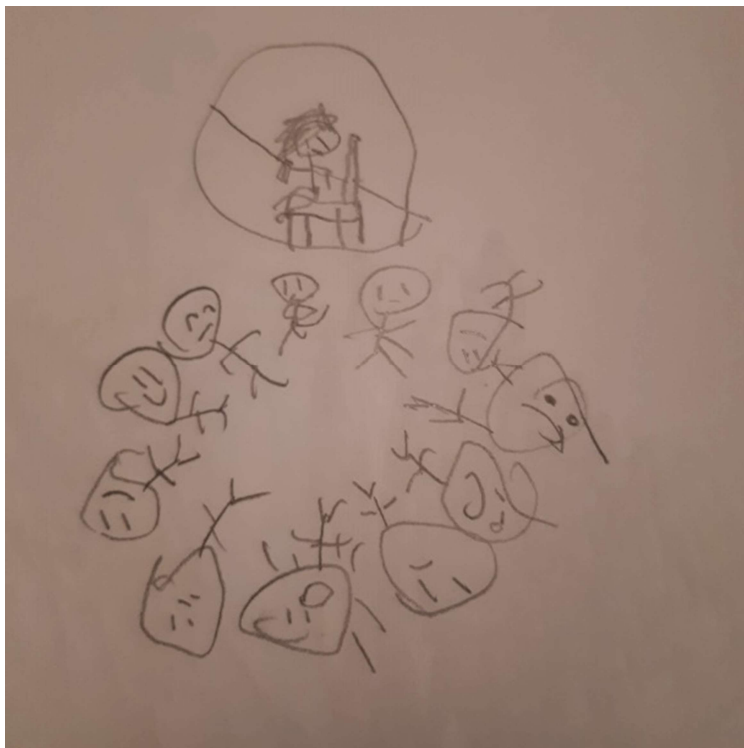


Figure 34: *Brandy's Least Favourite Activity (Circle Time)*

In their drawing activity, the children were asked to draw their least favourite places/areas in the classroom. Their drawings ranged from the writing area to the block area to the iPad area. Most of their answers were connected to their least favourite activities. Charlie said that he likes every place, but because he needed to select one, he was selecting something he did not like compared to the others. Boredom appeared to be the determining factor as to whether a place is liked or not, which is linked to the activities the children do there. For example, Alexa, Samson, and Carl said that they do not like the reading area because books are boring. Perhaps, the children prefer to have books read to them and do not enjoy reading and exploring the illustrations in the books on their own.

“If I Was A Teacher from Now on Everything Will Be A Rule”

I was interested in knowing what children would do if roles were reversed, so I asked, “If you were a teacher for a day, what would you do?” Some of the children said they will teach. For example, Ariel responded that, “If I was a teacher for a day, I will teach everything that that teacher is working for. I will do everything the same as her or him”, and Lambert said, “I will teach the kids”. Some children liked the idea of making the rules, for example, Camille answered, “I don’t know. Make rules not to like run in the class. And also, I will not like let them throw or kick or put their hands on people or bring toys to school”. Chris said, “The first rule is to have fun if I were the teacher. The second is to not learn. And the third rule, actually if I was a teacher, I will have a bunch of rules...The rule will be not breaking your inventions...” You can see he is very passionate about his inventions. The answers from the interviewed children varied. However, I was expecting that they would say that they would make the children play all day, but this was not the case. The children would teach and make rules if given the opportunity.

Discussion

To Have Fun and Learn

The aim of this study was to explore some kindergarten children’s experiences with and perceptions of play and learning in three full-day kindergarten classrooms. Children from three English kindergarten classrooms participated in this study. The findings in this study aligns with the argument of Clark (2001; 2007; 2017), Pyle and Alaca (2018), and Theobald et al. (2010) that children are capable of expressing their opinions on matters that concern them. I found that the children knew what they wanted to say and how they wanted to say it even in their drawings. The findings suggest that all the children in this study liked to play. For these children,

play is a fun activity. This supports the work of Froebel (1896), who argues that play is the natural disposition of a child; therefore, it should be included in every facet of their lives. Universal design for learning guidelines suggest that options should be provided to recruit interest, which for this study includes play. For the children in this study, play was described as something they played with, something they did by themselves, or with others. This means play involves having varied resources and materials, as the guideline on providing options for sustaining efforts and persistence (CAST, 2018) recommends. Play is also a vehicle to develop social skills as children are given options to foster collaboration and community (CAST, 2018), and to self-regulate their behaviour (CAST, 2018) through play.

There is a debate about which type of play is beneficial for children, that is, child-initiated play or teacher-directed play (Danniels & Pyle, 2018). The findings reflect the recommendation of Miller and Almon (2009) that a balanced kindergarten classroom should provide opportunities for both teacher-directed play and child-initiated play. The children in this study were provided ample time to engage in both teacher-directed play and child-initiated play. I found that both types of play helped children achieve curriculum goals, such as numeracy and literacy skills and socio-emotional development, like identifying their emotions and finding practical ways to regulate them. Nevertheless, the data suggests that the activities the children in this study enjoy most are linked to child-initiated play, such as playing with blocks, playing with toys, and pretend play. The findings reflect the work of Brillante and Nemeth (2018), which notes that engagement goes beyond including children's interests to their behaviours as well. The children in this study, for example Chris, used his play time to make inventions, which links to providing options for recruiting interests and providing varied resources and materials for him to play with, such as Lego blocks. He was able to express his understanding about emotions when he told me he was

feeling frustrated, which links to the principle of action and expression. He then, strategically planned how he was going to manage his emotions, which involved having options for executive functions, and then, he executed his plan by going to the calming area, which helped him calm down. In Chris' example, we see how the goal of the universal design for learning guidelines was enacted as he became an expert learner. Chris was strategic and goal directed as he planned and strategized on ways to keep his emotions under control and was able to monitor his own progress concerning his emotions. This enactment of Chris' learning may have been missed if I had not interpreted the data through the lens of universal design for learning.

Data from the drawing activities revealed that children's interests may change over time, as was the case with Peppa Pig and the characters associated with Peppa Pig. There is a need for classroom materials to be carefully selected to ensure instructional success, especially regarding themes and children's interests (Morrow & Rand, 1991; Newfoundland. Department of Education, 2010). The children's drawings in Miss Scarlet's class provided information that she would not have otherwise known. This highlights the benefits of allowing children to express themselves through various tools such as drawings. The disinterest in Peppa Pig did not come up during the semi-structured interview. This also highlights why using different data collection methods is necessary to capture what children are saying and thinking. The interviews were conducted with a sample of the classroom while the drawings were done by all the children in two classrooms. This provides a wider idea of kindergarten children's views on activities in the classroom.

When You Are Playing and Learning It's Kind of The Same and Kind of Not the Same

The interviewed children seem to relate learning in kindergarten with activities that are most likely to be directed by the teacher such as letters, numbers, and shapes, which aligns with the principle of representation, such as providing options for language and symbols (checkpoint 2). This aligns with the findings from Theobald et al. (2015) that demonstrate that pre-schoolers view activities as learning when there is teacher involvement, such as asking them to read or write. In this study, usually, the explicit learning of numbers, letters, and shapes occurred during teacher-directed activities, which include teacher directed-play such as the water centre that Amber talked about in her interview. During my observations, the kindergarten teachers would set up centres that the children rotated between and many of the activities the children mentioned during interviews addressed the objectives of those centres. In the case of Uziel, the teacher tried to be flexible, while still meeting curriculum objectives to allow him to pursue his curiosity about ocean life, which started with an interest in sardines. This unit met curriculum outcomes such as science, language, and art. The interviewed children said they also learn social skills like making friends, and they learn at lunch and in the gym.

The findings echo the play-based learning definition of Danniels and Pyle (2018), which is learning while at play. Many of the kindergarten children believed they learned when they played, although many of them could not explicitly express what that meant. They felt there were times they learned while playing, and other times, they did not feel like they learned from their play. My observations suggest that many of the children were learning while they played. According to Pyle and Alaca (2018), children in their study who made a connection between play and learning belonged to classrooms where different types of play were enacted, such as free play

and play-based centres, and the teachers were involved in the children's play. Perhaps because play was more teacher-directed, in this study, the children could not reconcile play and learning. Although, the three kindergarten teachers often used playful teaching to instruct the children, many of the children struggled to view play and learning as the same. The majority of the children felt play and learning were different. In one sense, the findings from the data does not correspond with the work of Pyle and Alaca (2018) as they reveal that the children in their study could not make a connection between play and learning and felt that way because the teachers in their study often present play and learning as distinct activities. But in this study, the teachers presented play and learning as interrelated activities. Further, children perceiving play and learning as being different entities aligns with findings from Scharer (2017) who noted that early childhood education teachers felt that learning and playing were different because they were concerned that parents will not believe that their children were learning if they taught curriculum content solely through play.

For Gray (2018) and Hewes (2018), for an activity to be considered play, it must be self-chosen and self-directed, intrinsically motivating, more emphasis on the process rather than the product, structured by the child or children, and imaginative. Play, for the children in this study, is considered something fun, while learning is linked to doing something more serious. This corroborates findings from Theobald et al. (2015) that suggest that children perceive play and learning as different. The pre-schoolers in their study viewed play as an activity in which they had agency and autonomy. Likewise, in this study, play is considered as an activity that recruited their interest (checkpoint 7) as they had options for individual choice and autonomy (checkpoint 7.1), rather than an activity that helped them learn numeracy, literacy, patterns, or self-regulation. Consequently, the children had trouble connecting play with learning. As in the case of Miss Sharon explaining to her class why play and

learning are the same, perhaps kindergarten teachers could help children become aware of their learning during play. That way, children might begin to make the connections between play and learning. Pyle and Bigelow (2015) suggest that children's perceptions about play may be influenced by their teacher's enactment of play in the classroom. In this study, the three teachers enacted play as an avenue to develop academic and socio-emotional skills, but the children still viewed play and learning as different.

We Get to Learn and Play

Children in this study like kindergarten because they play and learn. The goal of the universal design for learning guidelines is to produce expert learners by providing options for engagement, representation, as well as action and expression. From the observation data, there were ample provisions for children to play in the classrooms. The children engaged in child-initiated play and teacher-directed play many times during the day. The teachers also provided opportunities for the children to learn through free play, learning centres, and whole group activities. In addition, the teachers provided opportunities for children to learn social skills through circle time and learning centres, as the children are required to work with others. This study found that the things children liked about kindergarten corresponded with the objectives outlined in the full-day kindergarten curriculum documents. These included learning, playing, and socializing with one another. Their kindergarten routine allowed for teacher-directed activities and child-initiated activities in the three classrooms.

When People Hit Each Other

The children were asked what they do not like about kindergarten, as one of the objectives of employing a universal design for learning framework is to minimize barriers to learning (CAST, 2018). The children in this study did not like witnessing or

experiencing physical aggression. Moreover, the kindergarten teachers in this study recommended that children should be involved in programs such as KinderStart before coming to a kindergarten setting to learn some necessary social skills. Presently, the KinderStart program is voluntary. Perhaps, if the provincial government made it mandatory that may begin to resolve some of the social challenges' children may experience. Therefore, reducing the number of children that may exhibit aggressive behaviours.

Another barrier that emerged from this study is that children may not necessarily like certain practices that teachers engaged to promote learning. For instance, Miss Sharon was unaware that some children in her classroom did not like circle time. Teachers should regularly check in with their students to identify how to change common classroom practices to keep children engaged.

If I Was A Teacher from Now on Everything Will Be A Rule

The children in this study would teach, make rules, and play if they were the teacher for a day. I found their response interesting because I assumed that children would say that they would play all day. This finding suggests that children benefit from the structure provided by their teachers. The children perceive that they need to learn, and they need rules to provide safety and security. However, they also know that they need to have fun.

The semi-structured interviews and drawings in this study, not only provided insight for me, as a researcher, but also for the teachers in this study. Through the interviewed children's responses in her class, Miss Sharon was made aware that she was partly responsible for the children in her class viewing play and learning as different entities. This led her to reflect on her practices and to consider how she might make children understand the connections between play and learning. The

drawing activities helped Miss Scarlet and Miss Sharon gain insight into their children's thinking regarding certain activities. Miss Scarlet found that some children in her class were no longer interested in Peppa Pig, while Miss Sharon discovered that some children in her class did not like circle time.

Conclusion

This study was conducted in three kindergarten classrooms in one school. Further research should be conducted in other kindergarten schools within the St. John's area to understand other kindergarten children's play and learning experiences. The experiences of kindergarten children in other areas in Newfoundland and Labrador may not be the experience of those in St. John's. Therefore, further research in both urban and rural areas of the province is needed. Although my study found that the children's idea of play was not necessarily in line with their teachers' thoughts, opinions and ideas, this finding may not reflect the experiences of other contexts or environments. This study demonstrates that children's voices should be included in the research process as decisions are made concerning their right to learn in a way that honours how they learn.

The purpose of this study was to gain insight into kindergarten children's play and learning experiences. Employing a universal design for learning framework allowed me to gain insight into their experiences that may have been missed or otherwise overlooked. This study shows that children are capable of using their voices in discussing issues that concern them. Children in this study like to play by themselves, with others, and with materials in the classroom. They believe that they learn numbers, letters, shapes, and social skills in kindergarten. Sometimes, they believe they learn while playing, although they consider playing and learning to be different. The children like kindergarten because they both learn and play. However, they do not like to experience physical aggression, at times, present in the

kindergarten classroom during breaktimes such as recess and lunch. It can be assumed that is why some children will make rules if given the opportunity. It is possible that the children admire the power of the teacher as an authority figure in the classroom who makes rules and provides play opportunities. If given the chance they would do the same. Thus, the children would teach, make rules, and play if they were the teacher. I would recommend that play should remain an essential part of the kindergarten curriculum. The children have spoken; play is an activity they find pleasurable.

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Chapter Six

Overview and Conclusion

This study explores the implementation of play-based learning in three full-day kindergarten classrooms in St. John's, Newfoundland, and Labrador. Three questions framed this study, namely: "*What are the perceptions and experiences of some kindergarten teachers in St. John's regarding play-based learning?*", "*How is play-based learning implemented in some classrooms in St. John's?*", and "*What are some young children's experiences and perceptions of play and learning in a full-day kindergarten?*" The universal design for learning theoretical framework served as a lens through which the data collected for this study were analysed. These questions were used to explore the perceptions of, and experiences with play-based learning from the viewpoints of the teachers, children, and the researcher, which have been provided in this dissertation. By analysing the data through a universal design for learning lens, unbiased in-depth interpretations emerged.

This chapter provides a summary of the findings from the three papers and addresses this study's contributions to the body of literature on play-based learning through a universal design for learning theoretical framework. Subsequently, I discuss and provide recommendations in areas based on the findings across the three papers, which address professional development/learning, socio-emotional development/learning, school leadership/administrative support, and kindergarten teachers' classroom support. Furthermore, I discuss whether this study can be replicated, the limitations of the study, and avenues for future research. I conclude by sharing my thoughts on conducting this study and emphasizing the key messages for this study.

Summary of the Findings from the Three Papers

The findings, from the study on kindergarten teachers' experiences with and perceptions of play-based learning, reveal that the three teachers had similar understandings of the concepts of play-based learning. They all believe that play was a vital aspect of play-based learning. The three teachers intentionally set up playful learning opportunities for their children. Consequently, they are able to provide multiple means of engagement, representation, and action and expression. Also, the teachers in this study consider play and learning as interconnected, and for them, curriculum objectives (numeracy, literacy, and socio-emotional development) are met when children played. Moreover, the three teachers are able to balance teacher-directed activities and child-initiated activities by assessing the learning goals weekly, and by scheduling their days to include both types of pursuits.

The teachers note that they could benefit from the provision of a variety of resources and materials to make learning more meaningful for the children. The teachers share in interviews that some children could benefit from acquiring greater social skills before beginning kindergarten. The Newfoundland and Labrador government recommends that pre-schoolers attend the KinderStart program, which consists of monthly visits for the child to participate in activities taking place in a kindergarten classroom the year prior to kindergarten. The KinderStart program uses play-based learning pedagogy to extend children's numeracy, literacy, and socio-emotional skills. These social skills can be enhanced by attending KinderStart before transitioning to kindergarten, where they are introduced to other children, and learn about the social expectations of the classroom. Further to this short period of introduction to the classroom, children who are identified as needing more literacy and numeracy support are invited to supplemental classroom interactions with the kindergarten teacher.

All three teachers aspire to have more professional learning opportunities in the implementation of play-based learning within the area of assessment. Professional development for teachers focused on play-based learning and the assessment of this type of teaching pedagogy would address these raised concerns by all teachers in the study. However, all three teachers voiced a need for extra teaching support in order to fulfil the need of assessment. The assistance of a full - time dedicated specialist in play-based learning, such as an early childhood educator could assist with the timely assessment of children, as well as with addressing socio-emotional needs alongside early literacy/numeracy interventions. The teachers also identify the classroom space as another challenge in the delivery of play-based teaching methods. At times, the limited space imposed limitations on the play experiences of the children. Despite these challenges reported by the teachers, the findings show that they all endeavoured to implement play-based learning in their classroom. I believe the three teachers' teaching pedagogies benefited from positive administrative support (school leadership) as the school leadership embraced the play-based learning approach.

The second research question focused on how play-based learning is implemented in the three classrooms in St. John's. This study revealed that play is an essential part of the kindergarten children's daily routines. Children are provided ample opportunities to be engaged in both child-initiated and teacher-directed play. The children used play to engage in social interactions, to explain their actions to their peers, to regulate their interactions, and to demonstrate what they had heard or learned in school. The teachers in this study voiced that both teacher-directed and child-initiated play provide opportunities for assessment in the areas of both academics and socio-emotional development. The teachers share the philosophy that play makes learning more authentic for the children. Numeracy and literacy learning

opportunities are integrated into every experience of learning and aspect of the environment, in the three observed classrooms. This is achieved through dedicated learning centres, selected YouTube learning videos, curriculum activities, and free play periods, which are organized to provide children with exploratory opportunities to learn literacy and numeracy skills. During these exploratory free play time periods, children are observed writing creative stories, recalling what they had learned in class (like when Angel explained to her friend that her rock had a number five on it), and using their newly learned words and numbers.

Furthermore, observations indicate multiple instances where sustained shared thinking occurred between the teachers and children, and between the children and their peers. In this finding, sustained shared thinking is evident when the teachers engage in conversations with the children to understand what their current understanding of a concept or material is. Also, there was a balance of teacher-directed activities and child-centred activities. Usually, the teacher-directed activities are fulfilled in an enjoyable and fun manner, such as dancing to a song. There is a combination of large group, small group, individual learning, and child-initiated activities. An example of child-initiated activities will include Uziel's interest in sardines. However, the findings demonstrate that some activities, which the teachers consider inclusive, such as enhancing children's voices on topics during circle time are not preferred by all learners. Some children voice that they find circle time to be boring and long. Although, the sharing in circle time has always been a standard listening activity in kindergarten classrooms, teachers may need to reflect on why some children felt this way during this daily activity. One reason may be that some children may have difficulty sitting in one place or listening to others for a prolonged period of time.

In addition, the findings from the observations and interviews reveal that teachers may benefit from more professional learning/development, extra support in the classroom, more varied materials and resources, and a larger space to further facilitate the implementation of play-based learning.

Throughout this study, children's perceptions of and experiences with play and learning in a full-day kindergarten, are vividly observed and documented as children communicate their views on matters that pertain to them. The children in this study voice that they like to play because for them it is a fun activity. The children describe play as objects they played with, something they imagine or explore by themselves, or with others. Therefore, play through these children's eyes recruits their interests, promotes social skills, and is observed as developing self-regulation. In addition, it is observed and documented that children enjoy child-initiated activities the most, such as playing with blocks, toys, and through pretend play. The findings, however, indicate that children's play is driven by their personal interest, which may change over time, such as playing with the popular culture cartoon character, Peppa Pig who is often adored by a pre-school audience. Thus, teachers need to be more attuned to popular culture interests of young children and regularly alter classroom materials to reflect the likes and interests of children and thereby, achieve greater instructional success. Further, the children in this study related school learning in kindergarten to primarily teacher-directed activities, such as learning letters, numbers, and shapes.

Although many of the kindergarten children express the belief that they learn when they play, there are times the children feel that they do not learn anything from play. It is possible the children have difficulty articulating play as learning because learning is thought to be a teacher-directed activity. Consequently, the majority of the children feel play and learning are different. Notwithstanding, the children identify play

and learning as things they like about kindergarten. Perhaps, this is because their daily kindergarten routine allows for teacher-directed and child-centred activities.

An unexpected finding was that children were able to identify and understand physical aggression as an inappropriate behaviour or response in kindergarten. The children were asked what they did not like about kindergarten and most of them responded by expressing that they do not like being hit or when they observe their friends being hit. The interviewed children describe incidences of aggression as “hit”, “throw”, and “push”. Important aspects of socio-emotional development surround learning how to inhibit inappropriate behaviours and getting along with others. This finding shows that young children understand that these foundations are needed. If they are allowed to be the teacher for one day, they would teach, make rules, and play. Children believe rules are necessary to establish structure. And that learning and fun are also essential.

Academic Contributions of This Study

This study underlies a societal concern around how more often than not, a gap exists between theory, policy, and practice of play-based learning (Bulunuz, 2013, Burke, 2019; Scharer, 2017). For instance, Burke (2019) notes that while play is considered vital in children’s literacy, numeracy, and socio-emotional development in kindergarten classrooms, the focus of academic instruction in kindergarten classrooms has been primarily delivered in the form of teaching explicit literacy and numeracy skills to young children. As a result, children’s natural ability to learn and develop socio-emotionally from play has become secondary to an academic agenda (Burke, 2019). To address these growing concerns around play-based learning in kindergarten classrooms, this study is framed around a research inquiry that addresses gaps in the research literature, such as a lack of practical examples of how to facilitate learning through play (Bulunuz, 2019), a difficulty in reconciling play

and learning (Bulunuz, 2013; Burke, 2019; Lynch, 2014; Lynch, 2015; Pyle & Bigelow, 2015; Scharer, 2017), and what type of play is beneficial - child-initiated play or teacher-directed play (Danniels & Pyle, 2018). This study is conceptualized to address some of these issues. The overall knowledge gaps as found in existing literature are conceptualized in the introduction chapter. These gaps are essential in situating the significance of this present study by exploring teachers' perspectives on play-based learning, understanding how play-based learning is implemented in some classrooms, and investigating children's play and learning experiences in full-day kindergarten in the Newfoundland and Labrador context. However, because this dissertation is in a manuscript format, the three papers (chapters 3, 4, & 5) are also conceptualized individually. The manuscript format allows me to publish three distinct papers while looking at the same phenomenon (play-based learning in Newfoundland and Labrador). The first manuscript focuses on the first research question, which is: *What are the perceptions and experiences of some kindergarten teachers in St. John's regarding play-based learning?* The second manuscript explores the question *How is play-based learning implemented in some classrooms in St. John's?* The third manuscript investigates the third research question *What are some young children's experiences and perceptions of play and learning in a full-day kindergarten?* These questions are intended to provide an extensive understanding of play-based learning from the teachers', children's', and researcher's viewpoint. Throughout the introductory chapter, gaps in these bodies of literature are discussed. In the next section I identify the key issues.

Key Issues in the Introductory Chapter

In the introductory chapter, one key issue identified by studies, such as Bulunuz (2013) and Scharer (2017), is that most times, theory, policy, and practice do not work hand and in hand. According to Bulunuz (2013), this is further compounded by a lack of studies that illustrate how teachers can facilitate learning through play. However, the findings from this study demonstrate that theory, policy, and practice can work in unison. In supporting educators in a focused play-based pedagogical approach, the Newfoundland and Labrador Department of Education recognizes that play is the main method of learning for young children and, therefore, teachers are to provide learning environments that are play-based. Consequently, the three teachers in this study are guided in their pedagogical practice through government policy substantiated by theory that supports play-based learning. They have achieved this initiative by purposefully setting up playful opportunities for children to develop numeracy, literacy, and socio-emotional growth while addressing curriculum objectives. For example, Miss Suzan encourages child-initiated play for most of the day on Mondays to help the children in her class learn social skills and regulate their emotions and behaviours after the weekend. Also, this study considers the gap in the literature as identified by Bulunuz (2013), who argues, that there are few practical examples of how play-based learning is implemented. Thus, this study closes the gap by providing practical pedagogical examples of how teachers can guide learning through play. This study offers other kindergarten teachers' vivid illustrations of play-based learning, which may be considered in their own teaching approaches.

Another challenge acknowledged in recent studies (Bulunuz, 2013; Lynch, 2014; Lynch, 2015; Pyle & Bigelow, 2015; Scharer, 2017) is that some kindergarten teachers believe there is a dichotomy between play and learning. This belief makes it difficult for them to implement play-based learning in their classrooms. Alternatively,

the three kindergarten teachers in this study express that play and learning support each other and their daily practices in the classroom echo this understanding in contrast to their foundation of being educated as primary/elementary school teachers. The children are provided ample time for both child-initiated play and teacher-directed play. The teachers report that they believe that play helps children learn curriculum content because it makes learning more meaningful and authentic.

The three teachers believe that play has an important role in helping children regulate their emotions and develop their social skills. One of the reasons why the teachers were able to reconcile play and learning is because they have constant support from the school leadership/administrative staff, particularly the principal who sees value in using play to educate children. According to the principal, “Nothing is as successful as it ought to be if the administrators do not see any value in it. The administrator has to talk the talk and walk the walk” (The Principal, personal communication, April 28, 2020). This idea is echoed by Cancio et al. (2013) who believe that administrative support, such as informational, emotional, and leadership support can help teachers stay motivated and experience job satisfaction in their practice. The principal in this study supported teachers in resources and professional learning because they added value to children’s learning experiences. The principal and staff also believe that play is vital in young children’s development. However, many of the children in this study do not share the same opinions about play and learning as their teachers. The children in this study see a dichotomy in that play and learning are mostly different in their classrooms. This is because they view play as a “fun activity” and learning as a “serious activity”. Nevertheless, as Miss Sharon reflected on her own practice, she believes that she is partly responsible for the children’s lack of awareness of how play and learning are connected. She voiced that it is her responsibility to make the children conscious of their learning while they are

playing. That way, the children may begin to perceive play and learning as similar if the teacher makes it explicit that they are learning while they are playing.

According to Canadian researchers, Danniels and Pyle (2018), a challenge associated with the implementation of play-based learning is with what researchers focus on as the benefits of play. Danniels and Pyle explain that an emphasis is placed on free play by researchers who believe that play has developmental benefits, while researchers who argue that play helps with academic skills recommend teacher-directed play. This study contributes to this debate by recommending both types of play in kindergarten. The findings from this study demonstrate that both types of play are needed for children to enhance their academic and socio-emotional skills. For example, when Angel was engaged in child-initiated play, she was enhancing her numeracy skills while also learning how to interact with Roman. Through teacher-directed play, for example, the centres, the children are learning how to take turns, interact with one another, in addition to learning numeracy and literacy skills.

Key Issues in Manuscript One

In the first manuscript chapter (Chapter three) one key problem considered in this Newfoundland case study is provided by Fesseha and Pyle. For Fesseha and Pyle (2016), the Ontario government failed to provide a well-defined concept of play-based learning and professional development. This, therefore, resulted in half of the Ontario kindergarten teachers struggling to implement play-based learning. In this study, the Newfoundland government provides a clear definition of what play-based learning is, definitive examples of what it looks like through a series of children in play vignettes and provides recommendations on how kindergarten teachers may adapt play-based learning in their classrooms. The documents, *Full-day kindergarten play-based learning: Promoting a common understanding* and *Completely Kindergarten:*

Kindergarten Curriculum Guide, are especially useful to myself as a researcher, in regards to understanding what professional learning was given as a way of support for the teachers. This research contributes to existing literature as it highlights the need for clearly defined learning and teaching concepts that may somewhat be abstract. Although the teachers in this study do not provide a verbatim definition of what play-based learning is, they are able to capture the important elements of what it entails as they share examples of what they understand as play-based learning. Therefore, the teachers in this study are able to implement play-based learning in their respective classrooms. However, because the documents provide an elaborate explanation of what is expected in a play-based classroom in Newfoundland and Labrador, the teachers will like more ongoing professional learning/development, more physical space, and additional resources to further implement play-based learning. For example, the classroom environment described in the documents requires more space than what is currently the present classroom layout.

Key Issues in Manuscript Two

While the first chapter focuses on the three kindergarten teachers experiences with play-based learning, the second manuscript chapter (chapter four) concentrates on what play-based learning looks like in the three classrooms. Predominant research literature in this area focuses on how kindergarten teachers from different Canadian provinces other than the Atlantic provinces may implement play-based learning in varied ways due to the emphasis placed by their various governments on the importance of play in their curriculum documents (Peterson et al. 2016). Therefore, it is vital to have a Newfoundland and Labrador perspective to contribute to this growing body of literature. As discussed previously, the Newfoundland and Labrador government regards play as an essential and necessary means of teaching young children. Consequently, the three teachers in this study

implement play-based learning in their classrooms based on these supporting government policies. This study shows how supportive means, such as clearly described play-based pedagogical practices in the curriculum document, can lead to successful pedagogical implementation of play-based learning and thus, may be a reason that the teachers in this study do not perceive the dichotomies between play and learning as referenced in the literature (Bulunuz, 2013; Burke, 2019; Lynch, 2014; Lynch, 2015; Scharer, 2017).

Insufficient time is highlighted as one of the critical issues that England practitioners identify as to why they could not implement a play-based learning environment (Hoskins & Smedley, 2019). Unlike the findings from Hoskins and Smedley's research, this study reveals that the three teachers had ample time to implement play-based learning. They organize both child-initiated activities and teacher-directed activities. Observations show that teachers thoughtfully planned their daily routines to accommodate children's play. In the past, Newfoundland and Labrador kindergarten classes were previously scheduled daily for a three-hour half-day, however, they changed to full-day of five hours in 2016. According to the teachers, with a full day of five hours of instruction as opposed to three hours they are able to implement the intentions of a play-based learning experience as outlined in the curriculum.

Key Issue in Manuscript Three

The challenge emphasized in the third manuscript (Chapter five) focuses on the importance of how socio-cultural context influences our understanding of play-based pedagogies. For example, many of the studies I found on play-based learning in Canada focuses on the province of Ontario (Fesseha & Pyle, 2016; Lynch, 2014; McLennan, 2011; Pelletier & Fesseha, 2019; Peterson et al., 2016; Pyle & Alaca, 2018; Pyle & Bigelow, 2015). What may happen in one province, such as Ontario

may not reflect the climate of play-based learning in another, such as Newfoundland and Labrador. Thus, there is a need to represent the province of Newfoundland and Labrador in the current body of literature. Canadian researchers (Burke, 2019; Danniels & Pyle, 2018; Fesseha & Pyle, 2016; Lynch, 2014; McLennan, 2011; Peterson et al., 2016; Peterson et al., 2017; Pyle & Alaca, 2018; Pyle & Bigelow, 2015; Scharer, 2017; Wajskop & Peterson, 2015) have looked in particular at children's play. Researchers such as Pyle and Alaca (2018) and Pyle and Bigelow (2015) provide kindergarten children's perspectives on play in their full-day kindergarten in Ontario. There have been fewer studies with this focus in Newfoundland and Labrador.

Amongst other commonalities in consideration of socio-cultural contexts, not unlike the Ontario studies, the kindergarten children in this study love to play (Pyle & Alaca, 2018; Pyle & Bigelow, 2015), they believe they learn when they play (Pyle & Alaca, 2018; Pyle & Bigelow, 2015), but still regard play and learning as different (Pyle & Alaca, 2018; Pyle & Bigelow, 2015; Theobald et al., 2015). The children like full-day kindergarten because they play, learn, and make friends.

Physical aggression such as "pushing", "hitting", and "throwing things" is always more complex as it may be conceived as some children not having developed the socio-emotional maturity required to deal with situations that may not go their way or children not being able to respect personal boundaries. According to Penney et al. (2019), physical aggression may be a sign of a mental health issue. Regardless, the children in this study express that they do not like the aggression that takes place in school, which they describe as being hit or observing their friends being hit. But it is also necessary to note that one of the reasons that the government of Newfoundland and Labrador is advocating for play-based learning is to help children who may not have the necessary socio-emotional skills, such as self-regulation, acquire and

develop these skills. Strategies such as the teachers having conversations about respecting personal boundaries and breathing exercises to regulate emotion may be helpful.

Summary of Contributions

This study contributes to current literature on play-based learning since it captures some of the experiences with play-based learning as implemented in the Newfoundland and Labrador kindergarten context. The recurring themes found across the analysis in all the findings, is that play-based learning is essential to the academic and socio-emotional development of children. However, the successful implementation of play-based learning is dependent on the willingness of the teachers to thoughtfully organize playful opportunities for the children to meet curriculum objectives, such as developing numeracy skills [developing number sense, patterns, and shapes] by providing dominos, dice, MathLinks, Legos, 3-D shapes, while encouraging children to use their words and work with their peers (Newfoundland. Department of Education, 2010). Throughout this study, I learned that for the implementation of play-based learning to be successful, the kindergarten teachers need to plan, allocate sufficient time for activities, and be open to learning with the children, which includes listening to what the children have to share about how they learn best. My interviews with both the teachers and principal of the school show how support from the administrative staff is vital, if play-based learning is going to be precedent in their implementing play-based pedagogy (Cancio et al. 2013; Lynch, 2014; Suporitz et al., 2010). The three teachers share that school leadership/administration support provides the confidence they need to explore new pedagogies that focus on playful instructional strategies. A balance between teacher-directed activities, and child-initiated activities is also crucial. My observations show that when teachers had the time to implement play-based learning, they were more

open to its learning possibilities and not concerned with the overwhelming commitment of meeting curriculum objectives within a short amount of time.

This study contributes to the current debate on whether child-initiated play or teacher-directed play is more beneficial. Spending one month immersed in this study, I have reached the conclusion that both types of play are equally critical to a child's learning. Conducting this study has opened my eyes as a researcher and an educator to the possibilities of how teaching through play can afford children's literacy, numeracy, and socio-emotional development. Reflecting on how many curriculum outcomes the teachers implemented in helping their students become more engaged in literacy, numeracy and to grow socially and emotionally is inspirational to me as an educator. Moreover, my observations in the classroom and of the teachers' curriculum implementation contributes to the current literature by providing practical classroom and pedagogical examples of early learning through play, such as how the teachers set up playful opportunities through centres to engage the students in various types of learning. The descriptive observations are intended to help other teachers understand how to implement play-based learning activities that help meet curriculum outcomes in science, arts, numeracy, and literacy.

This study contributes to the literature which focuses on children's perception of what play means in their world. I have included the voices of children sharing that kindergarten should be a place for learning, with and through play, and have structure in curriculum delivery provided through the teacher. In addition, the study provides rich descriptions through participant observation showing current understandings of practical strategies that help children enhance their self-regulation processes.

Conceptual and Theoretical Contribution

In the introductory chapter, I note that there is little research that linked universal design for learning to play-based learning. The intention of using universal design for learning as a theoretical framework in this study, is to bridge that knowledge gap. This is achieved by using the universal design for learning framework to analyse the data collected through direct observations, semi-structured interviews, drawings, and photographs. By doing this, as a researcher, I am able to gain insight into play-based learning, that may have been missed otherwise. For instance, Chris' expressions and actions over the weeks may be considered as some random acts rather than him understanding and regulating his emotions and his learning to become an expert learner.

Importantly, considering universal design for learning as a framework gives this study a unique perspective in the needed practical ways that we can view learning of young children through valid educational checkpoints. Although, the universal design for learning framework may appear largely theoretical, this study validates that the various principles and checkpoints of the framework are evident in the daily practice of play-based instructional delivery of teachers and learning of students, in particular, kindergarten classrooms where play-based learning pedagogies are implemented daily and exemplified in this study.

Notably, this study further supports and corroborates the role of universal design for learning as a relevant and useful framework for exploring and understanding play-based learning. Although confidences in play-based learning approaches vary from teacher to teacher, reflection on one's practice through a universal design for learning lens may show the value of the teachers' practices, which address the diversity of student needs, when using a play-based learning approach.

The three tables below demonstrate practical examples of the principles of engagement, representation, and action and expression that are observed during the data collection of the three classrooms. A practical illustration of “recruiting interest” is when the three teachers provide opportunities for individual activities, whole group activities, and peer group activities (Table 9). Creating an environment where children can ask questions can be considered an example of “comprehension” (Table 10). A demonstration of “executive function” is when a teacher provides reading strategies or counting strategies, which the children can eventually use on their own (Table 11).

Table 9: *Practical Examples of the Principle of Engagement*

Engagement	Practical Examples
Recruiting Interest	<ul style="list-style-type: none"> • Providing opportunities for children to play, e. g. free play periods, outdoor play • Ensuring that the classroom environment is physically and socially safe. • Regularly asking the children to investigate what practices are working and not working • Providing opportunities for children to work independently or with their peers.
Sustaining Effort & Persistence	<ul style="list-style-type: none"> • Setting rules and goals. For example, with the help of the children create a noise level chart. That way, everyone can agree on the appropriate noise level. • The play areas should be stocked with a variety of resources and materials that make learning authentic. • Organizing group activities, such as circle time or centres to help children learn social skills.
Self-Regulation	<ul style="list-style-type: none"> • Instructing children on different types of emotions so that they can recognize what emotions they are feeling • Setting up areas within and outside the classroom where children can calm themselves

Adapted from CAST (2018). *Universal design for learning guidelines version 2.2 [graphic organizer]*. Wakefield, MA: Author.

Table 10: *Practical Examples to Illustrate the Principle of Representation*

Representation	Practical Examples
Perception	<ul style="list-style-type: none"> • Words can be displayed on a large sheet or on the SmartScreen. • YouTube Videos are helpful in teaching children concepts like capacity. • Using each child's interest (e.g., comic characters) to display information. • The children found animated storybooks to be engaging. • There should be an array of books on different topics.
Language & Symbols	<ul style="list-style-type: none"> • Providing opportunities for children to develop literacy skills by setting up centres, such as the author centre, where they write their own stories with images. • A bead centre was used by one of the teachers to develop the children's understanding of ABCs and patterns. • Creating centres like the number tower to teach about numeracy, colours, patterns, and teamwork. • Reading books to teach literacy, numeracy, and colour concepts. • Board games are good for teaching about numbers. • Being dramatic in your teaching, e.g., act out the characters
Comprehension	<ul style="list-style-type: none"> • Activating or supplying background knowledge by asking children to recall a time when... • Linking activities together, you can show them patterns. For example, can you remember the reading strategies, and have them recall words we learned last week. • After reading a book about rocks, encouraging the children to find unique rocks during outdoor play, and have them share what they found with the whole class. You can also use this reading to teach children about living and non-living things. • Creating an environment where children can ask questions. • Creating a display board where children can draw and label their images. For example, you

can encourage children to think about the board as the sea, ask them to draw sea creatures or things that can be found in the sea. Provide sticky notes for them to label their drawings.

Adapted from CAST (2018). *Universal design for learning guidelines version 2.2 [graphic organizer]*. Wakefield, MA: Author.

Table 11:*Practical examples: Action & Expression*

Action & Expression	Practical Examples
Physical Action	<ul style="list-style-type: none"> • Ensuring that tools, such as iPads, pencils, and crayons are accessible to the children. • Using different approaches to assess what the children know. For example, by listening and observing a child playing with connectors, you can assess his knowledge of shapes and motor skills. • Making allowance for children that may not respond to formal assessment methods. You can assess those children through impromptu responses, such as when the child counts out when you are reading a storybook to the whole class.
Expression & Communication	<ul style="list-style-type: none"> • Children can express their learning in other ways, in addition to print. You can use their writing during play to assess their literacy skills. • Allowing children to draw to express themselves. • Children can express their knowledge about sea creatures by using connectors to make a fishing rod and making paper fish.
Executive Functions	<ul style="list-style-type: none"> • You can let children know the objective of each activity and model what the activity entails. • Providing useful strategies for children to use, such as reading strategies, counting strategies, adding strategies. • Encouraging each child to participate in the activities and support them where necessary.

Adapted from CAST (2018). *Universal design for learning guidelines version 2.2 [graphic organizer]*. Wakefield, MA: Author.

Methodological Contribution

This study contributes to methodology and advances research in early learning by including children's voices. The findings of this study demonstrate that children's drawings are a useful and relevant source of data, as children communicate their ideas through drawing on matters that pertain to them. The drawings enhance the children's voices by providing insight that may otherwise have been missed, such as the lack of interest in playing with Peppa Pig characters. The drawings from the kindergarten children provides feedback for the teachers on reflections of the children on their pedagogical practices. Regarding the Peppa Pig characters, Miss Scarlet was surprised to learn that the children no longer had any interest in playing with the toy characters. Meanwhile, at the beginning of the school year, the children enjoyed playing with Peppa Pig characters. The children's drawings brought to the teacher's attention their changing popular culture interest over the course of the school year. Both the drawings and interviews are equally valuable, as sources of data, as they highlight varying perspectives on children's play and learning experiences. Through the children's interviews, physical aggression is flagged as a challenge in kindergarten. While the drawings provide information on their least favourite pedagogical and classroom activities.

This study also highlights valuable approaches on how to conduct research involving young children. One of these approaches pertains to the importance of getting to know the participants before data collection, as this makes the research process much richer in experience. Building relationships and trust of the teachers and children enriched the data collected, as it could enable the researcher to become privy to relevant and useful information that may have been missed otherwise.

Discussions and Recommendations

The current study explores play-based learning in three kindergarten classrooms by using a multi-case studies design, which allows data to be collected through observations, semi-structured interviews, drawings, and photographs. Personal communications with the three teachers and the principal provide additional insight. The recommendations from this study arise out of the existing literature, the findings from this study, and personal communication with the teachers and principal.

Professional Development

According to Lynch (2015), American teachers in her study cite inadequate teacher education as one of the reasons they are unable to effectively implement play-based learning. In this study, the findings suggest that the teachers would like to have more ongoing professional learning. For example, Miss Suzan explains that since she began teaching full-day kindergarten in 2018, there has been no professional learning. She uses resources provided by the administration in her school and her own readings to help inform what she does in the classroom. It is common knowledge that there are professional learning sessions offered in late summer through the provincial government and the school district in the past. However, with limited seats, some teachers have not been able to avail of this opportunity. Miss Scarlet would like professional development on how to assess children's learning when they play. This is especially important because as Moyles (1989) notes, play is complex in terms of its different forms and qualities, which may lead to teachers having a difficult time in assessing play. The findings from the current study aligns with the findings from Bubikova-Moan et al. (2019) regarding confidences in the development of educators, they note that early childhood educators were concerned about their qualifications and education. It is important to mention that in Canada, early childhood educators and teachers are educated

differently. Early childhood educators are taught both the theoretical and practical sides of early childhood development, such as how to use play to develop skills in young children. Meanwhile, teachers are educated in the broader classroom pedagogies that are not focused on early childhood development, with an emphasis on curriculum content, policies, and assessment (Lynch, 2014). The three teachers in this study have Masters' degrees, but that does not equate to having an extensive understanding of play theories or ways to implement play-based learning, especially because there are several approaches to its implementation (Bubikova-Moan et al. 2019; Danniels & Pyle, 2018; Lynch, 2014; Moyles, 2010).

Accordingly, there are two recommendations provided by Bubikova-Moan et al. (2019), which align with the findings in this study. The first suggestion is to provide opportunities for professional development with regards to play theories and play-based learning. The Newfoundland and Labrador government needs to recognize that although the three teachers in the study are well educated in the broader primary/elementary school curriculum, there are specific skills that are needed to facilitate learning through play-based learning. It must be noted, that although the teachers in this study have been able to successfully implement play-based learning, they would like to have additional professional learning on specific skill sets attributed to play-based learning. Delving deep into the literature for this study, I found that there are many play theories one could consider, and it is valuable to know which ones apply to one's classroom context. Currently, in Newfoundland and Labrador, professional development is often reserved for new kindergarten teachers and does not include teachers in mid-career. In addition, professional development should be offered around assessment in the area of play-based learning and how best to support children's socio-emotional development. According to Young et al. (2019), it is essential to provide professional development for teachers in early childhood

education that focuses on skills, especially around inclusion. The professional development/learning on inclusion will equip teachers with the skills to not only identify the needs of the children, but also how to meet those needs. I recommend that one way of achieving this is for the school board to partner with institutions, such as Memorial University of Newfoundland to provide these learning opportunities. As I mentioned earlier, early childhood educators and kindergarten teachers are educated differently (Lynch, 2014), therefore, Memorial University should develop some courses that focus primarily on play theories, approaches to play-based learning, using play to develop socio-emotional processes and skills, and assessing children's learning through play as part of their primary/elementary teaching degree program. Current undergraduate programming does not address these areas in courses offered through the program.

Another suggestion provided by Bubikova-Moan et al. (2019) and Suporitz et al. (2010) is that opportunities should be provided for workplace mentorship (teachers within the same school learn from one another) and cross collegiate reflections (teachers from different schools observe each other's practices). Suporitz et al. (2010) believe that peer coaching is an effective strategy in helping teachers learn from their peers on their pedagogical practices. For instance, Keung et al. (2019) discuss how kindergarten teachers in Hong Kong who participated in professional learning communities are able to develop instructional teaching strategies, such as play-based learning. One of the reasons this is possible is because the kindergarten teachers in their study engage in reflective practice. Likewise, Hall (2020) argues that for reflective practice to be successful, it needs to be collaborative. That is, teachers need to engage in discussions with their colleagues or experts to identify issues in their practice, create solutions to those issues, and apply those solutions in their classrooms. These suggestions provided for teachers' professional development by

Bubikova-Moan et al. (2019), Hall (2020), Keung et al. (2019), and Suporitz et al. (2010) on learning from colleagues in their schools and other schools mirrors what the principal of this study site recommends as an effective way to develop teachers' play-based pedagogical practices. The principal expresses that he believes that the best experts are in the classroom. He is in support of his teachers requesting to go and observe another teacher's classroom either in the same school or in a different school, that is, shadowing other teachers. For this principal, the best form of professional development happens when the teachers are open and willing to learn (The Principle, personal communication, April 28, 2020). For him, it is all about learning for the sake of the child.

In 2018, the Newfoundland and Labrador Department of Education stated that the universal design for learning framework should be included in curriculum renewal focusing on the early years (Newfoundland & Labrador. Department of Education, 2018). Therefore, the universal design for learning approach is considered as an instructional strategy to facilitate the implementation of play-based learning by the government. However, during my data collection, none of the teachers mentioned universal design for learning during any of our discussions including the interviews. This may be because I did not use the term "universal design for learning" in my interviews with them. After the data collection process, I asked Miss Scarlet if she was familiar with the universal design for learning framework. Miss Scarlet responded that she has knowledge of it and that it is a framework used for children with special needs. Therefore, she applies universal design for learning implicitly. Nevertheless, the findings from this study demonstrate that universal design for learning is a useful framework in understanding play-based learning (see Tables 9, 10, & 11 for examples). As a researcher, I observed that although the three teachers in this study do not explicitly express their knowledge of universal design for learning, they

however, are intentionally flexible in the educational materials and methods that allow the children in their classrooms to overcome some barriers to their learning (CAST, 2018; Rose & Meyer, 2002). By providing multiple ways for children to comprehend a concept or express their knowledge, and not subscribing to a one size fits all ideology, the kindergarten children in this study gain optimal access to the curriculum, which makes learning authentic and meaningful. Consequently, I believe professional development programs that address universal design for learning would be beneficial to all kindergarten teachers in Newfoundland and Labrador if it is to be a major part of their pedagogy. In addition, professional development is needed to correct the notion that the universal design for learning framework is specifically for children with special needs.

Lynch (2014) reports that many of the Ontario kindergarten teachers in her netnography study felt that they did not have support from the administrative staff. Administrative support is described as appreciation, guidance and feedback, consideration, and professional growth from school leaders (Cancio et al. 2013). Cancio et al. (2013) also report that administrative support or the lack thereof affects teachers' morale, while principal support is described by Suporitz et al. (2010) as making missions and goals clear, encouraging collaboration and communication, and fostering community and trust. In this study, the teachers benefit from administrative support, which includes support from the principal, staff, and their peers. As the teachers note that because of the support they receive from their school's leaders, such as receiving compliments from the principal on a play-based activity or being provided with resources that they request for their classrooms, they are able to successfully implement play-based learning. Fesseha and Pyle (2016) state that the kindergarten teachers in their study cite lack of support from their colleagues as a reason why they struggle with implementing play-based learning. This aligns with the

findings from Suporitz et al. (2010) which reports that peers influence their colleagues in their pedagogical practice. Although the teachers in this study enjoyed the support of the school leadership team and their colleagues, they requested that they would like support in terms of a kindergarten community forum where kindergarten teachers can come together to discuss their victories and challenges. According to Suporitz et al. (2010), this can be formal or informal instructional advice networks, where teachers can provide and seek useful advice on their practices. Borrowing an idea from Lynch's (2014) work, where she reviews teachers' discussions online, an online forum dedicated specifically for kindergarten teachers within the province may prove useful. This way, kindergarten teachers can connect with one another to share their experiences and provide practical counsel on how to overcome the difficulties associated with implementing play-based learning, especially with those kindergarten teachers in the province who may not have the support of their administration or colleagues. For example, the forum could include the Department of Education in discussing issues and pedagogical supports around the socio-emotional needs of young children.

Extra Classroom Pedagogical Support

In Ontario, the kindergarten classroom is equipped with a teacher and an early childhood educator (Lynch, 2014). The findings from the study conducted by Pelletier and Fesseha (2019) reveal that having two teachers in the classroom (kindergarten teacher and early childhood educator) is beneficial to children, especially those struggling, who attend full-day kindergarten as opposed to half-day kindergarten in Ontario. Pelletier and Fesseha (2019) note that because there were two teachers in the classroom the children developed better self-regulation skills, such as inhibiting inappropriate behaviours. Further, Young et al. (2019) suggests that the government should have at least two highly skilled educators in play-based

pedagogy in the classroom. Based on this study, I would recommend that an addition of an early childhood educator in the classroom might be valuable as they bring a different skill set than the kindergarten teacher.

Socio-Emotional Learning

The provincial government advocates for play and play-based learning because it is a true pedagogical approach that engages children in learning. In addition, it is believed that some children lack the skills to initiate play on their own due to the increased time they spend on screens, busy parents, and participation in adult activities rather than child-centred activities (Newfoundland & Labrador. Department of Education & Early Childhood Development, 2016). According to some of the interviewed children in this study, play is an avenue to learn social skills, such as playing nicely and making friends. Socio-emotional learning is essential as this study demonstrates because some of the children lack the socio-emotional maturity to regulate their emotions and behaviours. Some of the children in this study identify physical aggression as a source of concern in kindergarten. For instance, Penney et al. (2019) identify hurting others as a sign of mental health, thus, it is not that the children who hit others are intentionally being cruel, they just lack the skills to regulate their behaviours. I asked Miss Scarlet and Miss Suzan their thoughts about the children's sharing of not liking being hit in kindergarten. They both agree that it is children being unsure of how to regulate or show emotions. Also, when incidences of physical aggression occurred, the teachers say that they have a chat with the children about how hitting is not a measured response to resolving conflict. Consequently, socio-emotional learning needs to be emphasized especially at the beginning of the school year alongside academic skills. For the three teachers, socialization can be both a benefit and challenge of play-based learning. According to

the three teachers, it would be helpful if the children acquire some social skills prior to coming to kindergarten.

Young et al. (2019) explain that having a high-quality early childhood education program could help prevent children from later developing behavioural and other challenges. Accordingly, the Newfoundland and Labrador government has the KinderStart program, which is intended to help children transition into kindergarten by learning social skills, such as friendship and social responsibility. KinderStart is a program organized by the Newfoundland and Labrador government, which involves both parents/guardians and children. It is intended that parents/guardians and their children attend the program for eight months of the school year to acclimatize the children with what to expect, such as self-regulation skills, when they attend kindergarten the following school year. Through interviewing Miss Scarlet, she shared that the children who attend the KinderStart program have four sessions per school year. Most times the parents are invited to the library to attend parental support and literacy sessions with the principal, while the children attend independently the KinderStart session with the teacher. This information was confirmed by the consultant in charge of the KinderStart program with the Department of Education, through a phone call conversation. One of the issues Miss Scarlet shared that is problematic is due to parents having little time to observe their children while socializing and playing while attending these limited number of sessions. A change to the structure of the session would help parents to understand the importance of developing social skills at home. Another key issue around the KinderStart program structure is the limited number of sessions, such as four in total in this school's case is not near enough. This translates into ten hours preparation for children for a demanding first year of school. This is near not enough for children to be assessed for social skills and other issues. The limited experience that children

receive before attending full-time school in Newfoundland does not prepare children, teachers, and parents. Offering both half day and full day KinderStart programming would be beneficial to everyone. Another question pertains to whether all parents/guardians are availing themselves and their children of KinderStart to prepare children for their first year of school. In 2019, the Newfoundland and Labrador, Department of Education and Early Childhood Development reports a plan for the implementation of Junior Kindergarten. The proposed Junior Kindergarten is “a play-based, quality early learning program that would be available for four-year old children in the province during the year prior to Kindergarten (Newfoundland & Labrador. Department of Education & Early Childhood Development, 2019, para. 4). This will be helpful to children preparing to begin kindergarten. In addition, it would be helpful for teachers to receive more professional learning in how to recognize when children are exhibiting these challenging behaviours and how to work with families to address the child’s needs.

According to Penney et al. (2019) and Powell et al. (2006), socio-emotional learning is vital in early childhood education. For Penney et al. (2019), early childhood educators should be educated in recognizing different aspects of mental health needs such as anxiety, depression, disruptive behaviours, irritability, and aggression. In line with the recommendation of providing professional development for teachers in early childhood education (Bubikova-Moan et al., 2019), professional development opportunities that target how to identify the socio-emotional needs of children is required. Kindergarten teachers need to be educated on how to identify the socio-emotional needs of the children in their classrooms.

From my observations, I recommend that extra support in the classroom may help minimize physical aggression and benefit the social emotional health of all the children. In Miss Suzan’s class, anytime a child had difficulties with self-regulation,

the class support staff either attends to that one child, or we all leave the classroom for the one child, so that no other person gets hurt. Having another teacher, teacher assistant, or early childhood educator in the classroom full- time would assist with the socio-emotional needs of all children.

According to Clark (2017), in her book on listening to children's voices, the classroom environment serves as another teacher as she investigates children's opinions on their outdoor spaces. This is also mirrored in the curriculum document, that the classroom environment is to be the other teacher (Newfoundland. Department of Education, 2010). In this study, I observed how the teachers, especially Miss Suzan uses the sustained shared thinking strategy to facilitate the children's understanding of their socio-emotional needs. I believe that constantly having a conversation about physical aggression with the children during circle time, before they engage in free play both indoors and outdoors, reading books about regulating emotions, or playing media that deals with the topic can help children recognize that physical aggression is inappropriate. For instance, Miss Suzan had the calming areas both inside and outside the classroom. The breathing charts in her classroom were especially helpful. I saw how the children consulted the charts without Miss Suzan's supervision when they need to regulate their emotions showing a growing understanding of how they could regulate themselves when needed.

Miller and Almon (2009), Moyles (2012), and Powell et al. (2006) all recommend the use of play for the socio-emotional development of children. Powell et al. (2006) advocate for using forms of play, such as role play, dramatic play, imaginary play, and cooperative play as intervening tools with children with challenging behaviours. Teachers should find a way to integrate these forms of play with an emphasis on dealing with the issues of physical aggression. For instance, the teacher could ask the children to act out a situation in which they have experienced

physical aggression or witnessed a friend experiencing physical aggression and ask how that made them feel. This way, the children might gain more awareness of what physical aggression looks like and develop empathy and understanding of how it hurts people.

Listening to Children's Voices

The Mosaic Approach developed by Clark (2001, 2007, 2017) emphasizes the importance of including children's voices in matters that pertain to them. I used this approach by directly asking children questions through semi-structured interviews and by asking them to create drawings, in addition to indirectly collecting data through observations and photographs. This study finds that kindergarten children are able to communicate their opinions on their kindergarten experiences as studies such as Clark (2017), Pyle and Alaca (2018), and Theobald et al. (2015) demonstrate. This study highlights the value of having kindergarten teachers evaluate their instructional methods by asking children to share how their learning is successful or challenged based on the teacher's pedagogical approach. This feedback could be sought in the middle of the term or at the end of the term. The children could be asked to draw, take photographs, dramatize, sing, or use movement to express their views (this will allow for multiple means of expressing their ideas). The teachers also could decide whether they would ask the children to evaluate their teaching practices individually or during circle time where the evaluation can be done with a group of children. According to Lynch (2014), some Ontario teachers stated that the needs and interests of extroverted children often dominate those of introverts. In this study during the interview phase, it was more helpful when the children were asked questions individually rather than in pairs with a peer. Some children's voices and opinions were overshadowed by others as some children tend to go along with the opinions of others, especially when those others

are more verbal. Nevertheless, the teacher has full discretion and will be cognizant with the children in their classroom (the teacher knows the children who are more expressive or less expressive). Therefore, the teacher will be able to balance the needs and interests of all children by providing opportunities for all children to express their needs.

Replicating This Study

Qualitative research is often contextual and dynamic (Cohen et al., 2017; McMillan & Wergin, 2002). One of the reasons I undertook this study is to explore whether my findings would agree with some of the literature I had read. Some of my findings align with some studies, while others do not. For instance, the three kindergarten teachers do not face the same challenge of insufficient time to allow for play opportunities as the kindergarten teachers in Hoskins and Smedley's (2018) study do. I believe that this study can be replicated. However, there is no guarantee that the results will be the same. This study was conducted in three English classrooms in an elementary school in St. John's, Newfoundland and Labrador. The conditions in these classrooms may not be the same as other kindergarten classrooms within the St. John's area or rural Newfoundland. Nevertheless, I have provided a detailed account of the multi-case studies design used in this study. I have also accounted for the data collection methods by describing how I gathered my data. The analysis of the data has also been intricately described to provide insight into how I came about my findings. This is to ensure that if another researcher desires to replicate this study, they will have an audit trail (Yin, 2009). Another reason I describe my data collection methods, my participants, and my data analysis process is to ensure that findings from this study are trustworthy and credible (Leavy, 2017). I use triangulation to ensure trustworthiness by utilising different methods to collect data (direct observations, semi-structured interviews, drawings, and photographs) and

using different sources of data (three kindergarten teachers and forty- one kindergarten children). Also, I achieve data triangulation (Leavy, 2017) by using the literature and universal design for learning to interpret the data during data analysis.

Yin (2009) argues that although findings in case studies may not be generalizable to larger populations, they can, however, be generalized to theoretical propositions. This study can be generalized to theoretical propositions that describe play-based learning, such as describing play-based learning through a universal design for learning theoretical lens. The findings from this study can be useful to certain kindergarten classrooms that may share similar characteristics to the ones that are in this study. Likewise, transferability is “a way of making the research findings useful in other contexts, thereby extending the findings beyond your own data.” (Leavy, 2017, p. 155). This study is contextual as it is conducted in three kindergarten classrooms that use the play-based curriculum, in St. John’s. I believe the findings from this study can be transferred to similar contexts, that is kindergarten classrooms that use a similar play-based learning curriculum guide within Newfoundland and Labrador, and internationally, kindergartens that advocate for play-based learning.

Limitations of the Study

Creswell (2014) defines limitations as potential issues or weaknesses, which are identified by the researcher concerning their study. Time may be considered as a limitation in this study. Although I did spend about six hours daily in the classroom, I feel as if more hours would have been more beneficial to me as a researcher. The data was collected over a one-month period at the end of the school year. In the future, I would like to collect data over the school year. That way, I can examine differences between the beginning of the year and the end of the year. For instance, the school administration team kept informing me that the children in Miss Suzan’s

class had improved greatly in their socio-emotional learning, that the difference in children's behaviour was significant. Therefore, it would be practical in future research to follow the children's progress from the beginning of kindergarten in September to the end of the school year in June. This would allow more opportunity to observe how teachers meet children's needs and interests throughout the year to ensure their academic and socio-emotional success. That is not to suggest that the data that I did collect is not rich and rigorous. On the contrary, by collecting data at the end of the school year, the three kindergarten teachers and their children were able to communicate their experiences with play-based learning more coherently. Moreover, an extended research period would allow observation of other common practices outlined in the document, such as gauging teachers' understanding of childhood development theories and the documentation and assessment strategies used to evaluate children's learning when they play.

Another limitation in this study was the sample size. I sent recruitment letters to several elementary school principals. Only two principals responded, one from the private school system and one from the public school system. The principal of the private school informed me that the kindergarten curriculum in her school is inquiry-based learning not play-based learning. The principal from the public school was happy to have me conduct a study on play-based learning as the kindergarten classrooms use the play-based learning curriculum. Therefore, three kindergarten teachers participated in this study and are from the same school. Perhaps, collecting data from other kindergarten teachers in different settings may have provided a different set of findings. However, the data provided by these three teachers and their students provide rich and rigorous data, which facilitated my understanding of play-based learning in their context. In the future, I would like to collect data from multiple primary elementary schools. This would allow me to observe whether some

classrooms implement play-based learning or prefer other instructional strategies. To achieve this investigation, multiple researchers might be necessary.

The logistics in planning a multiple-case studies design could also be a limitation. As Yin (2009) notes, "Case study is remarkably hard, even though case studies have traditionally been considered a 'soft' research, possibly because investigators have not followed systematic procedures" (p. 21). The researcher needs to ensure they have not bitten off more than they can chew. I found that at the end of each day, I had an overwhelming amount of data because I collected data through different methods and from different sources to ensure triangulation (Leavy, 2017), which improves the trustworthiness of this study. Therefore, I had much rich data to select from, and that is how data triangulation (Leavy, 2017) was achieved thereby showing that my research choice and approach are reliable. This was aided by using several literatures around play-based learning and a universal design for learning framework to interpret these rich data, as a result, I am able to ensure the credibility of the findings. Further, this study is reliable because as a researcher, I provide a detailed account of my literature review, theoretical framework, methodology (research design, data collection methods, sampling procedure, and data analysis process).

Future Research

According to Creswell (2014), the limitations identified by the researcher regarding their study potentially leads to suggestions for future research directions. Creswell (2014) and Yin (2009) note that multi-case studies are robust because they allow for comparisons to be made across different cases to provide in-depth insight into a phenomenon. This study uses a multi-case studies design to gain in-depth insight into play-based learning in three kindergarten classrooms in St. John's, Newfoundland and Labrador. This study is exploratory and lays the groundwork for

other researchers to examine play-based learning in Newfoundland and Labrador.

The following are considerations for future research in Newfoundland and Labrador:

- i. Conduct an online survey to include the opinions of kindergarten teachers across Newfoundland and Labrador as this study was only able to collect data from three kindergarten teachers in St. John's. The online survey will ensure that more kindergarten teachers' voices are included in the research on play-based learning.
- ii. Investigate play-based learning in other kindergarten schools, including French-immersion classrooms because this study focuses on three English kindergarten classrooms. This is necessary to get a balanced view of play-based learning in the Newfoundland and Labrador context, since French immersion classrooms are part of the play-based learning kindergarten experience.
- iii. Explore other common practices that are outlined in the Newfoundland and Labrador kindergarten document, as this study focuses on a few. This study explores the time provided for children to play and explore; how the classroom environment is organized to enhance literacy and numeracy; teacher-directed activities and child-initiated activities; and how teachers use sustained shared thinking to stimulate children's activities and talk. Some common practices that might be observed in future research are: teachers having a thorough understanding of all kindergarten outcomes, child development, and the play-based approach to children's learning; teachers practice documentation and reflective practice and; how curriculum topics and objectives are introduced and explored using an integrated curriculum model of delivery rather than a subject-specific approach. This is an essential

future research consideration as a major finding in this study centres around professional development and learning about implementing play pedagogies that adhere to play- based theories and assessing children's play. A study investigating childhood development philosophies that the teachers support may provide valuable insight into their current practices and into areas that they may need help, and how best to support them.

- iv. A fundamental tenet of the universal design for learning framework is that there are diverse learners who need multiple options for action and expression. Future researchers should consider using other data collection methods, such as children taking photographs, making a video, dramatizing, and singing, in addition to the ones used in this study to understand children's views on play-based learning and the kindergarten environment. These types of various approaches could ensure that every child has a way to express themselves through mediums that are more meaningful to them. That way, individual children's voices are appropriately represented in the research.
- v. To ensure that all children's voices are included, particularly children with socio-emotional needs, a case study on the KinderStart program and how effective it is in helping children transition into kindergarten is needed. There seems to be a disconnect between what is described in the KinderStart document and what is currently been practiced.

Final Reflections

This study emerges from a desire to improve my pedagogical practices as an early learning teacher. The study focused on the present climate of play-based learning in St. John's, Newfoundland and Labrador, by exploring three kindergarten classrooms. I enjoyed the research process, especially working with the children. The data collection process has afforded me the opportunity to understand three teachers' perspectives on play-based learning, to observe how play-based learning is implemented in the three classrooms, and to listen to what the children had to say about play and learning. It is important to remember that while the three teachers enjoy teaching through play, they may benefit from more professional development. Implementing play-based learning requires purposeful planning in which both teacher-directed activities and child-initiated activities are equally important. This type of planning requires time and support from the school leaders and colleagues. Children can express their understanding of their learning environment. For the children in this study, play is an essential part of their lives and they like it when they play in kindergarten. Their voices support the use of play-based learning as a means to enhance academic and socio-emotional development.

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Appendix A (Universal Design for Learning)

Table A1

Universal Design for Learning Guidelines

Multiple Means of Engagement	Multiple Means of Representation	Multiple means of Action and Expression
Affective Networks: The "WHY" of learning	Recognition Networks: The "WHAT" of learning	Strategic Networks: The "HOW" of learning
Provide options for Recruiting Interest (7) <ul style="list-style-type: none"> • Optimize individual choice and autonomy (7.1) • Optimize relevance, value, and authenticity (7.2) • Minimize threats and distractions (7.3) 	Provide options for Perception (1) <ul style="list-style-type: none"> • Offer ways of customizing the display of information (1.1) • Offer alternatives for auditory information (1.2) • Offer alternatives for visual information (1.3) 	Provide options for Physical Action (4) <ul style="list-style-type: none"> • Vary the methods for response and navigation (4.1) • Optimize access to tools and assistive technologies (4.2)
Provide options for Sustaining Effort & Persistence (8) <ul style="list-style-type: none"> • Heighten salience of goals and objectives (8.1) • Vary demands and resources to optimize challenge (8.2) • Foster collaboration and community (8.3) • Increase mastery-oriented feedback (8.4) 	Provide options for Language & Symbols (2) <ul style="list-style-type: none"> • Clarify vocabulary and symbols (2.1) • Clarify syntax and structure (2.2) • Support decoding of text, mathematical notation, and symbols (2.3) • Promote understanding across languages (2.4) • Illustrate through multiple media (2.5) 	Provide options for Expression & Communication (5) <ul style="list-style-type: none"> • Use multiple media for communication (5.1) • Use multiple tools for construction and composition (5.2) • Build fluencies with graduated levels of support for practice and performance (5.3)
Provide options for Self Regulation (9) <ul style="list-style-type: none"> • Promote expectations and beliefs that optimize motivation (9.1) • Facilitate personal coping skills and strategies (9.2) • Develop self-assessment and reflection (9.3) 	Provide options for Comprehension (3) <ul style="list-style-type: none"> • Activate or supply background knowledge (3.1) • Highlight patterns, critical features, big ideas, and relationships (3.2) • Guide information processing and visualization (3.3) • Maximize transfer and generalization (3.4) 	Provide options for Executive Functions (6) <ul style="list-style-type: none"> • Guide appropriate goal-setting (6.1) • Support planning and strategy development (6.2) • Facilitate managing information and resources (6.3) • Enhance capacity for monitoring progress (6.4)

Adapted from CAST (2018). *Universal design for learning guidelines version 2.2 [graphic organizer]*. Wakefield, MA: Author.

Appendix B (Recruitment Letters)



Faculty of Education

Academic Programs Office
G.A. Hickman Building
St. John's, NL Canada A1B 3X8
Tel: 709 864 3403 Fax: 709 864 2001
www.muneduc@mun.ca

Recruitment Script for Parents/Guardians

Hello Parent/guardian:

My name is Chinwe Ogolo, and I am a Student in the Faculty of Education at Memorial University of Newfoundland. I am conducting a research project called *Exploring Play-Based Learning in Full-Day Kindergartens in St. John's, Newfoundland and Labrador* for my PhD degree under the supervision of Dr. Anne Burke. The purpose of the study is to explore the implementation of play-based learning in St. John's.

I am contacting you to invite your child to participate in a semi-structured interview and drawing activities in which they will be asked to discuss their experiences with play and learning and to draw on places that enhance or do not enhance those experiences. Participation will require interviews of about five to ten minutes in the presence of the vice principal or guidance counsellor and drawing activities may take between ten to twenty minutes in the classroom in which they may be asked to elaborate more on their drawings.

If you are interested in your child participating in this study, please contact me to arrange a meeting time. You will be provided with an informed consent form which describes the study, possible benefits, risks, withdrawal, confidentiality, and anonymity. If you want your child to participate, you will be required to sign the document. There will be two copies, one for you and one for the researcher.

Your child's participation in the study is not a school board, principal, school, curriculum, or teacher requirement. It is voluntary.

If you have any questions about me or my project, please contact me by email at co4072@mun.ca, or by phone at 709-693-0093.

Thank-you in advance for considering my request,

Chinwe Ogolo

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research, such as your rights as a participant, you may contact the Chairperson of the ICEHR at icehr.chair@mun.ca or by telephone at 709-864-2861.



Faculty of Education

Academic Programs Office
G.A. Hickman Building
St. John's, NL Canada A1B 3X8
Tel: 709 864 3403 Fax: 709 864 2001
www.mun.ca

Recruitment Script for Teachers

Hello teacher:

My name is Chinwe Ogolo, and I am a Student in the Faculty of Education at Memorial University of Newfoundland. I am conducting a research project called *Exploring Play-Based Learning in Full-Day Kindergartens in St. John's, Newfoundland and Labrador* for my PhD degree under the supervision of Dr. Anne Burke. The purpose of the study is to explore the implementation of play-based learning in St. John's.

I am contacting you to invite you to participate in a semi-structured interview and a series of observations of your classroom in which you will be asked to discuss your experiences with implementing play-based learning. Participation will require observation of your classroom for fourteen days and the interviews will be about fifteen minutes of your time and will be held at your school either before and after school or at lunch time in the fourteen days. The observations will include how the classroom environment is set up to enhance literacy and numeracy, how children's activities are sustained through shared thinking; the amount of teacher and child-initiated activities. With your help, children in your classroom will participate in drawing activities and some children will be interviewed about their play experiences with the vice principal or guidance counsellor present.

If you are interested in participating in this study, please contact me to arrange a meeting time.
Your participation in the study is not a school board, principal, or employment requirement. It is voluntary.

If you have any questions about me or my project, please contact me by email at co4072@mun.ca, or by phone at 709-693-0093.

Thank-you in advance for considering my request,

[Redacted Signature]

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research, such as your rights as a participant, you may contact the Chairperson of the ICEHR at icehr.chair@mun.ca or by telephone at 709-864-2861.



Faculty of Education

Academic Programs Office
G.A. Hickman Building
St. John's, NL Canada A1B 3X8
Tel: 709 864 3403 Fax: 709 864 2001
www.mun.ca/feduc

Recruitment Letter for Principals

Dear Principal:

My name is Chinwe Ogolo and I am a Student in the Faculty of Education at Memorial University of Newfoundland.

I am conducting a research project called *Exploring Play-Based Learning in Full-Day Kindergartens in St. John's, Newfoundland and Labrador* for my PhD degree under the supervision of Dr. Anne Burke.

The purpose of the study is to explore the implementation of play-based learning in St. John's. I would like for you to consider this study for your school. I am looking to work with one or two kindergarten teachers in your school. This observation and interview process would be for fourteen days. During this time, I would be considering how play-based learning is implemented in the classroom. I am hoping to explore this through semi-structured interviews with the two teachers and 4 children, as well as a checklist of observation of child and teacher-initiated play activities, and how teachers sustain children's activities and talk through sustained shared thinking. I also will consider how the classroom environment inspires children's play to enhance literacy and numeracy. The children will be asked to participate in drawing activities to understand their favorite and least favorite activities to do in class and the places they like and do not like within their classroom. This is to gain insight into what enhances their learning and areas in the classroom that they find least inspiring. Interview questions such as "What do you understand as play-based learning?" will be asked of the teacher. Children will be asked questions such as "Do you know what play is? What does it look like?" and "What are you drawing? Why?"

For the purpose of this research, I would like to ask that you kindly send the attached recruitment to your school kindergarten teachers and students' parents/guardians. The long term goal of this project is to understand how play-based learning is implemented in full-day kindergarten, the benefits and challenges associated with it and what can be done to improve its implementation.

As you are fully aware, this participation of your school, teachers or children is not a requirement of your employment. This is completely voluntary and up to you and your school, and community if they wish to participate.

If you have any questions about me or my project, please contact me by email at co4072@mun.ca, or by phone at 709-693-0093.

Thank you in advance for considering my request,

Chinwe Ogolo

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research, such as your rights as a participant, you may contact the Chairperson of the ICEHR at icehr.chair@mun.ca or by telephone at 709-864-2861.

Appendix C (Ethics Clearance)



Interdisciplinary Committee on
Ethics in Human Research (ICEHR)

St. John's, NL, Canada A1C 5S7
Tel: 709 864-2511 ext 6000
www.mun.ca/research/ethics/human/icehr

ICEHR Number:	20190014-ED
Approval Period:	April 29, 2019 – April 30, 2020
Funding Source:	Not Funded
Responsible Faculty:	Dr. Anne Burke Faculty of Education
Title of Project:	Exploring Play-Based Learning in Full-Day Kindergartens in St. John's, Newfoundland and Labrador

April 29, 2019

Ms. Chinwe Ogolo
Faculty of Education
Memorial University of Newfoundland

Dear Ms. Ogolo:

Thank you for your correspondence of April 21, 2019 addressing the issues raised by the Interdisciplinary Committee on Ethics in Human Research (ICEHR) concerning the above-named research project. ICEHR has re-examined the proposal with the clarification and revisions submitted, and is satisfied that the concerns raised by the Committee have been adequately addressed. In accordance with the *Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans (TCPS2)*, the project has been granted *full ethics clearance* to April 30, 2020. ICEHR approval applies to the ethical acceptability of the research, as per Article 6.3 of the *TCPS2*. Researchers are responsible for adherence to any other relevant University policies and/or funded or non-funded agreements that may be associated with the project.

Please complete the [ICEHR - Post-Approval Document Submission](#) form to upload the NLESD approval upon receipt.

The *TCPS2* requires that you submit an [Annual Update](#) to ICEHR before April 30, 2020. If you plan to continue the project, you need to request renewal of your ethics clearance and include a brief summary on the progress of your research. When the project no longer involves contact with human participants, is completed and/or terminated, you are required to provide an annual update with a brief final summary and your file will be closed. If you need to make changes during the project which may raise ethical concerns, you must submit an [Amendment Request](#) with a description of these changes for the Committee's consideration prior to implementation. If funding is obtained subsequent to approval, you must submit a [Funding and/or Partner Change Request](#) to ICEHR before this clearance can be linked to your award.

All post-approval event forms noted above can be submitted from your Researcher Portal account by clicking the *Applications: Post-Review* link on your Portal homepage. We wish you success with your research.

Yours sincerely,

Kelly Bludook, Ph.D.
Vice-Chair, Interdisciplinary Committee on
Ethics in Human Research

KB/hw

cc: Supervisor – Dr. Anne Burke, Faculty of Education

Research Approval Conditions

Date: 05/01/2019

Investigator(s): Chinwe Ogolo

Research Title: Exploring Play-Based Learning in kindergartens in St. John's, Newfoundland and Labrador

Application Date Received:

New Research Application: ☒

Extension Application: ☐

1. A list of potential schools for this research has been submitted. Yes ☐ No ☐

Your request to conduct this research is: APPROVED ☐ NOT approved ☐

Approved requests for research are subject to the conditions/requirements below:

2. Final approval to conduct this study will rest with the principal of each targeted school and the targeted group of teachers' students/parents where applicable.
3. Conducting the research will in no way negatively impact instructional time for students and teachers.
4. Conducting this research must not put any burden of responsibility on school administrators or other staff unless they specifically agree to it. Such agreement must not negatively impact instructional time.
5. Participation in the study will be voluntary and participants will be able to opt out at any time without prejudice. This must be clearly communicated to the participants at the outset.
6. For students under 19 years of age, the researcher(s) must secure parental consent and confirm such consent with the principal before the research proceeds. Students 19 years of age and older must provide their own consent. Regardless of age, youth must be clearly informed from the outset that they may refuse to participate, even if their parents consented to their participation.
7. Ensuring anonymity of participants and confidentiality of all data generated and collected throughout the research.
8. Before the research project can begin, it must receive final approval from your university's Research Ethics Committee and a copy of this approval must be sent to the Research Review Committee of NLESD as per the contact information listed below.
 - 8a. Ethics Committee approval letter has been received ☐
 - 8b. Not applicable ☐
9. If there is potential risk in this research project that some participants may relive a traumatic experience which can cause emotional or psychological stress, counselling services and other appropriate supports must be available during and subsequent to the data collection process. Researchers are responsible for providing such supports. This service will not be provided by the NLESD.
10. A copy of the research findings and resulting papers/reports must be directed to the CEO/Director of Education or designate. Please provide update on report if not available within one year.
11. Research results must be made available to the schools involved and the individual participants who request them.
12. The Newfoundland and Labrador English School District takes no responsibility in conducting this research, and will not be held liable for any negative impacts relating to this research effort. The full responsibility to organize and conduct this research rests with the researcher(s).

Recommended by: _____
Research Review Committee

Date: _____

Signature of Approval: _____
Associate Director of Education

Date: _____

Signature of Compliance: _____
Researcher's

Date: May 1, 2019

A signed copy of this form MUST be returned to the address below and to the potential schools before research can begin:

Attention: researchethics@nled.ca
Newfoundland and Labrador English School District
93 Elizabeth Avenue
St. John's, NL
A1B 1R6

Appendix D (Informed Consent Forms)

Informed Consent Form for Parents/Guardians

Title: Exploring Play-Based Learning in Full-Day Kindergartens in St. John's, Newfoundland and Labrador.

Researcher(s): Chinwe Ogolo, Faculty of Education, Memorial University, co4072@mun.ca

Supervisor(s): Dr. Anne Burke, Faculty of Education, amburke@mun.ca

You are invited to take part in a research project entitled "Exploring Play-Based Learning in Full-Day Kindergartens in St. John's, Newfoundland and Labrador."

This form is part of the process of informed consent. It should give you the basic idea of what the research is about and what your child's participation will involve. It also describes your child's right to withdraw from the study. In order to decide whether your child may wish to participate in this research study, you should understand enough about its risks and benefits to be able to make an informed decision. This is the informed consent process. Take time to read this carefully and to understand the information given to you. Please contact the researcher, Chinwe Ogolo, if you have any questions about the study or would like more information before you consent.

It is entirely up to you to decide whether your child should take part in this research. If you choose not to take part in this research or if you decide to withdraw from the research once it has started, there will be no negative consequences for your child, now or in the future.

Introduction:

My name is Chinwe Ogolo. I am a third-year doctoral student at Memorial University.

As part of my doctoral dissertation, I am conducting research under the supervision of Dr. Anne Burke.

Purpose of Study:

The purpose of the study is to explore how play-based learning is implemented in full-day kindergarten classrooms in St. John's. The revelations from the data will provide deep insight

in kindergarten teachers' and children's perspectives of play-based learning. This will highlight the benefits and challenges of implementing a play-based curriculum in a full-day kindergarten and proffered solutions or suggestions on how to make it better. So far, there is little study conducted on the implementation of a play-based curriculum in a full-day kindergarten since its inception in 2016 in Newfoundland and Labrador. This exploratory study will add to existing literature on play-based learning in a local and international context.

What Your Child Will Do in this Study:

Your child's opinions matter. I am hoping to interview your child about their experiences with play and learning. This will include some drawings and semi-structured interviews. Your child will be interviewed with an audio recorder alongside another child in the presence of the guidance counsellor or vice principal during play periods at the dramatic play area. Your child will be asked to produce drawings and there will be discussions about their drawings which will also be audio recorded in the presence of the guidance counsellor or vice principal. I will take photographs of their pictures with a camera as I am not allowed to take away the hard copies. As the interviews and drawing activities will be conducted during play activities, your child will not feel left out as they will be involved in their own activities.

Length of Time:

The interviews should take between five to ten minutes. The drawings should take about fifteen minutes.

Withdrawal from the Study:

- Your child can withdraw from the interviews until it is included in the aggregated data set, after that they will be unable to withdraw it. You can withdraw your child within 48 hours of the interviews.
- During the data collection, your child may withdraw from participating at any point. However, once the data is in the process of being analysed, they will not be able to withdraw their data as it will be aggregated with the other data at this point.
- There are no consequences to your child if they withdraw.
- If you want to withdraw your child, simply inform the teacher to inform me or send me an email.

Possible Benefits:

There may not be many direct benefits to your child from participating in this study beyond the self-reflection and fun gained during this process. However, their opinions will benefit

kindergarten teachers and children as teachers may seek to improve on their classroom practices, therefore, other children will enjoy going to kindergarten and learning. This study will contribute to research in using a play-based pedagogy in a full-day kindergarten which includes children's voices.

Possible Risks:

Your child will be interviewed alongside another child at the same time. Both children will be interviewed in pairs in the presence of the school's guidance counsellor or vice principal. Your child may feel anxious to say and draw what they really feel as they recall things they do not like about kindergarten. In that case, your child should inform me immediately and I will stop the interviews or drawing activity. In addition, the school's guidance counsellor or vice principal would know the children in your child's classroom and will be advised to stop the interview or drawing activity if they feel your child is showing any discomfort.

Confidentiality:

- As a researcher, it is my ethical duty to safeguard your child's confidentiality. I will not discuss any information regarding my observations or interviews in your child's classroom with anyone.
- Also, the consent forms will be stored separately from interview data, observation field notes, and drawings, so that it will not be possible to associate a name with any given set of responses.
- The data from this research project will be published and presented at conferences; however, your child's identity will be kept confidential. Although I will report direct quotations or display drawings from the data, your child will be given a pseudonym or code, and all identifying information or markers will be removed from any reporting.
- You need to be aware that because the participants for this research project have been selected from a few kindergarten schools/classrooms, it is possible that your child may be identifiable to other people based on what they said or drew.

Anonymity:

Anonymity refers to protecting any identifying characteristics, such as a name or description of physical appearance or other identifiable markers. Every reasonable effort will be made to ensure your child's anonymity. Your child's name will be removed from the data and assigned a code and they will not be identified in my dissertation and publications without your clear permission.

Recording of Data:

I will be using an audio tape to record conversations I have with the children regarding their drawings. For the news interviews, I will be recording using an iPad, this is to add to the authenticity of the set and help me recall information without interrupting the children. If you agree to this, please check the relevant yes/no checkboxes at the end of this form.

Use, Access, Ownership, and Storage of Data:

- The data will be stored as hardcopies (interview transcripts and drawings) and stored electronically on a password protected a USB-drive.
- Hardcopies will be stored in a locked filing cabinet. Consent forms will be stored separately from the data.
- Only the transcribers will have access to the interview data.
- The research data will be kept for a minimum of five years, as required by Memorial University's policy on Integrity in Scholarly Research. Retaining or destroying data beyond the required 5 years is something the researcher can decide upon later.

Reporting of Results:

- The data will be presented at provincial, national and international conferences and published in peer-reviewed journals.
- Upon completion, my dissertation will be available at Memorial University's Queen Elizabeth II library, and can be accessed online at:
<http://collections.mun.ca/cdm/search/collection/theses>.
- Since this is qualitative research, direct quotations and drawings will be used but identifying markers will be removed.

Sharing of Results with Participants:

- You will be able to access the study results without having to contact me online at:
<http://collections.mun.ca/cdm/search/collection/theses>

Questions:

You are welcome to ask questions before, during, or after your participation in this research. If you would like more information about this study, please contact: Chinwe Ogo, co4072@mun.ca and Dr. Anne Burke, 709-864-8610, amburke@mun.ca.

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research, such as the way you have been treated or your rights as a participant, you may contact the Chairperson of the ICEHR at icehr@mun.ca or by telephone at 709-864-2861.

Consent:

Your signature on this form means that:

- You have read the information about the research.
- You have been able to ask questions about this study.
- You are satisfied with the answers to all your questions.
- You understand what the study is about and what your child will be doing.
- You understand that if you choose to end participation during data collection, any data collected from your child up to that point will be retained by the researcher, unless you indicate otherwise. You can withdraw your child's data within 48 hours of being interviewed.
- You understand that you are free to withdraw participation of your child in the study without having to give a reason, and that doing so will not affect you now or in the future.

I agree to be audio-recorded

☐ Yes ☐ No

I agree to the use of drawings

☐ Yes ☐ No

I agree to the use of direct quotations

☐ Yes ☐ No

By signing this form, you do not give up your legal rights and do not release the researchers from their professional responsibilities.

Your Signature Confirms:

☐ I have read what this study is about and understood the risks and benefits. I have had adequate time to think about this and had the opportunity to ask questions and my questions have been answered.

☐ I agree to participate in the research project understanding the risks and contributions of my participation, that my participation is voluntary, and that I may end my participation.

☐ A copy of this Informed Consent Form has been given to me for my records.

Signature of Parent/guardian

Date

Child's name

Date

Researcher's Signature:

I have explained this study to the best of my ability. I invited questions and gave answers. I believe that the participant fully understands what is involved in being in the study, any potential risks of the study and that he or she has freely chosen to be in the study.

Signature of Principal Investigator

Date

Informed Consent Form (Kindergarten Teachers)

Title: Exploring Play-Based Learning in Full-Day Kindergartens in St. John's, Newfoundland and Labrador.

Researcher: Chinwe Ogolo, Faculty of Education, Memorial University, co4072@mun.ca

Supervisor: Dr. Anne Burke, Faculty of Education, Memorial University, amburke@mun.ca

You are invited to take part in a research project entitled "Exploring Play-Based Learning in Full-Day Kindergartens in St. John's, Newfoundland and Labrador."

This form is part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. It also describes your right to withdraw from the study. In order to decide whether you wish to participate in this research study, you should understand enough about its risks and benefits to be able to make an informed decision. This is the informed consent process. Take time to read this carefully and to understand the information given to you. Please contact the researcher, Chinwe Ogolo, if you have any questions about the study or would like more information before you consent.

It is entirely up to you to decide whether to take part in this research. If you choose not to take part in this research or if you decide to withdraw from the research once it has started, there will be no negative consequences for you, now or in the future.

Introduction:

My name is Chinwe Ogolo. I am a third-year doctoral student at Memorial University.

As part of my doctoral dissertation, I am conducting research under the supervision of Dr. Anne Burke.

Purpose of Study:

The purpose of the study is to explore how play-based learning is implemented in full-day kindergarten classrooms in St. John's. The revelations from the data will provide deep insight in kindergarten teachers' and children's perspectives of play-based learning. This will highlight the benefits and challenges of implementing a play-based curriculum in a full-day kindergarten and proffered solutions or suggestions on how curriculum can be approached in a better way. So far, there is little research conducted on the implementation of a play-based curriculum in a full-day kindergarten since its inception in 2016 in Newfoundland and

Labrador. This study will add to existing literature on play-based learning in a local and international context.

What You Will Do in this Study:

I am hoping to observe in your classroom your approaches to play-based learning. I am also requesting to interview you after some days of observation. In addition, I am requesting one interview which will last fifteen to twenty minutes, take some pictures of your classroom environment without children present. You will have the opportunity to review your transcribed interviews with me and clarify. With your help I will like to interview four children (whose parents have given consent) and ask them about their play experiences. These children will be interviewed in pairs at the dramatic play area with presence of a guidance counsellor or vice principal about their play experiences. I will be using an audiotape recorder to record their responses. I will also like to ask the children (with consent) to draw four pictures and ask them questions concerning those pictures. The guidance counsellor or vice principal will also be present for this. Images of the drawings will be taken with a camera. I'm hoping that the children who do not have consent will be occupied with other play activities as to not feel left out.

Length of Time:

I will like to observe your classroom for fourteen days; included in these fourteen days are interviews and observations. There will be one interview with you, which may take between fifteen to twenty minutes. The interview session with children will be in pairs, will be five to ten minutes per session with the vice principal or guidance counsellor present.

Compensation:

I know your children are very important to you, I will like to offer you some assistance as you see fit to help with the daily running of your classroom. As a teacher myself, I can assist with play areas and other activities. I will like to stay for the duration of the whole day even though my data collection may be for three hours to help you.

Withdrawal from the Study:

- You can withdraw from this study before the fifth day of classroom observations because I will begin to analyse the data concurrently with data collection. Also, this will give me time to find another participant for this study within the time frame.
- You can withdraw from the interviews until it is included in the aggregated data set, after that you will be unable to withdraw the transcript.
- There are no consequences to you if you withdraw from this study.

Possible Benefits:

There may not be many direct benefits to you from participating in this study beyond the self-reflection gained during this process. However, the benefits to other kindergarten teachers will be significant as they relate to your answers and experiences. The study may also help you reflect on your current practices and how you may improve it. This study will contribute to research in using a play-based pedagogy in a full-day kindergarten classroom in NL.

Possible Risks:

As this study does ask you to reflect on past teaching experiences this may cause you emotional stress, if this is the case, please advise me immediately and I will stop the interview.

Confidentiality:

The ethical duty of confidentiality includes safeguarding participants' identities, personal information, and data from unauthorized access, use, or disclosure.

- As a researcher, it is my ethical duty to safeguard your confidentiality. I will not discuss any information regarding my observations or interviews in your classroom with anyone.
- Also, the consent forms will be stored separately from interview data, observation field notes, and photographs, so that it will not be possible to associate a name with any given set of responses.
- The data from this pilot research project will be published and presented at conferences; however, your identity will be kept confidential. Although I will report direct quotations from the data, you will be given a pseudonym or code, and all identifying information or markers will be removed from any reporting.
- You need to be aware that because the participants for this research project have been selected from a few kindergarten schools/classrooms, it is possible that you may be identifiable to other people based on what you have said.

Anonymity:

Anonymity refers to protecting any identifying characteristics, such as a name or description of physical appearance or other identifiable markers. Every reasonable effort will be made to ensure your anonymity. Your name will be removed from the data and assigned a code, and you will not be identified in my dissertation and publications without your clear permission.

Recording of Data:

I will be using an audio tape to record the interviews with your permission. I will also be using an audio tape to record conversations I have with the children in your classroom regarding their drawings and experiences. With your permission, I will like to capture images of the classroom arrangement. If you agree to this, please check the relevant yes/no checkboxes at the end of this form.

Use, Access, Ownership, and Storage of Data:

- The data will be stored as hardcopies (interview transcripts, photographs, and drawings) and electronically on a password protected a USB-drive.
- Hardcopies will be stored in a locked filing cabinet. Consent forms will be stored separately from the data.
- Only the transcribers will have access to the interview data.
- The research data will be kept for a minimum of five years, as required by Memorial University's policy on Integrity in Scholarly Research. Retaining or destroying data beyond the required 5 years is something the researcher can decide upon later.

Reporting of Results:

- The data will be presented at provincial, national and international conferences and published in peer-reviewed journals.
- Upon completion, my dissertation will be available at Memorial University's Queen Elizabeth II library, and can be accessed online at:
<http://collections.mun.ca/cdm/search/collection/theses>.
- Since this is qualitative research, direct quotations will be used but identifying markers will be removed.

Sharing of Results with Participants:

- You will be able to access the study results without having to contact me online at:
<http://collections.mun.ca/cdm/search/collection/theses>

Questions:

You are welcome to ask questions before, during, or after your participation in this research. If you would like more information about this study, please contact: Chinwe Ogolo, co4072@mun.ca and Dr. Anne Burke, 709-864-8610, amburke@mun.ca.

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research, such as the way you have been treated or your rights as a participant, you may contact the Chairperson of the ICEHR at icehr@mun.ca or by telephone at 709-864-2861.

Consent:

Your signature on this form means that:

- You have read the information about the research.
- You have been able to ask questions about this study.
- You are satisfied with the answers to all your questions.
- You understand what the study is about and what you will be doing.
- You understand that you are free to withdraw participation in the study without having to give a reason, and that doing so will not affect you now or in the future.
- You understand that if you choose to end participation during data collection, any data collected from you up to that point will be retained by the researcher, unless you indicate otherwise.
- You understand that if you choose to withdraw after data collection has ended, your data cannot be removed because it has become part of the aggregated data.

I agree to be audio-recorded

☐ Yes ☐ No

I agree to be video recorded

☐ Yes ☐ No

I agree to be photographed and the use of photographs

☐ Yes ☐ No

I agree to the use of direct quotations

☐ Yes ☐ No

☐ Yes ☐ No

By signing this form, you do not give up your legal rights and do not release the researchers from their professional responsibilities.

Your Signature Confirms:

☐ I have read what this study is about and understood the risks and benefits. I have had adequate time to think about this and had the opportunity to ask questions and my questions have been answered.

☐ I agree to participate in the research project understanding the risks and contributions of my participation, that my participation is voluntary, and that I may end my participation.

☐ A copy of this Informed Consent Form has been given to me for my records.

Signature of Participant

Date

Researcher's Signature:

I have explained this study to the best of my ability. I invited questions and gave answers. I believe that the participant fully understands what is involved in being in the study, any potential risks of the study and that he or she has freely chosen to be in the study.

Signature of Principal Investigator

Date

Appendix E (Interview Schedule for Teachers)

Interview Schedule for Teachers

1. Can you tell me about your experiences in kindergarten?
2. What do you understand by play-based learning?
3. Is there a relationship between play and learning?
4. Which do you prefer, direct instruction or teaching through play and why?
5. Speak to me about your understanding of the common practices for a play-based pedagogy classroom
6. Do you think their expectations are realistic or not?
7. What are some of the benefits of using play-based learning?
8. What are some of the challenges?
9. Can you tell me the idea behind how you organized your classroom?
10. Do you think you were adequately trained to implement play-based learning appropriately?
11. Speak to me about the level of support you receive from your administration
12. If you could select just one thing to facilitate the implementation of play-based learning in your classroom, what would that be?
13. Is there anything else that would facilitate the implementation of play-based learning in your classroom?

Appendix F (Interview Schedule for Kindergarten Children)

Interview Schedule for Kindergarten Children

Do you know what play is? What does it look like?

Do you like to play?

What do you play in Kindergarten?

Tell me about a time when you are learning?

Do you learn when you are playing?

Are playing and learning the same or different, why?

What do you like about kindergarten?

What do you not like about kindergarten?

If you were teacher for a day, what would you do?

For the Drawings (Four Drawings)

- Draw your favourite thing to do in the classroom.
- Draw what you do not like to do in the classroom.
- Draw your favourite place in the classroom.
- Draw the place you do not like in the classroom.

Interview Questions

What are you drawing? Why?

Why do you like to do that?

Why do you not like to do that?

Why do you like or not like this place?