

**A Narrative Inquiry into the Experiences of Children and Parents with Technology: What
Are Real and Unreal Worlds?**

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By

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Abstract

We always think of play as something of more of an organic interaction. What if play was considered in terms of technology. This inquiry attended to children and their parents' stories and experiences to find out what is the definition of play from their perspectives and how young children experience technology in terms of real and unreal. Many adults find the technological world quite different from children's perspectives; however, children in some cases consider technology-based games and natural play as the same world. This narrative inquiry attempted to understand what the participants feel, think, and perceive from the concepts of natural play and technology-based games for facilitating the process of learning, and how participants recognized and differentiated between these two worlds. Following the narrative inquiry tradition, I shared my lived experiences and stories with the participants, explained the research questions, and then asked participants to share their stories. Four participants, two mothers and their children attended three research conversations each, for a one-hour duration over three months. They narrated their stories regarding their understanding of the concept of play alone, with friends, or in parallel. Participants also shared their stories about boundaries between two worlds. The experiences and opinions of the participants were similar in some of their stories and different in others. Their stories give the reader and the researcher a deep insight into the perspectives of parents and their children on the concept of play and the world of technology.

Key words: narrative inquiry, real and unreal worlds, technology, lived experiences

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Introduction

Following the narrative inquiry tradition, I begin this document with narratives about my experiences in educational settings and in my personal life. I examine these experiences to understand the contribution of technology to our understanding of the concept of play, and further bring this examination into the narrative accounts of the study participants. The supporting literature and research methodology employed in this study are discussed in Chapters 2 and 3 respectively, and key narrative concepts are outlined in Chapter 3. Chapter 4 delves into the research participants' experiences and extracts narrative threads from their accounts. Chapter 5 provides a summative review of my experiences and new understandings over time, as well as a return to the research's critical wonder.

CHAPTER ONE

My Narrative Beginnings

Vignette 1, Childhood

I will never forget the day, when I was a ten-year-old child, and my father came home with a strange and big device, turned it on in front of my eager shiny eyes and introduced it to me: "This is a computer". Even its English name was interesting to me. He opened the painting application for me and explained how I could paint and colour while was excitedly looking at the colours in the application, my father told me that I have 24 crayons in my bag and this computer has a lot of beautiful crayons! That day was a turning point for me because familiarity with this device could broaden my horizons and make learning exciting for me; however, at that stage, I only knew how to use it for painting. I had found a new friend who enabled me to draw different shapes and apply different colours to it without having to erase the previous colours with an eraser. Therefore, that night, when I went to bed, I was thinking that there must be software that can be used to write my homework and maybe solve the math equations I learned in school. It was like an angel fulfilling a little girl's wishes.

Similarly, in shaping my narrative beginnings embedded in my passion for technology, I remember the day my cousin was admitted to the university and told me that she would study computer engineering. The only thing that came to my mind was that "Computer Science" is turning the computer on and off, and also, I was thinking that opening programs is a very simple task, so why does she want to go to the university to learn these simple tasks? Then, when I entered high school, I learned Photoshop, Word, Excel, and several other computer programs and realized that the knowledge of using this device is not just turning it on and off, but it has a very

complex world that has no end. With this technology, I was able to calculate, type, and design tables. If I had a misspelling, I could see it; if I used a ruler in the word document, I could draw a perfectly smooth line that I was not able to draw accurately with regular rulers. It was a spark for me to see how much entering this world could affect my learning. It was during that time that I realized that the emergence and advancement of technology would take me into a new world, which I would not be able to explore with limited tangible tools. Pencil, pen, and paper could not engage me enough and that coincided exactly with my years of worry that I could barely maintain my focus consistently and for a long time.

Vignette 2, Being a Teacher

I entered the classroom. I was supposed to teach literacy to 15 small children. Above the whiteboard was a photo frame with the word "welcome" written. The student sitting at the first desk came to me and asked what was written there? I read aloud to him, "Welcome." He pretended to be reading, took his index finger toward it, moved it from left to right, and repeated, "Welcome." I can read it! (In Persian, unlike English, the text is written from right to left).

It was my first-year experience in the classroom as a teacher, and I was anxious about how I could persuade students to sit in their chairs and be interested and focused when I was teaching. When I started teaching in the following days, one of them told me that he knew the alphabet because he had seen it many times on his father's laptop's keypad. Another student said "why should I write it? I can borrow my mother's cell phone and bring it to the class and simply by pressing the button, I would be able to finish my homework faster". Then, I informed them that I would expect them to use a pencil during the school year. Although it was not very convincing for students that why they had to write the letters using pencil not the keyboard, they started writing using a pencil.

I am still wondering what does technology promise to human beings, and what does it take away from us in return? As a teacher, when I want to write down my to-do list, do I prefer using my cellphone's notes or paper and pen? I think that benefits technology has given to humans are many; however, it undoubtedly takes away things from us.

Looking Back to See Forward

Clandinin (2013) argued that narrative inquirers begin with inquiring into their own stories of experience because a narrative inquiry is an ongoing reflexive and reflective methodology (p.55). She discussed that an autobiographical narrative assists the researcher to bridge the past, present, and future. I was seven years old and in the first grade. I was waiting during the weekdays for the weekends to go to my grandmother's house and play Atari¹ games with my cousin, who was the same age as me. Every weekend, my cousin used to play an Atari soccer game, giving me one of the two joysticks, and taking the other one himself. He said, "let's play together, kick off the game, Shima"! I excitedly started playing soccer, using the joystick, dribbling to put the ball in the back of the net, and attacking the opposing team with seriousness and enthusiasm, I was very happy when I scored the winning goal.

After a while, I realized my joystick was not connected to the device, and I realized that my cousin had been playing with the Atari's artificial intelligence all that time instead of playing with me. He had deceived me and pretended that I was one of the parties in the game. When I objected to him, he told me that the console's artificial intelligence plays more professionally than me. Therefore, he preferred to play with the artificial intelligence instead of me.

"Embedded in the retellings of these early experiences is a notion that each story is always partial and contextual and offers new possibilities as the stories are retold" (Caine,

¹ Atari was created by Nolan Bushnell and Ted Dabney in 1972 and became a pioneer in arcade games, home video game consoles and home computers.

Estefan, & Clandinin, 2013, p. 577). Years have passed since then, and when my cousin and I recall those times, it sounds more like a fun experience; however, I find it inspiring in relation to my current research interest because I understand that even a 7-year-old boy was able to realize that the artificial intelligence of the device is designed more professionally and of better quality than my skills in playing a soccer game, and to take advantage of it. I wonder about the potential effects that artificial intelligence might offer in the educational system. The innovations allow computer programmers to design educational applications to perform complicated tasks. It may lead to the opportunity to improve the learning processes. However, it is impossible to fully replace the instructor. Clandinin (2006) believed that "lived and told stories, and talk about those stories, are ways we create meaning in our lives as well as ways we enlist each other's help in building our lives and communities" (p. 44).

A Journey from the Past to the Present Generations

The three dimensions of temporality, sociality, and place are reflected in the experience of a situation (Clandinin & Connelly, 2000). Clandinin (2013) argued that one of the dimensions of narrative inquiry is temporality. Time causes many changes in people's beliefs, and it takes us through an imaginary tunnel that enables us to travel rapidly from past to future. This journey allows us to have a broader view and perspective towards our beliefs, opinions, and understanding of the specific topic. When I complained to my father about my cousin and his unwillingness to involve me in the game, my father narrated some of his childhood experiences and described how he played with his brothers with a soccer ball, they did not have an Atari. He then asked me not to complain and encouraged me to strengthen my physical skills and increase my real skill in the real world instead of improving my computer game skills. Now when I wonder about his recommendation, I questioned myself what does 'real' mean? Is the world that

technology has offered us unrealistic? In this study, I attempted to address what ‘virtual’ and ‘real’ meant from participants’ perspectives.

I feel the need to pause in this stage of my life and tell some of these stories, such as you read in my narrative at the beginning of this chapter because doing so has led me to understand myself in a new way, to shape and reshape my perspectives and ideologies. Clandinin (2013) shared that "each story of experience opens into new stories to be lived and told, always with the possibility of retelling and reliving" (p.203). Telling and reliving these stories has helped me to understand myself in a new way in relation to others. I understand the importance of telling these stories; as I look back on my stories and experiences, I further realize who I am as an educator.

At that time, my father perhaps thought that the world was divided into two parts. Real and unreal. The boundary between the two worlds was probably apparent to him, but real and unreal are not necessarily concepts a child would use. It seems that if his daughter sits behind the monitor, it means that she is in an unreal world; if she plays with the actual ball, she is in the real world. This belief, I think, is still prevalent for many people, and some still reluctant to accept that the border between these two worlds might be so blurred that it is almost impossible to distinguish confidently between the two worlds for some people at certain ages.

Technology and Seniors

As a child, I experienced one aspect of artificial intelligence, which was an emerging technology at that time. However, by comparison, today, there has been significant progress and a wide variety of educational computer software. I believe artificial intelligence provides opportunities for learners who have visual or hearing problems or speak different languages. Presentation Translator, for example is an artificial intelligence-based solution that creates

subtitles in real-time mode. Students can hear or read in their native language by using artificial intelligence speech recognition.

Prior to the spread of the COVID 19 pandemic around the world, my grandmother decided to go to England to meet my uncle who is living in London. One of the main concerns of our family was that my grandmother could not speak English at all. She had a connecting flight, and it exacerbated our concern. She first had to go to Hamburg, and then from there to London. All the family members were either busy studying or working, so they could not accompany my grandmother on this trip. I decided to provide her with texts in Persian and a translation of these texts into English so that she could use them at the airport in case she had to show those notes to the airport's staff. My grandmother was very nervous and said that something might happen that we did not anticipate, and she was worried that she would not be able to solve the problem. The idea of using the Google Translate website came to my mind and decided to check whether she could say sentences in Persian, using her cellphone without typing it. I tried it and found out that it would be possible to have the immediate translation orally, and I assured her that this website would be user-friendly. In this way, she would be able to say Persian phrases instead of typing or carrying papers with the translated sentences.

After explaining the process to her, she became very hopeful and happy. The result was very promising. She arrived in London and shared her successful experience with us. Artificial intelligence has penetrated the current education system, and when recalling this experience, I became further aware of what technology offers us in everyday life at different levels.

How is the Teacher-Student Relationship Affected by Technology?

In the kindergarten where I am working, teachers are not allowed to use cell phones for educational purposes, and children are not allowed to watch cartoons or visual content in the

classrooms because the kindergarten's director believes that working with technological devices has negative consequences for children's health, including vision problems. I remember a day, when it was nap time, three children resisted taking a nap. I encouraged them to paint and be quiet for an hour until the end of nap time. They were impatient and constantly spoke loudly. The director of the kindergarten allowed me to show them a short, animated video for half an hour. I sat in front of them and played the video on my cellphone. After a few minutes, I realized that they did not even blink while watching the animation. They did not even see me sitting in front of them, right behind the cell phone, and they were just staring at the screen. The real world had blurred for them.

The connotation of the word technology is positive for some, and some people find it useful to use technology in any situation. The question that comes to my mind is how technology can make up for lost eye contact between teacher and student? I believe most teachers find it very helpful to have eye contact with students, because it helps them understand if their ideas have been transferred successfully to students and enables them to find motivation by receiving feedback from students. In those moments when the children with whom I was working were staring at the phone screen, technology had eliminated my eye contact with them and I was not able to get the feedback I needed. Technology-based education or education with the help of technology conveys two different meanings for me, and it has always been one of my challenges as a teacher to find out if technology should incorporate into education system sometimes and in some situations and just has a facilitating role, or basically, the use of technology should be one of the essential and main tools of education. The relationship that develops between teachers and students is significant. I lost that connection with the students in that half-hour. This losing of connection between teacher and students may have a positive aspect. Students do not have to

learn the educational content only from their teacher; rather, technology facilitates learning in the learning environment, and a change in the way educational materials are presented leads to inclusion in the classroom. On the other side, a concern would be if the education system is moving towards technology-based devices and replacing the role of teacher in the classroom.

Dewey (1938) believed that interaction is an essential criterion of experience, and we are learning during an interaction. This awakening moment led me into a deeper knowing of myself. Zaleski and Kaufman (1998) believed that "being with others reveals the truth about ourselves" (p 91). Could the same be said for technology? The children may have ceased to interact with me, but it was obvious they were interacting with the video while watching it. What is happening within and between children interacting with a video? While watching, the children were probably paying attention to the different colors in the video, listening to the variety of different sounds in the video, and analyzing it. The pace of events that take place in the video are faster than the real world, so children need more focus and attention to analyze and understand situations. These factors cause children to become completely immersed in the image and video while watching, and to not be able to interact with me or the classroom environment. The question arises here is why is it important to attend to this interaction? Interaction is very important because learning happens through interaction. In order to fully convey concepts to children, we need their full and complete attention, so we will be able to teach children different concepts. If they are distracted and unable to concentrate and communicate effectively, learning will not happen successfully. Interaction does not have to be only with another human, it also has implications for the environment and objects in the environment. In my story, the interaction was with the video.

In the background of this situation, what I attend to as a teacher is an internal satisfaction I get from observing how my students become literate. When I transfer the knowledge and realize that they have learned it, it gives me infinite satisfaction. Building a constructive and friendly relationship with my students make me happy as I see them learn new skills. Therefore, what is the purpose of education? Teacher satisfaction or students' optimal and maximum learning?

Research Wonders

While some educational institutions' principles, early childhood educators, and policymakers consider technology as a distraction in educational settings, some find it helpful to incorporate digital devices, educational applications, and audio-visual aids into educational settings to increase students' engagement, encourage their collaboration, spark innovation, and enhance student's learning (Himmelsbach, 2019). By telling my lived experiences and attending to children and parents' stories and accounts, I am going to look closely at the details of these experiences in relation to time, people, and the relationships involved.

When children play physically with tools such as toys or balls, they are playing a real game from an adult perspective. Regardless of race, religion, or social class, the pattern of physical games that has been common among children for years and centuries are based on playing with tactile tools in natural environments. While playing these games, children touch tools and toys, talk to themselves (talk to themselves internally), take on various roles, and talk to their playmates and dream together. They imagine themselves in different social situations alone or with their friends and create their own role in these real situations. They play different roles and perform many scenarios. For example, they take on the role of mother or father in the family and imagine themselves in the kitchen and cook a dinner for family. They imagine themselves as a professional soccer player, a famous actor/actress, a teacher, or simply simulate

situations at home, in the community, and in public places, imitating these roles and even creatively inventing new scenarios.

Today, the concept of play has expanded, and it is shaped and reshaped in new and creative ways. New types of play are becoming popular rapidly. These forms of play did not exist in previous decades, and they are product of the emergence of technology in this century. The question that arises here is, how unrealistic are these technology-based games for children? Do children differentiate between physical games and technology-based games? Basically, I want to understand what play is. Adults often distinguish between these two different types of playing, but what about children? Do children see these two types of games differently? Have digital game designers been able to create environments that are somehow similar to real-world situations for children?

Himmelsbach (2019) asserted that thanks to technology, classrooms in schools no longer have walls. In learning contexts, there are no longer any restrictions on access to diverse information and different resources. Given this context, this research will focus on understanding the experience of digital games in learning and defining the concept of interactive play in terms of technology through narrative inquiry. Therefore, this research will inquire into children's stories and parents' experiences in order to hear their voices, opinions, and experiences to understand what technology offers to us as teachers, facilitators, students, families, and learners. Children's and parents' perspectives on digital games and play and if they find it educative or miseducative (Dewey, 1938) will be narrated and retold (analysed). What is meant by educative and miseducative here is whether there are experiences in real and unreal worlds that furthered or froze children's growth in ways related to technology. I will discuss the educational or miseducational role of technology in children's growth while unpacking their experiences. This

research will inquire into participants' stories, and as we are inquiring into the story, we open up the space for understanding.

Before doing this research, I was assuming play more as an organic interaction, but this wonder arose for me what if play was considered in terms of technology? My research puzzle creates two wonders:

- How do young children experience technology in terms of real and unreal?
- How do concepts of play help us understand young children's use of technology?

When I reflect on Hoffman's (1991) words "I am traveling toward experience" (p. 162), and considering that "experiences are never taken at face value but are explored in terms of temporality, sociality, and place" (Xu et al., 2007, p. 418), It is critical to consider that narrative inquiry help us gain a deeper understanding of lives in motion. Ultimately, it is significant to ponder the approach of this research in a sense of understanding, through narrative inquiry, how young children see technology as real and unreal, and how concepts of play aid our understanding of their technology use.

CHAPTER TWO

Literature Review

Introduction

The expanding literature on the contribution of technology in learning highlights that many scholars have found this phenomenon valuable in educational research (Culp, Honey, & Mandinach, 2005; Jobe & Peck, 2008; Dunleavy, Dexter, & Heinecke, 2007). Thinking about the experience of children and conceptualizations of play, and emerging new aspects of it, which results from the penetration of technology in various dimensions of educational systems, has framed my wonders regarding how do concepts of play help us understand young children's use of technology? I will draw on Dewey's (1938) conception of experience to understand children's natural and physical play experience and their technology-based experiences to understand to what degree children consider these two types of games as real and unreal worlds. I will use the ideas of situation and interaction to shape this inquiry to understand students' and their families' perceptions of the concepts of play. Dewey's (1938) understanding of situation and interaction will lead me in comprehending continuity and contexts of children's lived experiences in playgrounds or playing with digital devices and, as I attend to these experiences, I will consider how children and families make a distinction between these two types of play. Understanding the meanings and philosophy of the concept of play is the key to understanding how this travel between these two worlds is happening. In the context of shaping our understanding of children' and parents' experiences and considering the boundary of two real and unreal worlds and stories to live by², inspired by narrative inquiry which is considered as both phenomenon and

² Stories to live by (Clandinin& Connelly, 1995) is a narrative phrase related to identity. In short, it means that the stories we tell about ourselves shape and exhibit identity.

methodology (Clandinin & Connelly, 2000), this inquiry will address my research wonders to help us understand young children's using of technology. The following sections will first discuss understanding the concepts of play, then will consider the integration of technology into the classroom, explain the concepts of real and unreal worlds, and finally argue the link between literature and the focus of the study.

Understanding the Concepts of Play

In this section, I will discuss the social justification of doing this research, argue the definitions of play from the perspective of some other researchers. Then, in the following chapter, I will weave these definitions of the concept of play into my unpacking and relate it to my inquiry.

As a young person, I had the privilege of living in a world with limited technology-driven tools when I was a child, and at the same time, I have had the chance to live and gain experience in a world where technology is so influential. I think people born in the current years probably will not be able to imagine a house without a laptop or a computer. For me, there are social justifications for doing this research because I believe we are moving from the previous stage, and entering a very new stage in educational topics. I think denying the impact of technology on all aspects of life and for people with different ages has become almost impossible. So addressing the impact of technology on children's learning, and especially on children's play, is an issue that needs to be addressed because, as we will read in the following literature reviews play is the most important tool for children's learning. So if we want to move towards better understanding the impact of technology on children's world and the path of their mental development, we need to hear voices, observe children's behavior, and analyze their play patterns.

The concepts of play, its definition, types, and contribution to children's development and their learning process have always been among important topics in the field of education. According to Sutton-Smith and Kelly Byrne (1984), play has long been recognized as a serious scientific subject for children's mental development. Hence, there have been numerous and varied theories and definitions about the concept of play. The concept of play in childhood education and its importance is supported by a wide range of researchers in various fields, including health, education, psychology, sociology, and philosophy. Stating different definitions of play in this research is important because it can help us to rethink and reconsider our memories and lived stories in coming to understand situations and interactions in relation to technology. In redefining play through the experiences of the participants in this research, we open possibilities to a deeper understanding of that concept in our hearts and minds. As Young et al. (2015) asserted “there is a difference between knowing something of that experience in your head and being able to understand the experience in your heart” (p.158).

According to Wood and Attfield (1996), the concepts of play are challenging to define. These different and diverse views arise from different and sometimes conflicting thoughts and opinions about the concept of play in children's education. This is also a result of different approaches to the study of play and various explanations of how play adds to human experiences (Dockett & Fler, 1999). In this regard, I believe hearing and understanding people's lived experiences is important. When parents narrate their childhood play experiences, these stories inadvertently, and perhaps advertently, influence parents' current beliefs regarding their child's play experiences. What I experienced as a concept of play during my childhood directly or indirectly affects my current perspective. It reminds me of Clandinin's (2013) words that “people's lived and told stories are not linear” (p.45). Clandinin argued “we need to inquire into

all these kinds of stories, stories that have become intertwined, interwoven into who we are and are becoming. These stories live in us, in our bodies, as we move and live in the world” (p. 22). Similarly, Clandinin (2013) asserted that “our experiences in the past are embodied in our lived and told stories. We carry them with us” (p. 196). Therefore, they have emphasized that it is crucial that the meaning of play in children's lives should be located in a context where it can be valued and understood.

What is meant by play for children? I believe although understanding the concept of play seems simple at first glance, its definition is complex. One reason could be that play is not a concrete form of behaviour with a specific purpose, but it is an abstract concept. Thus, defining a particular activity as an experience of play depends significantly on how participants perceive that activity and its structure (Johnson, Christie, & Wardle, 2005). Bodrova and Leong (2003) highlighted that play is typically an essential activity in developing and nurturing children's minds. They believe that high-level play is perceived as both fun and developmentally valuable. Since play is an abstract concept, its perception and definition can change for people over time because people gain new experiences during their lives. In this context, Clandinin (2013) wrote that “understanding lives in motion creates openings for new relationships to emerge, for lives to unfold in unexpected ways; there is no final telling, no final story, and no one singular story we can tell” (p.205). I also believe that experiences that we gain throughout time and our current beliefs are greatly dependent on people we have met, places we have been, and lived stories we have heard. Clandinin et al. (2006) asserted that “as we reflected on our own experiences, we saw that our stories of whom we were had shifted partly because of the contexts in which we found ourselves and the people with whom we came to live in relation” (p.113). She also believed that “thinking with stories is primarily thinking relationally [...] thinking about the

other's experience, to thinking of the narratives that shape people in their contexts, in their unfolding life, in that moment that comes out of all the other moments and points toward a future" (p. 30).

What should also be highlighted is the distinction between play as and play as pedagogy. When we understand play as based on a dictionary definition, then play is enjoyable, pleasurable, and amusing as in an activity or a game. Since it is an enjoyable activity and a natural tendency for young children, it should be considered a natural way young children learn and therefore should be seen to contribute to learning. Thus, many researchers and experts in education define play as something related to learning. However, regarding play as a pedagogical tool, it is necessary to distinguish this kind of play from play as a natural activity for children.

Gray (2011) argued that reducing or eliminating physical and natural play causes many problems in children. Gray believed that the decline in children's free time to play over the last years has caused a sharp increase in children's psychopathology. "Anxiety, depression, feelings of helplessness, and narcissism" (p. 443) have increased as play, especially outdoor play, has deteriorated. Children fail to learn the social and emotional skills if they do not play (Gray, 2011).

Stone (2017) asserted that "play can be misunderstood, particularly play in the school context" (p.307). Active learning could be labelled by teachers as a play when actually it is teacher-directed active learning. Stone believed that although it can be considered a beneficial activity, it is not defined as a play. According to Stone, play is defined as "intrinsically motivated where children pursue play for their own satisfaction, learning, and needs and something or someone is not leading, guiding, or directing the play experience [...] Choice is another attribute of play where children choose to play, how to play, and with whom to play" (p.307). He believed

that the child should be leading the play, and it is a child who should be in control of the play experience, not educators as adults. According to Stone's definition of play if the experience is chosen or assigned for the child by educators, actual play may not unfold. Stone defined play as something that is not a goal-oriented activity, and the goal is not the play's object, even if a goal is achieved. Stone asserted that the process of play is more important to the child than the product of play. Play can be goal-oriented activity. Teachers can lead students to play with toys that are aligned with educational goals. For example, if instructors plan to teach the transportation system, they can provide toys related to bus, car, traffic signs, and lights.

According to Leggett and Newman (2017), any concept of play in early childhood education must consider the educator's position. They believed that play includes children deliberately exploring, discovering, imagining, and interacting with things, people, and their natural environment. They asserted that this definition acknowledges both the cognitive and sociocultural aspects of learning and development. Educators can help children grow mentally by intentionally sustaining children's thinking and participation in play-based learning environments.

Pyle and Danniels (2017) presented another definition of play-based learning as a child-directed method. They used a qualitative methodology to evaluate fifteen kindergarten classes, which included observations and teacher interviews. Two different teacher profiles emerged. The first profile differentiated play and learning and reported difficulties and challenges that meeting academic demands through play-based learning. Their students engaged in unstructured play. The second profile claimed that play could help students learn academically and that teachers play an essential role in the play. In this study, participants (students) participated in five different types of play, ranging from child-directed to teacher-directed. The continuum of play-

based learning offers a wider and more realistic concept of play-based learning to help teachers implement this pedagogical approach and improve research on play-based learning in early childhood education.

Hoorn, Monighan-Nourot, and Alward (2011) categorized the concept of play into three groups: the child's spontaneous play without teacher guidance or control, the second type is teacher-guided play, and the third type is teacher-controlled play; so, there is widespread consensus that classifying a learning activity as play is influenced by both child-centered and teacher-centered factors. In an educational context, sometimes, adults such as parents also play with kids.

As an educator, I always reflect on whether I should guide children when playing with them or let them be leaders. I have heard various opinions and stories from many of my colleagues. I think that knowing the experiences of different people helps us to know ourselves better and to achieve a more logical and correct response to our questions. Clandinin and Rosiek (2007) argued that the view of experience embedded in narrative inquiry has its roots in John Dewey's (1938) pragmatic philosophy. According to the authors, "narratives are the form of representation that describes the human experience as it unfolds through time. Therefore, narratives are, arguably, an appropriate form to use when thinking about inquiry undertaken within a pragmatic framework" (p.40).

The significance of play as perceived by pioneers such as Froebel, Isaac, Montessori and McMillan is related to the concepts of freedom, innocence, naturalness, and nurturing a child. Weininger (1980) described play as a learning process through which infants learn about themselves and what they can do. He also believed that the growth and development of infants is dependent upon play.

Play is an essential experience for children because it is a dynamic process through which children actively explore their environment. Frost, Wortham, and Reifel (2012) highlighted some positive physical, cognitive, emotional, social outcomes that can be achieved when children are given the opportunity to play. Correspondingly, Copple and Bredekamp (2009) asserted that play is a significant way for fostering cognition, social competence, and developing self-regulation. Despite extensive research indicating the importance of play in early childhood education, the value of play has been overlooked at many preschools (p.14).

In order not to overlook the importance of topics such as play, I always reflect that educators should refer to past experiences to upgrade the current perspective. This introspection causes new opinions and views to be generated at the moment. Clandinin and Caine (2013) stated that “narrative inquiry is an ongoing reflexive and reflective methodology, narrative inquirers need to continually inquire into their experiences before, during, and after each inquiry” (p.171).

Turning to existing research helps us comprehend how other researchers perceive the concept of play. Understanding the concepts of play from other researchers’ perspective provides social justification for my research. It situates my understandings of play in the context of previous research and assists me to deeply understand the importance of play in children’s mental process. Existing definitions encourage me to have a better analysis of the participants’ narrated stories and experiences. Understanding previous researchers play definitions helps me to better feel the participants’ emotions and thoughts. These definitions assist me to view the world from this study’s participants’ viewpoints.

Reflecting upon the main purpose of this research and my research wonders, I understand that after hearing the experiences of the participants, and reflecting on their lived stories, I will probably not have the same point of view as I had before hearing their stories. My question all along the way has been, what is this change for? And for whom will it be important? I believe the answer could be for teachers, families, and curriculum designers who are looking for ways to improve children's mental development and increase learning.

Integration of Technology into the Classroom

Educators are increasingly agreeing that technology can play a significant role in students' learning. On the other hand, the issue of whether introducing technology into the classroom has a positive effect on teaching and learning is still debated in the educational community (Culp et al., 2003). Individual computer use is not the only option for using educational technology. Videoconferencing, digital television, electronic whiteboards, and digital cameras are examples of other equipment and software that can be used. Educators have struggled to decide what kinds of technologies they can use and how to use these digital devices (Culp et al., 2003). They believed that there is no right form of technology or perfect way to use it; instead, they should consider whether the selected device is helpful in the classroom and for students who use it or not. Also, the chosen digital devices should meet the learning and teaching objectives and goals of the school.

Any type of technology is likely to play a unique role in students' education. Word processing and e-mail, for example, can help with communication; database and spreadsheet systems can help with organization; and modelling software can help with math and science concepts (Honey et al., 2005). Apple Computer (2005) looked at the use of technology by students, and according to a study of thirty reports on educational technology systems, students

used laptops mostly for writing, taking notes, completing homework assignments, organizing their work, interacting with peers and instructors, and researching topics on the Internet.

Proponents of educational technology argue that technology allows students to learn at their own pace and in any place. They agree that integrating technology into the classroom helps students to improve critical thinking, problem-solving, and communication skills, as well as learn the technical skills they will need in the future (Jobe & Peck, 2008). Proponents believed that teachers also benefit from the integration of technology into the classroom. Teachers can modify and design instructional materials and evaluations to directly meet their students' learning needs, gain access to more authentic content to aid in the creation and delivery of lessons, and provide additional sources of knowledge for their students with the help of technology (Dunleavy et al., 2007).

Opponents, on the other hand, argue that the usage of technology and digital devices should not be encouraged in school systems for a variety of reasons (Valdez et al., 2005). They believed that some technology proponents have endorsed technology as if using computers automatically results in high-quality teaching and learning. Too many schools place a greater emphasis on technology than on learning. The ability to produce a visually appealing text, for example, does not imply that students have a better understanding of concepts in academic areas. They also claimed that as technology usage's time increase, spending sufficient time on other important activities such as play or game in the natural environment or doing some activities like art, music, dance, and field trips dramatically decrease. They also noted that computers limit students' opportunities for socialization, which they claim is another example of miseducative usage of technology.

In the next section, I will argue children's perceptions of the virtual world and real-world play. Do children draw a clear line between these two worlds or do they often understand these two worlds as one? I will also discuss the thoughts of some researchers in this regard.

Real and Unreal Worlds

The controversy about the real-world and virtual-world relationship is as old as the emergence of technology itself. In the following section, I explore some researchers' articles who described a conceptualization of half-real worlds in the context of children's lives. Juul (2011) described how video games are located between real rules and fictional worlds. Trowbridge and Stapleton (2009) also worked on the boundaries between fantasy and reality. Rosa, dos Santos, and de Paula Faleiros (2016) examined the opacity of the boundaries between real and virtual worlds from Facebook users' perspective. As a result, the relationship between the physical and virtual worlds became a common topic in academic and multitudinous network user discussions.

In the field of philosophy, Rosa, dos Santos, and de Paula Faleiros (2016) emphasized the coexistence of virtuality and truth in the relationship between past and present, a relationship based on the direct correlation between perception and memory. While we refer to our existing memories, events, emotions, and sensations, they are elusive, immeasurable, and coexist within the reality of virtuality, and they give meaning to what we encounter. The concept of virtuality is present in any act of perception. However, with the advent of the Internet and social media, large areas of the world's population began to engage with one another in traditionally "virtual" worlds, broadening the debate about the relationship between the two groups (Rosa, dos Santos, and de Paula Faleiros, 2016). As a result, the relationship between the physical and virtual worlds became a common topic in academic and multitudinous network user discussions. They

examined the opacity of the boundaries between real and virtual worlds from Facebook users' perspective. The aim of their study was to investigate the sensations and meanings that young social network users attribute to real and virtual environments. Researchers chose Facebook users (adults) because the researchers were familiar with it and also because of Facebook's undeniable global representation. The research looked at the opacity of the boundaries between the real and virtual worlds from the viewpoint of young Facebook users. The qualitative research methodology was used to perform this analysis and the semi-structured interview form was used for data collection. The following were the key meaning zones that arose during the process of analyzing the reports: "It feels different"; "we are not actually together"; "it is connected with people" (Rosa, dos Santos, and de Paula Faleiros 2016, p. 270). The zones were divided into themes and analyzed based on the interviewees' sense and meaning similarities. Although the respondents claimed that what happens on Facebook is more superficial and that having a physical presence is more real, they also stated that what they see and do on the web makes them feel and become excited. Feelings evoked by texts and photographs are similar to feelings evoked by a song or a scent or a memory or a thought. The distinction between the real and virtual worlds is derived from the interaction with the devices and services that mediate communication between human beings and life from Facebook users' viewpoint in this case.

Juul (2011) also described a conceptualization of half-real worlds. He described how video games are located between real rules and fictional worlds. According to Juul (2011), half-real refers to the idea that video games have two facets: they are real in the sense that they have real rules with which players communicate, and they are real in the sense that winning or losing a game is a real occurrence. When a game is won by defeating a dragon, however, the dragon is a fictional one rather than a true one. He believed that video games are a hybrid of fiction and

rules. Rules define what can and cannot be achieved in a game, and they present obstacles that the player must learn to solve over time to win the game. He referred to video games as half-real, but another word he suggested would be half-fictional, and the historical significance of a game's fictional level can shift over time.

DiLalla and Watson (1988) studied 39 children's behaviors to examine their reactions to teachers' interruptions to their fantasy play that were initiated by an experimenter as she engaged in role playing with them. It was hypothesized that "preschool children would progress through a stepwise sequence of developing ever clearer boundaries between fantasy and reality" (p.11). The children ranged in age from 2 to 6. The findings revealed that as children grew older, they progressed through the series to the point that, at 5 and 6 years old, they could integrate an interruption into their dream scenario without stepping outside of it and without being bothered by it.

Trowbridge and Stapleton (2009) also worked on the boundaries between fantasy and reality. They believed that alternative realities for interactive entertainment environments are now possible thanks to technological advancements that go beyond visual effects. Immersive entertainment illusions engage most of the senses in every direction and dimension. Theme parks are extreme examples of interactive entertainment, in which experiential entertainment designers and scenario writers immerse the viewer in a real or imagined reality. It outperforms other forms of entertainment because it can keep this illusion going for thousands of people for a long time, an entire day, or even a week. Theme parks face difficulty in incorporating computer-generated content for experiential entertainment because of this level of scrutiny. A good audience experience includes a seamless combination of physical reality and the author's virtual

imagination. The author must be able to engage and guide the audience's imagined reality for this illusion to work.

The Link Between Literature and the Focus of the Study

The relationship between play and learning, and in particular, whether play is an appropriate approach in teaching young children, has been debated in the literature for many years. The literature has revealed that play contributes to various aspects of child development, and the importance of play as a vehicle by which young children learn most effectively is valued and recognized by educational theorists (Piaget, 1962; Vygotsky & Cole, 1978; Wyver et al., 2010). Technology is another consideration and has currently been incorporated in the various educational setting. Many adults find the technological world quite different from that of children's perspectives; however, children in some cases consider technology-based games and natural play as the same world. I tried to bring some scholar's perspectives and opinions in this literature review to provide various perspectives towards my research wonders. In the following section, I attend to parents' and children's lived stories and experiences to understand what they feel, think, and perceive from natural play, technology-based games for facilitating the process of learning, and how they recognize and differentiate between these two worlds.

There have been articles regarding natural play (Wyver et al., 2010; Gray, 2011), incorporation of technology (Dunleavy et al., 2007; Valdez et al., 2005), and the distinction between the real and the unreal world (Rosa, dos Santos, and de Paula Faleiros, 2016) in the studied literature reviews. However, no study considers all three factors, particularly employing the narrative methodology. The literature, articles, and books related to my wonders that I already have mentioned in the literature are the distinction between the real and the virtual world from the perspective of adults and young people, and in this study I will examine the distinction

between the real and the unreal world between children. In the following chapter, I will examine the various dimensions of the narrative inquiry methodology that I employed in conducting this study and then I will describe the research method of this research.

CHAPTER THREE

Narrative Inquiry Methodology and Methods

What is Narrative Inquiry?

Narrative inquiry is a complex methodology that requires a commitment to human interaction. As a method of human study, narrative inquiry helps a researcher to comprehend the stories and perceptions of others. Participants and researchers are given the opportunity to participate in the process of inquiring into stories based on personal experience. Narrative inquiry is a rich method of investigating human lives that examines a profound sense of interconnectedness and connectedness.

Narrative inquiry is a form of a qualitative study in the social sciences and education with intellectual origins in the humanities and narratology (Connelly & Clandinin, 1990; Huber et al., 2013). The analysis of stories, telling, and retelling lived experiences to provide a framework for understanding personal and structural issues is known as narrative inquiry. Humans' lives, storied lives, and narrative inquiry provides a backdrop for studying how people perceive the universe.

The early works of education philosopher John Dewey (1938) influenced the emergence of narrative inquiry as a research methodology (Clandinin & Connelly, 2000). According to Dewey, education, life, and experience are the same. "Learning is life, and life is education, and studying life, education, and experience are studying experience" (p. 220). If we want learning to be meaningful and impactful, we, as educators, must understand our students' and communities' experiences.

Narrative inquiry is concerned with people's daily lives and investigates the social, cultural, linguistic, and institutional narratives that form them (Clandinin et al., 2010). According to Connelly and Clandinin (2006), narrative inquiry is a research methodology and a way of

writing and living a life. This means, in my opinion, that narrative inquiry values stories from the standpoint of lived experiences because it provides a basis for interpreting past, current, and future experiences. Narrative inquiry is a methodology for narratively inquiring into people's experiences, as well as a view of the phenomena of people's experiences (Clandinin & Connelly, 2000). In this approach, a narrative inquiry is born out of an ontological interest about how people live and the elements that make up their lives (Caine et al., 2013).

In this study, I need to keep in mind that I must respect participants' stories as Clandinin and Caine (2013) stated that narrative inquiry begins and ends with respect for lived experience. I also will consider the importance of collaboration. According to Clandinin and Connelly (2000) in narrative inquiry there is

collaboration between researcher and participants, over time, in place or series of places, and in social interaction with milieus. An inquirer enters this matrix in the midst and progresses in the same spirit, concluding the inquiry still in the midst of living and telling, reliving and retelling, the stories of the experiences that made up people's lives, both individual and social (p.20).

The aim of narrative inquiry is not to find definitive evidence but rather to uncover personal stories/experiences. Stories assist us in comprehending our own experiences and assist us in comprehending lived experiences that are not similar to our own. Stories aid in developing empathy, raising awareness and forming communities by bridging the gap between different experiences. According to Caine, Estefan, and Clandinin (2013), "Narrative inquiry is how we perceive human experience" (p. 584). Narrative inquiry is chosen as a research methodology because of my research puzzle's experiential, emotional, and relational basis. The purposes and knowledge of telling and listening are at the heart of this research methodology.

As Clandinin and Rosiek (2007) asserted, "What is unique is the advent of narrative methodologies in the field of social science research" (p. 36). They mentioned that human beings have lived out and told stories about that living for as long as we could talk. And then we have talked about the stories we tell for almost as long. These lived and told stories and the talk about the stories are one of the ways . . . we fill our world with meaning and enlist one another's assistance in building lives and communities. What feels new is the emergence of narrative methodologies in the field of social science research. With this emergence has come intensified talk about our stories, their function in our lives, and their place in composing our collective affairs (pp. 35–36).

Sensitivity to multiple intersections and dimensions of experience is needed for narrative inquiry. The idea that experience is at the heart of narrative inquiry and is expansive in nature provides a good journey for researchers to learn about it as a research methodology. Throughout the investigation, the picture of a widening, expanding circle comes to mind, reaching both before and after the investigation. Clandinin, Steeves, and Caine (2013) proposed that narrative inquiry allows for inquiry into participants' lived experiences, as well as attention to "social, cultural, linguistic, family, and institutional narratives" (p. 45).

According to Clandinin and Caine (2013), Dewey's theory of experience is the philosophical basis of narrative inquiry. The analysis of experience that recognizes the embodiment of the individual living in the world is possible with Dewey's view of experience. Clandinin and Connelly (2000) conceptualized narrative inquiry as a research method by developing a metaphor of a three-dimensional narrative inquiry space. According to Clandinin (2006), there are the three dimensions of the narrative inquiry space: personal and social (interaction); past, current, and potential (continuity); and location and place (situation)" (p.47).

According to Clandinin and Caine (2013), Dewey's two requirements of experience, interaction and continuity enacted in the circumstances, provide the grounding for attending to a narrative conception of experience through the three-dimensional narrative inquiry space with dimensions of temporality, location, and sociality (p.168).

Furthermore, according to Clandinin (2013), "narrative inquiry is a research method that enacts many, if not all, of the concepts of a Deweyan theory of inquiry". In all the ways that our Dewey-inspired view of experience makes apparent, narrative inquiry is relational; it is relational through time, locations, and relationships" (pp. 18-19). So, by looking back and forth through our lives in this way, we know that our life stories are not meant to be permanent. Besides, I am intrigued by the fact that we are never alone, regardless of where we are or when we are doing so, which implies that we can still relive and share our continuing tales, as well as form and reshape stories to live by (Clandinin & Connelly, 2000; Li, 2004; Zhao, 2007).

As narrative study became a valid method and was seen to have valuable data sources in the social sciences, and new forms of analysis of these stories appeared in qualitative research, a significant change in the research process occurred, allowing narrative inquiry to flourish (Pinnegar & Daynes, 2007). The emphasis on people's narratives shifted as a result of this change, from stories as documentation of experience to the study of experiences themselves, and the phenomenon of lived lives became the central focus. This is interpreted as the stories that people live by (Clandinin & Connelly, 1994). In this research, stories to live by are told through the children and their parents telling of their experiences about the concepts of play, technology-based play, the penetration of technology into the educational settings, and they will share their thoughts, perceptions, and challenges in this regard.

Clandinin and Rosiek (2007) argued that narratives are the type of representation that represents human experience as it unfolds over time. As a result, narratives are perhaps the most suitable method to use when considering investigation within a "pragmatic framework" (p.40). According to Clandinin and Caine (2013), a narrative inquiry study starts by inquiring into the researcher's own personal stories of experience. Writers believed that since narrative inquiry is a continuous reflexive and reflective approach, narrative inquirers must continuously inquire into their experiences before, during, and after each inquiry (p.171).

Clandinin and Connelly (2000) stated that narrative inquiry involves "collaboration between researcher and participants, over time, in place or series of places, and in social contact with milieus" (p.20). An inquirer joins and progresses through this environment in the same spirit, completing the inquiry while still living and saying, reliving and retelling, the stories of the events that made up people's lives, both personally and socially" (p.20).

Experience is unfolding for narrative inquirers, and it is "lived in the middle" (Caine et al., 2013, p. 575) without a distinct beginning or end in different social contexts. According to Clandinin, Murphy, Huber, and Orr (2010), "As narrative inquirers, our lived and told stories are always in relation to or with those of our participants" (p. 82).

Commonplaces of Narrative Inquiry

Connelly and Clandinin (2006) identified the three dimensions or commonplaces of temporality, sociality, and place as being simultaneously explored. In a narrative inquiry, all three commonplaces are equally essential, and they all contribute to a more comprehensive understanding of each participant. We must make an effort to consider each participant from a broad perspective, considering their historical, current, and future experiences, as well as how they could change. According to Clandinin and Connelly (2000), the best way to conduct a

narrative inquiry is to experience it in four aspects at the same time and ask questions pointing in each direction. These four aspects are individual's past and future and inward and outward knowledge and awareness of their life experience. In this research, I will ask open-ended questions, so the participants would be able to respond in all four directions.

According to Clandinin et al. (2013), relationships are central to sociality. "Relationships among narrative inquirers and participants are at the heart of the narrative inquiry." (p. 49). Personal circumstances are essential in the sociality dimension. We also pay attention to the relationship between the participants and the inquirer and when it comes to sociality. Through cooperation, transparency, and trust, this essential relationship will serve as the foundation for this investigation. These three commonplaces of our life stories, according to Caine et al. (2013), are understood as part of broader "cultural, social, family, and institutional narratives" (p. 577).

Personal, Practical, and Social Justifications

Three justifications needed to be examined in order to explain the intent of my study while considering educational research and the audience of this narrative inquiry. Personal, practical, and social justifications are investigated in depth in order to address the questions "So what?" and "Who cares?" that is important to the researcher, participants, and the larger educational landscape (Clandinin & Caine, 2013, p. 175).

According to Clandinin (2013), narrative inquirers can start with personal justifications, which implies explaining the inquiry based on their own life experiences. As a result, the author wrote

each narrative inquirer needs to engage in such autobiographical narratives as she/he begins a new study. We call these autobiographical narrative inquires narrative beginnings. Through that writing, each of us comes to understand, to

name, our personal, practical, and social justifications [...] this work shapes our research puzzles and identifies key narrative concepts and terms. In this way we can make visible our ontological and epistemological commitments, in relation with participants (p. 89).

Furthermore, Clandinin (2013) said that "our past experiences are embodied in our lived and told accounts." We still have them with us" (p. 196). According to Clandinin et al. (2006), "as we reflected on our own experiences, we saw that our stories about who we were had changed partly because of the circumstances in which we found ourselves and the people with whom we came to live in relation" (p.113).

Reflecting on this context and by doing this narrative research, I want to help myself, in the first place, to become acquainted with the ideas, opinions, and feedback of the participants. I find it helpful to hear participants' opinions and understand their thoughts, so that I would be able to make changes in my teaching methods to develop current methods align with the feedback I receive. Another justification for my research is that when the results of my research are published, other teachers would be able to hear voices and better understand the views of children and families about the concept of play and the introduction of technology into the education system.

This awareness would cause changes in their performance. This research can also be used to make the voices of children and their families heard on a larger scale, which is considered as an important goal to me.

One of my goals in doing this research is to understand how we should use technology to help children's learning in a positive way, as well as to become more mindful of the negative sides of technology in our life. By attending to the lived stories of the participants and recalling

my own experiences as a child and now as an educator, I attempt to understand where children draw the line between reality and unreality, and to what extent and in what situations they perceive two worlds to be the same or different.

Another social justification of this study is aiding parents and teachers in determining how much technology can be included into their child's learning process. It also allows parents to become acquainted with the experiences of other parents, to hear their concerns and voices, and to realize if some of their problems and challenges are identical or different.

Research Approach and Research Process

Narrative inquiry is a way of understanding and inquiring into experience through “collaboration between researcher and participants, over time, in a place or series of places, and in social interaction with milieus” (Clandinin & Connelly, 2000, p. 20). For Clandinin and Connelly, narrative is the primary approach for social science research since it is the way experience is enacted. They believed that "Experience happens narratively. Narrative inquiry is a form of narrative experience. Therefore, educational experience should be studied narratively" (p. 19). According to Clandinin and Connelly, "the contribution of a narrative inquiry is more often intended to be the creation of a new sense of meaning and significance with respect to the research topic than it is to yield a set of knowledge claims that might incrementally add to knowledge in the field" (p. 42). According to them, narrative inquiry provides an opportunity for personal and social growth for both the participants and the researcher (p. 85). Therefore, narrative inquiry is primarily relational; as the authors highlighted, "connection is at the heart of narrative thinking" (p. 189).

In narrative inquiry, the researcher's responsibility is to engage a responsive environment to gather stories of lived experiences (Connelly & Clandinin, 1990). The following methods

could be used to collect narrative inquiry data: field notes, journal entries, interviews, conversations, recorded storytelling, autobiographical and biographical writing, and other documents such as newsletters are all examples of shared experience documents.

Narrative inquirers negotiate the field as they move between story beginnings, field texts, intermediate texts, and finally research texts, rather than setting research questions. From field to field texts, field texts to interim texts, and eventually research texts, there is continuity. In the narrative inquiry, the researcher receives feedback from relational responses throughout the research process. Responses also contribute to a better understanding of the situation by bringing their own personal and professional experiences to the discussion. I approached the puzzles with "a sense of a search and a re-search" (Clandinin & Connelly, 2000, p. 124). This research was initially shaped by monthly online conversations where participants told stories about their experiences. Field texts were written during research conversations in which participants shared their personal stories. Conversations provide a venue for participants' and researchers' stories to be composed and heard.

In this study, the purpose of research conversations was to produce field texts that captured participants' narratives and led to understanding lived experiences. I analyzed video recordings of meetings, transcripts of interviews, and field notes so that what was written reflected the lived experience in ways that emerged from the researcher-participant interaction. For the transition from field texts to interim research texts, I composed interim research texts that reflected narratives of experience in ways that showed temporality, sociality, and place. As I read and reread our conversations, I became aware of various opportunities for interpretation. As I moved from the research interim to the research texts, I constantly contacted the two participants and shared what I was going to write. Sometimes they approved the content, and sometimes they

changed parts of it. This interaction shaped a new understanding to understand better what it meant to co-compose the research text. Throughout the writing of the research text, I was attentive to field notes to represent both participants in ways that resonated with them.

The field could be continuing contacted participants to narrate their experiences and live with them in a particular place or time. Therefore, being in the field entails settling into the temporal unfolding of lives. Clandinin and Connelly (2000) highlighted that stories are not always conveyed in chronological order and hooks (1997) added that people's lived and recounted stories are not always moving from point A to point B.

The focus of narrative inquiry shifts from 'what?' to 'how?' questions. This is accomplished by group storytelling. In the end, narrative inquiry analyzes people's stories as they are lived and written, retold, and relived. According to Clandinin and Caine (2013), as previously noted, Dewey's theory of experience provides the philosophical foundation of narrative inquiry. The respect for lived experience is at the heart of narrative inquiry. The study of experience that respects the embodiment of the individual living in the world is possible with Dewey's view of experience (Clandinin, 2013). Furthermore, according to Clandinin and Connelly (2000), narrative inquiry involves a relationship between researcher and participants, in which we enter in the middle of our lives, recognizing that our lived stories and lived experiences unfold through time and place, as we are always telling, retelling, and living the stories of the experiences that shape our lives.

I shared my stories of how this research evolved. I also shared my lived experiences and stories with the participants, explained the research wonders to them, and asked them to share their stories and express their opinions. The research involved open-ended dialogue, conversations, and interviews between the participants and myself about the research topic. I

invited four participants to attend this research. Two parents and two children were the participants in this narrative inquiry. We had three WebEx meetings individually, for a one-hour duration over three months. The conversations have been audio-recorded with permission from the participants, and transcriptions have been created from them. The audio recordings have been protected in a password-protected computer or recording device, and only my supervisor, Dr. Shaun Murphy and I have access to the transcripts but only for this thesis research purpose.

During the conversations, I invited them to share their experiences about the concept of play and the introduction of technology into children's play in educational settings. I examined how young children experience technology in terms of real and unreal, and I also attempted to know how concepts of play help us understand young children's use of technology. After each research conversation I created field notes which helped to further understand the recorded conversations. I formulated some interview questions in advance of the conversations. In the following figure 3.1, I briefly illustrate the research method.

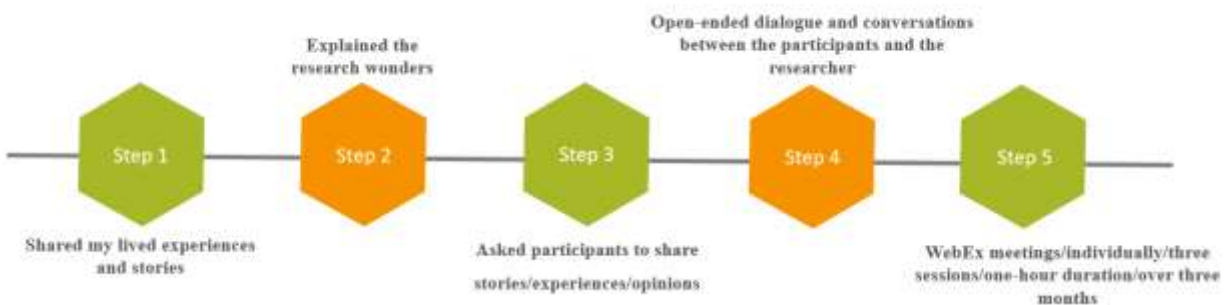


Figure 3.1: The research method

According to Clandinin and Connelly (2000), field and research texts are written with the three-dimensional narrative space, in such a way that researchers and participants travel back and forth in a reflective and ongoing process of co-composing field and research texts. Clandinin and Caine (2013) asserted that field and research texts "refer to the records, including for example,

field notes, transcripts of conversations, and art forms such as photographs and journals that are composed or co-composed by researchers and participants" when composing field, research, and final texts with the participants (p. 166). Clandinin and Caine (2013) argued that

Field texts are read and reread, looked at and relooked at, and attention is paid simultaneously to temporality, sociality, and place. It is the attention to the three dimensional narrative inquiry space that then moves deeper into the meaning of the experiences. While there are three dimensions in the inquiry space, these dimensions are often intertwined and knotted. In some ways the three dimensions form the fabric of life experience. The knots tie stories to place, people, and time, and one dimension cannot be understood without the others. (p. 172)

Clandinin and Caine (2013) also pointed out that there is a continual process of engagement between researchers and participants as they go backward and forth in the three-dimensional narrative inquiry spaces as part of the process of writing and co-composing field and research texts. The authors also mentioned that, as will be addressed further, final study papers can be challenging to write, mostly because their focus now shifts to a public audience that they may not be aware of, and who did not participate in the researchers' and participants' lived and told narratives.

Clandinin and Huber (2015) believed that "Ongoing negotiation with participants helps narrative inquirers to construct research texts that both objectively and profoundly reflect the narrative inquirers' and participants' experiences" (p.13). During research conversations and informal meetings, I hold field notes about my thoughts and feelings, which later became part of the data review. Clandinin and Caine (2013) emphasized the need of considering the personal, practical, and societal justifications of the shared work between narrative inquirers and

participants while writing the final research texts. This is significant because "stories are not simply a medium for learning, development, or change, but also a life [...] living is field text, and field texts are co-compositions of lives" in narrative inquiry (Caine et al., 2013, pp. 578-579).

Ethical Considerations in Narrative Inquiry

Participants were completely free to leave the study at any time with no consequences. They were told that participation was entirely optional and that they have always had the option to withdraw at any time, and their data would be removed from the study and destroyed if they so desired. They also were informed that once data collection was finished and no longer used for the analysis, the data would be destroyed after the requisite five years of storage after the thesis was completed.

When the focus of research is on children, they may be vulnerable as participants and require special considerations in designing and conducting the research. In this research, I first sent the research conversations questions to their parents. I informed families about all the research conversations and interviews, and I sent the consent form to the families of the children before the start of the research conversations and research.

Pseudonyms were added to the research conversation transcripts and information associated with the audio recordings of the research conversations and transcripts for participants who demanded confidentiality and anonymity. Participants' pseudonyms were used in public reporting of the study results. Participants had the ability to review their transcripts and the final version of the thesis, but confidentiality were preserved throughout. To maintain confidentiality, participants had time to edit or delete parts of their responses or a portion of their responses. Audiotapes and transcripts stored in a password-protected computer to secure participant confidentiality and/or privacy.

In the transcripts, identifiers to the participants, their position, or their situated identity were identified, omitted, or changed, as requested by the participants. The results of this study can be released and discussed at conferences; however, participant identities will always be kept private unless they choose otherwise.

A narrative inquirer should attend to relational ethics. We can live with difficult stories and experiences as narrative inquirers, and we can create a relational space with the participants by staying with them in ways that shape the composing of the three-dimensional narrative inquiry space marked by ethics and attitudes of openness, mutual vulnerability, reciprocity, and care (Caine et al., 2013; Clandinin & Caine, 2013; Clandinin & Connelly, 2000). According to Clandinin and Caine (2013), "Narrative inquirers need to focus to the ways individual narratives of experience are intertwined in social, cultural, family, linguistic, and institutional narratives". Each inquiry highlights the ambiguities, complexity, challenges, and doubts that the inquirer encounters while living in the field and writing field texts, interim research texts, and final research texts" (pp. 171 172).

As we begin to see disruptions, fragmentations, and silences in the lives of participants (Clandinin & Caine, 2013), the context of the relational inquiry space beyond the narrative inquirer and participants becomes increasingly important to comprehend in the multiple dimensions of looking backward and forward within stories (Caine et al., 2013; Clandinin, 2006).

The narrative inquirer and participants are embedded within a social, cultural, and familial context that allows us to "continuously inquire into the social fabric of experience and to not lose sight that people are always becoming" (Clandinin & Caine, 2013, p. 176); and all of

this means that we are always composing (new) lives and stories to live by, (re)shaping ourselves.

Qualitative research is more reliant on the researcher's judgement and experience. Furthermore, the sort of information gathered is subjective and specific to the individual or situation. As a result, avoiding bias is far more difficult than in quantitative research. In this study, two participants were immigrants, which means that in some parts of the conversation, I probably had different understandings of what they really meant due to the different backgrounds. Furthermore, the participants' genders affect the way they view the world and how they narrated the stories.

As I write this thesis, sentences spark my mind in a way that I can see and feel myself immersed on many stories shared with the participants in this study during conversations; more specifically, many lived experiences and shared stories, that were highlighted and reflected/discussed further, resonate in my life as a teacher, maybe, on our lives, as we (re)shape and compose new stories to live by in the midst of the plurality of lives in motion.

The third chapter focused on narrative inquiry as a research methodology, which is the process of the researcher and participant sharing stories of lived experiences in order to implement the meaning of lived lives. The stories uncovered through narrative inquiry are then classified according to temporality, sociality, and location. Through sharing our stories, we can find support, encouragement, and interesting emergent strategies for moving ahead with our stories to live by. The third chapter looked at the history of narrative inquiry as well as the research methodology. This research's research process, methods, and ethical considerations were also covered. Chapter four will inquire into the lived experience of participants.

CHAPTER FOUR

Findings

Introduction

This research explored the storied experiences of participants who are children and their parents. Narrative inquiry, as suggested by Connelly and Clandinin (2006), is "the study of experience as a story" (p. 477). In interviews and conversations, the research participants' accounts offered a foundation for comprehending the participants' experiences through the commonplaces of narrative inquiry: temporality, sociality, and place. These three commonplaces enable a full and expansive awareness of each participant. Temporality, or the concept of time, helped the researcher, me, see participants' lives as changing and flowing between past and future and in relation to the person (Clandinin & Connelly, 2000, p. 50). Sociality, which has to do with relationships, is concerned with the participant's and researcher's personal and social settings (Connelly & Clandinin, 2006). Finally, place refers to the location where the events took place. Place, according to Connelly and Clandinin (1999), is storied and "has a history with moral, emotional, and aesthetic dimensions" (p. 2).

Narrative inquiry, according to Clandinin, Steeves, and Caine (2013), enables us to investigate participants' lived experiences while also paying attention to "social, cultural, linguistic, familial, and institutional narratives" (p. 45). Finally, we strive to comprehend key personal, practical, and social justifications in a narrative inquiry (Clandinin & Huber, 2010). Narrative inquirers engage in the questions 'So what' and 'Who cares?' in order to understand why this particular narrative inquiry research can be significant on a more comprehensive societal level (Connelly & Clandinin, 2006).

I invited two mothers and their two daughters to participate in this study. I had three research conversation meetings with Sarah and her 6-year-old daughter Natalie. I also had three research conversation meetings with Aida and her daughter Eliza. In this chapter, I first introduce the participants, explore the participant's stories and narratives, and then analyze these lived experiences.

Vignette 1, A Warm Welcome

Due to the pandemic, the research conversations were conducted online. My research topic was technology and holding these online meetings could make the research conversations even more exciting for both the participants and me. Before starting the first research conversation, I was wondering how the children would react to the online meetings. I was worried about whether they would feel comfortable or not. I was trying to find some creative ways to encourage children to share their stories with me. I opened my laptop, signed in and waited for the research conversation to begin.

Introducing the First Two Participants, Sarah and Natalie

Sarah and Natalie³ were the first two participants I met with. Sarah is a woman, mother, student, and immigrant. She immigrated to Canada with her husband and their daughter three years ago, and Sarah recently received a Master's of Business and Administration. She was an immigrant like me, which helped us enter the relational space together. Another factor that helped us build a friendly relationship was that we both were students during the last two years. These factors created a space for us to better understand some of each other's concerns. Also, although she was not a teacher, she was interested in educational topics, and this was a positive

³ All names in this research are pseudonyms.

point for me. I asked her if she and her daughter would like to participate in study, and she said that "I would be happy to participate in this study for several reasons" (Sarah, August 2021). She explained that the first reason for her interest in participating in this research is familiarizing herself with the concept of play so that she would be able to become a better parent and get to know her child's world better. Sarah believed that by participating in my research by telling her stories, she would better understand her emotions, feelings, and perspectives, getting better interpretations of her memories by recalling her lived stories. Sarah added that by participating in this study, she would better understand how her daughter views the world and how Natalie perceives the concept of play. According to Sarah, it would enable her to understand better how to teach life concepts to Natalie in the future. I asked Sarah to talk with Natalie about this research topic in a way understandable for her. Sarah informed me that Natalie showed interest in participating in these research conversations.

Sarah told me that Natalie was interested in online meetings because she had told her mother that "you always have meetings with your professors, and now this is my turn. I also have an important meeting with Shima, and I am invited to participate in this study, and I am happy" (Natalie, August 2021). What was interesting to me when I heard about Natalie's enthusiasm for participating in the online meeting was how different today's children are from previous generations. When I was a child, I had no experience of online meetings.

The first research conversation was scheduled, and when the online research conversation started, three of us were excited. At first, I orally reviewed the study's topic and ethical consideration and invited Sarah and Natalie to share their lived experiences and stories regarding playing in natural environments and with technological devices.

Understanding Children' Preference: Playing Alone, With friends, or Parallel

From an adult's perspective, when children play physically with toys or balls, they are engaging in a real game. The pattern of physical games that has been prevalent among children for years and millennia is based on playing with tactile tools in natural environments, regardless of race, religion, or social class. Children explore tools and toys, talk to themselves (internally), perform various roles, and communicate with their playmates and dream together while playing these games. They imagine themselves in various social situations, either alone or with friends, and create their own roles in these scenarios. They take on various roles and take part in a variety of scenarios. The concept of play has evolved in recent years, and it has been reshaped in new ways. New forms of play are increasingly gaining popularity. These forms of play did not exist in earlier decades and resulted from technological developments. What does it mean to play for children? Although the concept of play seems simple at first glance, it is complex to define. One reason could be that play is an abstract concept rather than a tangible type of behaviour with a clear objective. As a result, identifying an activity as play is highly dependent on how players perceive the activity and its structure (Johnson, Christie, & Wardle, 2005).

Bodrova and Leong (2003) highlighted that play is typically an essential activity in developing and nurturing children's minds. They believe that high-level play is perceived as both fun and developmentally valuable, so I used language that was understandable to Natalie and started asking questions about her experiences of playing with her friends; and also asked her to share her experiences of playing alone. In the beginning, she was a little shy, and she paused for minutes to recall stories. However, after a few minutes, she felt comfortable and shared her thoughts and memories confidently and excitedly. Natalie explained that sometimes she likes playing with her friends and sometimes alone. When I asked if she was interested in having her

friends when playing with her mother's phone, she replied, "No. I like to play with the phone alone" (Natalie, August 2021). I asked Natalie to imagine that her friends are sitting next to her, and each of them has their own phones in their hands. "Would you still prefer playing alone"? She replied that she still prefers to play alone. She needed some time to recall her stories. A few minutes later, she added, "When I am in a playground, sometimes I play alone, but I prefer playing with my friends".

In the past, children had options to play alone or with friends, and some children sometimes preferred playing alone without friends, depending on their individual personality. I asked this question from Natalie was because I wanted to know if the introduction of technology into the world of children influenced this choice. Natalie's answer seems to have been influenced by a device called a cell phone. After hearing Natalie's answer, I wondered why she insisted that once she plays with her mother's phone, she just prefers to be alone in any condition. I wondered why Natalie kept answering that she no longer needed her friends when playing with her mother's cell phone. Sarah began to talk about her experiences and mentioned that

I think Natalie just imagines that she prefers playing with my phone, and this is not what I have witnessed because when she has to choose between staying at home and playing with a phone and 'going out and playing in the park, she always chooses going outside the house and play with her friends (Sarah, August 2021).

Connelly and Clandinin (2006) highlighted that as we study experience, we consider the "simultaneous exploration" of the following three commonplaces: temporality, sociality, and place (p. 479). My understanding from Natalie's and Sarah's stories is that Natalie's favorite place to play is outside the home. Natalie's age could be an important factor influencing this choice. She is at an age, she is 6, when she is interested in discovering the world outside the

home and wants to see and discover new things from the environment every day. For her, the out-of-home is a place full of learning and exploration. Communication is another key factor that influence this choice. By communicating with friends, Natalie can build effective and good relationships with her friends and learn new things from them.

Children's Experiences of Using Technology and their Stories of Travelling Between Two Worlds

I believe that sometimes adults are not able to distinguish between true and false stories. Leonard (2018) conducted a survey in which respondents were asked to read four stories. Two of the stories were real and two were from a fake news publisher. According to Leonard, some participants could not distinguish fake stories from real ones, and this depended on their background knowledge of the topic. These stories were about two political figures. According to the study's result, those participants who did not have background knowledge in politics could not distinguish the fake ones from real stories. One of my two wonders in this research has been understanding whether from children's perspectives, there is a boundary for the technology-driven world and the world without technology, or a blending of the worlds, where there is no definite boundary.

I asked Natalie if she had ever wished to invite the cartoon characters she sees on the phone to her birthday party? She replied, "No, I know they are not real. When I was a kid, I wanted to invite them, now I am a big girl. I know they are only on TV" (Natalie, August 2021). Natalie's response reminded me of how important the concept of time is in narrative research. In the past, when she called herself a child, Natalie thought she could invite cartoon characters, but now Natalie considers herself big enough that she knows they are not real. Clandinin et al. (2013) suggested that lives unfold through a process of change, involving the "temporal

unfolding of their lives in different places and in different relationships” (p. 48). She was talking about her age. She was trying to tell me that now everything has changed, and I am no longer the same person, and now I have changed my mind and I know characters are not real.

Sarah mentioned that when Natalie is using technological devices, she feels that she has an active role in her play and everything is under her control; she feels that she is playing a real role in different scenarios. Sarah believed that sometimes Natalie imagines herself a real singer or a real actress. Sarah explained

Natalie knows very well that the cartoon characters or animations in a game are fictional characters. The reason why Natalie loves technology-driven games is that she has an active role in technological-based play to lead characters and events, and she also has better control on all variables. Last year we bought her a musical instrument toy with which she could sing. We praised her for singing for us. She fell in love with that toy because she could play the role of different singers many times. She often invited her father and me to go to her concert, sit on chairs, and perform a concert. She loves playing an active role in a play, and technology fulfills this need for her (Sarah, August 2021).

Under the structure of cognitive and affective processes, pretend play and creativity are interconnected (Russ, 2003), yet it did not interrupt her understanding of who could be in the room with her physically for her party. Play, imagination, and creativity may have a similar prime configuration to some extent (Saracho, 1992). A multitude of research has shown that pretend play helps children's creativity by facilitating cognitive and affective processes (Dansky & Silverman, 1973; Howard-Jones, Taylor, & Sutton, 2002; Moore & Russ, 2008; Russ & Schafer, 2006; Saracho, 1992). Their main findings support empirical links between divergent

creativity, imagination and play. Sarah pointed out "I had never thought about these stories before I narrated today".

Sarah believed that telling these stories allowed her to reconsider, rethink, and relive these experiences. As Young et al. (2015), asserted "there is a difference between knowing something of that experience in your head and being able to understand the experience in your heart" (p.158). As Sarah mentioned this aspect, I was reviewing the concept of mindfulness in my personal life. Sometimes, I feel I have no idea why I am doing an activity, or I forget why I started a journey. So, I always decide to let the dust settle in my mind to recall how I felt at the beginning of the journey. I remind myself what inspired or encouraged me to start doing an activity by referring to my personal notes. Mindfulness has always played an important role in my personal life, and I think by recalling and telling experiences, I encouraged Sarah to understand better what has happened in Natalie's mental development from her childhood till now. I think she will probably focus more on her daughter's play pattern in the future because of reminding and telling these experiences today. Sarah told me that "I need to think more critically about Natalie's behaviour pattern" (Sarah, August 2021). Clandinin (2013) wrote that "understanding lives in motion creates openings for new relationships to emerge, for lives to unfold in unexpected ways; there is no final telling, no final story, and no one singular story we can tell" (p.205).

The Role of Parents

Hammer et al., (2021) believed that parents at home may have a pivotal role in shaping students' beliefs towards using technological devices which are in turn an important precursor to students' use of technology for learning. Sarah mentioned that the only reason that Natalie wanted to play with Sarah's cellphone was not Natalie's personal interest. Instead, sometimes

Natalie does not have any other option, and she has to choose this option because Sarah is too busy and cannot dedicate time to take Natalie to a park or a playground due to her busy schedule. Connelly and Clandinin (2006) stated “narrative inquiry, the study of experience as story, then, is first and foremost a way of thinking about experience” (p. 477). When Natalie was telling me that she always likes staying home and playing with the cellphone, Sarah probably was reviewing past experiences to see if this was Natalie's preference or if she had no choice but to do so. In narrative research, we are encouraged to reflect upon our experiences.

At the second and third meetings, Sarah and I tried to go into more detail about Natalie’s behavior pattern and her actions and reactions. First, I asked Sarah to share if in her family they have any time restrictions for using technological devices and describe Natalie's reaction in this case. Sarah replied

when Natalie was younger, she was trying to convince me to set less time restrictions on technology-based games, but eventually she realized that I only allow her to play with my cellphone on weekends not every day and playing with my cellphone has time restrictions. I think Natalie has come to understand that we have less time restrictions on playing with actual toys; however, there are stricter rules for playing with electronic devices. I have explained to her many times that if she uses my cell phone for a long time, she will have a headache and using the cell phone for a long time will lead to poor eyesight. (Sara, September 2021).

According to Xu et al., (2020) myopia⁴ is one of the leading causes of vision loss globally. They believe that myopia is associated with near viewing behaviors, which currently include reading, communicating and entertainment on hand-held electronic devices. Hyperopic

⁴ Nearsightedness (myopia) is a common vision condition in which you can see objects near to you clearly, but objects farther away are blurry.

defocus is believed to trigger active eye growth, and when children view near targets the image plane is likely to be behind the retina due to accommodative lag. Sarah felt that her child should stare at cell phone screen for only a few hours to avoid headaches and eye damage. Sara's view may have been derived from information provided by researchers in scientific papers and articles, or it can also be provided through social media and news. I asked Sarah if she, as a parent, had ever tried to teach basic life techniques to Natalie through the technology world, or if technology had just been a fun role for their family at home. Sarah replied

I have come to the conclusion that it has not always been sufficient and satisfactory to use words to teach basic life lessons to Natalie. I want to tell you a story. Natalie is not an early bird and I have many struggles every morning to wake her up. I used to talk a lot with her about the importance of not being late and I had told her that if she was late she might upset her teacher and she might miss the school bus and I had tried with every sentence to convince her to wake up easier in the morning, but the process continued. There is an animated character named 'Choo Choo' who, in one episode, arrives late to school, I found the episode and showed it to Natalie. Natalie was very impressed with this cartoon, and I saw better results in the mornings after showing that episode to her, because when she did not wake up, I was telling her not to be late like Choo Choo (Sarah, September 2021).

According to Sarah, technology came to help her. She decided to show Natalie an animation named Choo Choo, a character who always arrives late to school. Sara added that Natalie was impressed with this episode, and Sarah saw the positive results in the mornings routine after showing that episode to Natalie. Sarah added that in her opinion, educational

technology has been effective in teaching Natalie's some life strategies and has made things a little easier for her. I asked Sarah if Natalie was interested in playing with kitchen utensils. Sarah replied

When she was younger, she was interested in playing with kitchen utensils, but now she is not interested. Instead, she is now interested in cooking with me.

When I am cooking, she comes to me and likes to participate, and when we are at the dinner table, she announces to her father that she did a great job today and made this food. We always encourage her for making such delicious food (Sarah, September 2021).

Natalie's gender may be one of the reasons she is interested in cooking. She has seen her mother cooking many times and has probably tried to pretend that sometimes she can play the role of mother in the family and cook like her mother. Children concentrate on their parents' behaviors and often try to imitate them. To put it another way, many children's behaviours are impacted by their parents or other people's behaviour. Children are keen observers who constantly process and imitate adults. Teachers, parents, friends, and elder siblings all have a significant impact on the actions and reactions of youngsters. Many children's behaviors become habits over time and are often reflected in their adulthood lifestyle. Gender influences children's choices and preferences. Children who identify as daughters frequently imagine themselves as the family's mother and copy their mothers' habits. On the other hand, youngsters who identify as boys are more likely to imitate their father's behaviour. One of the factors impacting the participants' experiences and narrated stories in this study could be their gender. According to the two children who told the narratives in this study, the girls were

usually interested in playing in the kitchen. According to their mothers' accounts, the girls liked to examine kitchen things. Aida and Sarah both thought their daughters were interested in cooking, and they had experimented with kitchen utensils when they were younger. This could be because in some traditional homes, women are responsible for cooking in the family. However, I think this is not always the case.

Technology Shaping Imagination and Creativity

The advancement of technology has helped people to express their creativity differently. People can constantly look for information and learn new things they did not know previously. It provides us with a platform to express ourselves. This relates to people's creativity and how they express it. We can now share our views. YouTube has grown into a multibillion-dollar business in recent years. YouTube's success is due to all video makers and their viewers. They can express their various abilities and viewpoints. They use video cameras and edit their videos on computers, which helps them produce the greatest product possible. The technology could aid in the development of creative creativity. Mishra (2012) believed that digital technologies are becoming an increasingly important component of working and playing. Technology is at the center of our lives and interactions, from smartphones to internet technologies, YouTube videos, and multiplayer games.

I asked Sarah if Natalie had ever come up with a new idea that family had never talked about at home, and if so, where did the idea come from? Sarah replied that this had happened many times. For example, we had never talked about camping in the family in our family conversations, and we had never had a camping experience. I recently have witnessed Natalie puts on her hat and take her backpack. Natalie

emphasizes that you and daddy should not come with me on this trip, and I am having fun with my friends. I have grown up, and I only have to go camping with my friends. I was curious to ask Natalie some questions and realized that she learned about camping equipment from her friends. She told me a couple of times that she should go to the mountains with her friends and go alone when she grows up. She told me you and daddy would get tired, so it would be better for us to stay at home. In this way, she and her friends will have more fun without us.

Sarah added

communication with friends plays a crucial role, but technology has also been considered a guideline for Natalie's imagination skills. A YouTuber named Ryan always goes to different camping sites with his parent. They roast marshmallows and set up a tent, and Natalie loves to do those things. She learned from this YouTuber. The only difference is that Natalie tends to do these activities with her friends, not with her family, because her friends say she will have more fun if they go independently (Sarah, September 2021).

Natalie never requested to go camping or to a playground by herself, which seems remarkable. Natalie expressed an interest in setting up camp and other camping-related activities (Sarah, September 2021). On the other hand, the technological world appears to encourage them to spend time alone. What intrigued me was that Natalie learned these ideas from two different places: one, from watching Ryan's YouTube videos, and the other, from dialogues she had with her kindergarten peers about their camping experiences. Natalie, according to Sarah, was more motivated by her peers.

As Sarah and Natalie discussed camping adventures, I pondered the difference between viewing Ryan's camping videos and Natalie's actual camping experience. In other words, why would Natalie want to go camping in the real world rather than just viewing Ryan's videos? Natalie, I believe, was first exposed to the concept of camping through technology. More profound experience and long-term learning, on the other hand, are only attainable through hands-on participation in the activity, not only by watching videos. If Natalie and her family go camping, she will be able to perform what she has already seen in Ryan's videos and will be able to learn those things on her own, allowing her to engage more deeply in the learning process by practicing camping activities. Children appear to learn abilities superficially and store them in their short memory by just watching activities. Instead, the quality of learning will improve when those viewed activities become actual activities and a lived experience for the youngster. Experiences will be stored in long-term memory and become a part of one's life. They would be able to hone their abilities and put them to use in various scenarios.

If technology has advanced to the forefront of 21st-century learning debates, creativity has been the closest word and concept. According to Druin (2010), the technological complexity and richness of a child's environment are different from what adults experienced when they were children. For example, no adult today has experienced what it is like to get their first iPhone app. Gulati (2008) argued that the Internet is often considered a resource that enables individuals to overcome the constraints of traditional elitist spaces and gain access to learning. Thanks to new communication technologies, especially the Internet, there are exciting possibilities for overcoming geographical and cost barriers to learning. Clandinin (2013) suggested that "each story of experience opens

into new stories to be lived and told, always with the possibility of retelling and reliving" (p.203). We are prompted to consider experience as circular, rounded, and expansive rather than linear. I could clearly see this during the research conversations when Sarah was talking. Sarah was talking about the impacts of technology on her child and then was telling me the influence of Natalie's friends on her behaviours and perceptions. She was moving in different times and different places when talking with me and constantly new things were coming to her mind.

Children Growing Up Today Versus Children Growing Up in The Past

Greco (2013) compared the new generations and previous ones and the technology addictions. Greco believed that most children are nurtured in an environment where the television and many electronic devices are present immediately after birth. Later, the always-busy parents let the children entertain themselves in front of the television, which, even when not being watched, gives them a sense of security due to the rich background it generates. According to Greco, they should find security in communicating with their parents and other adults. The same desire encourages the parents to present a new toy to their children, for example, the telephone, which initially is nothing more than a musical device. The next few years are spent with the television as a background fixture and the mobile phone as a playmate. Then the children grow up, and the 'limited offer on the TV' starts to fade away, as parents speak about their children's achievements with computers and the internet. Even while they are in primary school, it is almost expected for every youngster to have a cell phone. According to Greco, the effects of such parenting are beginning to manifest more and more in modern society, both educationally and behaviorally.

I asked Sarah if Natalie is basically familiar with YouTube, Facebook, Instagram, or other applications in the field of technology? Sarah replied that,

Natalie is quite familiar and has even asked me many times to take a photo of her and upload it on Instagram. Sarah stressed that she was even shocked to hear the word upload and how she was able to use the word (Sarah, October 2021).

Over time, generations' experiences of understanding certain concepts, words, and hobbies can change dramatically. I asked Sarah if Natalie knew that using technology and instructional videos for YouTube users would generate revenue. Sarah replied that she does not think she has any information about the income and probably does not know it. Another question that I asked Sarah was whether the characters in the tutorial videos look like real characters for Natalie? She replied

Ryan is like a dream to Natalie. Whatever Ryan shows in the videos; Natalie asks us to buy it. Ryan has a 'dream life's so Natalie asked me once if Ryan is a real human? I explained that yes and he lives in America. Natalie asked is America a very distant place? For Natalie, Ryan's life was such a dream that even Ryan's place of residence must be so far away (Sarah, October 2021).

Natalie had no idea where Ryan, her favourite YouTuber, was living. She did not know where in the United States of America Ryan was living, is, and she asked her mother, "Is that possible to go there one day" (Natalie, August 2021)? It seems that the technology world has helped children to increase their knowledge in many areas. For example, in this case, it has helped Natalie to increase her knowledge that there is a country named America.

I believe that excellent images and videos are made for children in the technological world; nevertheless, not everything is as ideal as they might view in the real world. Something

unpleasant may occur, such as Natalie's observation that marshmallows at the camping site are not cooking as well as they should be, and that something may go wrong in the roasting process, resulting in the marshmallows not tasting as lovely as expected. Natalie should go through various good and bad experiences that she won't witness in Ryan's recordings. The food always appears excellent in the videos, and the released videos and photographs almost always look perfect.

I asked Sarah about the latest toy that Natalie had asked their parents to buy, and Sarah talked about a bubble toy that she was very interested in. I asked Natalie to talk about this bubble toy with me. She said, "I got it, so I can share it with Thomas because sharing is caring. He is my best friend" (Natalie, October 2021). It seems that Natalie has willing to share a toy with her friend. Her sentence reminds me of our first meeting in which she emphasized three times, "I don't want to share my mommy's cellphone with my friends. I want to play alone". She unconsciously shared different attitudes with me. It seems that sharing depends on what will be shared, and playing with toys or games on the cellphone leads to different reactions and attitudes.

Using technology-based devices as a game or entertainment is considered the most common activity of today's children. Any platform that allows social interaction is considered a social media site such as Facebook or Twitter. O'Keeffe et al. (2011) believed that such sites had experienced tremendous growth among today's young as a source of entertainment and communication. As a result, it is critical for parents to understand the nature of social media sites, as not all of them are safe for children. Pediatricians are in a unique position to assist families in comprehending the technological aspects of life. They try to encourage healthy use and urge parents to monitor for potential problems with cyberbullying or exposure to inappropriate content.

Introducing Participants, Aida and Eliza

Eliza and her mother, Aida, were also participants. Aida introduced herself as a woman, wife, mother, and student. She is interested in children's studies. She introduced herself as an advocate of the introduction of technology into the world of children and considered balance as the first condition for this world. Her nine-year-old daughter, Eliza, is described by her mother as a smart girl with colourful dreams.

As I expected, Eliza wanted to start the research conversation. At the heart of narrative inquiry is the relationship between narrative inquirers and participants (Clandinin et al., 2010). To put it another way, narrative inquiry requires the establishment of a caring relationship between the researcher and the participant. This is crucial because they can become empowerment stories when both sides share their stories (Connelly & Clandinin, 1990). I tried to build a good relationship with participants. I began to explain the topic in a language that was understandable for her. In the beginning, Eliza asked a question that was beyond my expectations. She asked me, "Is this research going to help children or moms?" (Eliza, August 2021). I explained that it might help children, parents, researchers, and teachers. She reacted, "Oh! If so, then the Prime Minister will probably like it too!" I asked why should the Prime Minister like it? Do you know him? She responded, "Yes! I saw his interview on TV because voting is going to take place". I wondered if Eliza's sentences could be related to my wonders in this study. As a child, she knew what was happening in the country. Could this awareness be attributed to the effects of technology in children's lives?

Social Relationships, Learning and Technology

One of the reasons I decided to work on technology was due to my fears and concerns regarding the erosion of my social relationships. At first glance, it may seem that if researchers

are working on technology, they have a positive approach to it. However, in fact, one of my concerns in my personal life has been that social relationships have taken on a different pattern due to the introduction of technology into our lives. Sometimes these changes are so fast that I cannot quickly update myself accordingly. I often find myself in situations where I feel I cannot adapt to these changes and show resistance to change, acceptance and adaptability. Therefore, I eagerly asked some questions in this regard from participants to know whether they preferred traditional communication and learning methods or were more interested in technology-based methods. Therefore, asking about playing with peers or playing alone with technological devices could give me some insight into whether Eliza prefers to communicate in the traditional way or through technology-based devices. I asked Eliza to tell me about games she has played with her classmates or friends. She spoke to me with confidence. She started

my best friend's name is Sophie. We play a lot of interesting games together. For example, we both have babies and we braid their hair. Let me explain it for you. These babies are toys, but they actually have souls, and they understand what we are saying. Babies cannot speak. Maybe they speak, we cannot hear them though.....I don't know Maybe they are just toys I don't know They even have a birthday and we celebrate their birthday (Eliza, August 2021).

When I ask her if she prefers playing with her friends or alone? She said firmly and confidently "With my friends." I ask her the reason and she replied

well, that's very clear! When I play with my friends, we have more fun!" I like drawing. Sometimes on paper, sometimes with a tablet.....Paper is much better. I like painting or colouring with Sophie in the backyard because after that we can run. You know.... children cannot run in the house (Eliza, August 2021).

Learning is another dimension of the technology world. Learning takes place in different environments. Many people have access to a personal cellphone, so research in the field of mobile learning is on the rise. Koole (2006) examine some limitations in distance learning. The limitations that Koole mentioned in distance learning are considered significant in choosing an appropriate learning application for children. She believed we need to carefully consider some critical factors in selecting appropriate mobile technologies. One of the limitations she considered is transparency. She asserted that the limitations of mobile devices also impact their transparency. According to Koole (2006), "transparency is measured by the amount of time the user must focus on actual device usage compared with the amount of time he or she can focus on cognitive tasks" (p.2). She asserted that it is critical to equip students with easy-to-use tools that allow them to access relevant information sources. Such tools should reduce, or at least, should not add cognitive load. She offered some suggestions for boosting transparency. Reducing the number of activities required to perform a task is one method. Long and complex set-up procedures cause the user's attention to shift away from the learning tasks and toward the devices. Automating procedures that make common functions easier and more efficient is another technique to promote transparency and reduce cognitive load. Personally, I believe the reason why Eliza prefers real friendship and interaction is that she experiences a smaller cognitive load.

On The Boundary of Two Worlds

I asked Eliza if she thinks the TV characters in the cartoons are real or they are just in the movie. She replied

It depends. For example, in YouTube, people are real, and in cartoons, some are real and some are unreal. For example, I saw 'Ladybug'. I liked Paris very much!

I told my mommy that I must go to Paris one day because the ladybug is living in Paris (Eliza, September 2021).

I asked her are the ladybugs real? she laughed and said, "No way! Paris is a real place, but ladybugs cannot speak in reality and this is just a movie!".

Eliza narrated a story about an animated character named the Ladybug, and she mentioned that she should visit Paris in the future because her favourite animated character is living there; however, she confirmed that there is no the lady bug in real life. She realized that Paris is a real place; however, the character is not. Natalie, for example, has no idea where Ryan, her favourite YouTuber, lives. She had no idea where Ryan was living in the United States of America, so she asked her mother, "Is it likely to go there one day?" (Natalie, August 2021). It seems that the technological world has aided children in expanding their knowledge in a variety of areas such as geography.

I asked Aida if she thinks Eliza prefers playing with her friends in natural environments or using technology? Aida answered

Eliza's first priority has always been playing with her friends and using toys.

Since I am busy and I do not have enough time to take Eliza out of the house or invite her friends to the house, she actually has to see movies or animations but she is not satisfied with this and she prefers spending time with her friends. Eliza often makes a distinction between toys and natural games and technology, and her first priority is tangible games in natural environments. When she is alone and cannot see her friend, she asks me to give her my cell phone so that she can explore YouTube (Aida, September 2021).

"Embedded in the retellings of these early experiences is a notion that each story is always partial and contextual and offers new possibilities as the stories are retold" (Caine, Estefan, & Clandinin, 2013, p. 577). When I thought about Eliza's stories, I realized that children are different and have different perspectives. The concept of play is complex and can be defined in different ways. Play has long been acknowledged as a significant scientific subject for children's mental development, according to Sutton-Smith and Kelly Byrne (1984). As a result, there has been a multitude of definitions regarding the understanding of the play. Frost, Wortham, and Reifel (2012) highlighted that play is an essential experience for children because it is a dynamic process through which children actively explore their environment. Children's preferences can vary depending on their personal preferences, ages, and genders. Children's choices can vary, and factors such as their age and gender can affect their preferences. Eliza is older than Natalie, so their preferences are sometimes quite different.

Technology and The Parenting Roles

I believe that different people influence how children develop mentally, and parents play an important role in their children's developmental process. In the research conversations, I was also interested to understand how parents think about the penetration of technology in children's worlds. I asked Aida to prioritize these concepts from Eliza's perspective: technology-driven games, movies and cartoons, and YouTube. Aida answered

Eliza is very smart. As soon as she realizes that an app or cartoon has an educational aspect, she asks me to stop it. Most of the time, she finds out which movie has educational aspects and which do not pursue a very specific educational goal. If she likes to spend time with technology, I have to make sure that the

educational aspect of those applications or movies do not have obvious and direct educational words, otherwise she does not want to be involved. She cares about touching objects and likes to touch toys, papers, or crayons. After that, the world of YouTube is more real to her, and the movie ranks third. Technology-driven games come in last (Aida, September 2021).

An element that may influence participants' views of the world is their age.

Natalie is a six-year-old girl. She was familiar with the 'YouTube' website, but she had no idea that it could benefit video creators. On the other hand, Eliza was older than Natalie and was aware of YouTube's earnings. She told Aida that she could make money on YouTube by uploading videos.

Furthermore, according to Aida, when Eliza understands that a movie or an application has instructional aims, she requests her mother to stop it (September 2021). This emotion was not reflected in Natalie's or Sarah's accounts because Natalie is younger than Eliza; she may not be as skilled as Eliza at recognizing instructional programs or movies. Furthermore, younger children appear to be more enthralled by the pleasure of viewing the movie than by determining whether the characters in animations are real or not. As the children grew older, this process took on new dimensions, and as Aida described, Eliza expressed interest in becoming a YouTuber in the future or asked Aida to publish Eliza's photo on Instagram. Natalie appears to be happy with viewing videos. It is critical to remember that the personalities of the individuals are unique. There is no assurance that Natalie will think like Eliza when she reaches Eliza's age; this could be due to personality differences among the participants, and age should not be the only determining factor in how they interpret the technological world.

I asked Aida to share if Eliza liked playing with house furniture or kitchen stuff. She shared the same answer as Sarah. She said that she would play with kitchen utensils when Eliza was younger to discover and learn, but recently she has not been doing so. She seems to have passed this stage and found new ways to discover the world around her. Clandinin et al. (2006) asserted that "as we reflected on our own experiences, we saw that our stories of whom we were had shifted partly because of the contexts in which we found ourselves and the people with whom we came to live in relation" (p.113). At some stages of learning, children seem to react to toys or any device that is different from other ages and stages. In Aida's example, her daughter no longer wants to play with kitchen utensils. Eliza has found more exciting things to learn and try. Clandinin (2013) wrote that "understanding lives in motion creates openings for new relationships to emerge, for lives to unfold in unexpected ways; there is no final telling, no final story, and no one singular story we can tell" (p.205). It seems that this change in Eliza's choices and preferences will continue, and any of the things that are attractive to her now might no longer be attractive to her later, or they might remain attractive. I ask Aida to share a story of Eliza's learning basic life behaviour through using technology. She stated that,

when Eliza was 4 years old, I regularly asked her to wash her hands before eating food, but she refused. I found an animation in which a girl did not wash her hands before eating lunch and she got sick. In this animation, the germs on the hand of the animated character were shown under a magnifying glass. Eliza was so scared that she cried for a week. She was very scared and I was very sorry that I showed her that animation. She was terrified and started obsessively washing her hands. I am very sorry to show that animation to my daughter. The negative effects on her

mental health were beyond words. I am upset to remember this story. Instructional video cannot always have positive results, and children's educational applications designers must design apps carefully. It is parents' responsibly to watch the video before showing to their children (Aida, September 2021).

Aida continued that,

my husband always prefers telling a story to Eliza rather than using technology to teach her skills. When he tells a story, Eliza listens well and imitates the character's behavior. Eliza's father created an imaginary family for Eliza. This family has a little girl. This girl is the same age as Eliza. Eliza really enjoys hearing her father's stories. She learns a lot. Eliza's father believes that technology unnecessarily speeds up children's cognitive awareness. Storytelling and poetry reading for children help them keep the natural process of their mind development.

According to Clandinin, Murphy, Huber, and Orr (2010), "As narrative inquirers, our lived and told stories are always in relation to or with those of our participants" (p. 82). We learn from each other. Dewey (1938) believed that interaction is an essential criterion of experience, and we are learning during an interaction. This awake moment led me into a deeper knowing of myself. As I listened to Aida's stories, I thought that storytelling in many situations could still be very instructive and effective in children's learning. The use of words can also strengthen children's imagination, and the basic principles of life can be trained well by transferring words. As Aida mentioned, Eliza is interested in hearing her father's story, and they teach her a lot through storytelling. I still remember in detail all the stories my grandmother used to read to me when I was a child. Words are important and remain in children's memory. Talking about

storytelling with Aida reminded me of my childhood memories and stories. Zaleski and Kaufman (1998) believed that "being with others reveals the truth about ourselves" (p 91).

In the third research conversation, we decided to go in detail about Eliza's interests and behaviour. Clandinin (2013) shared that "each story of experience opens into new stories to be lived and told, always with the possibility of retelling and reliving" (p.203). I encouraged Aida to share her experiences and stories with me, allowing her to rethink, relive, and reconsider those stories. Clandinin (2006) believed that "lived and told stories, and talk about those stories, are ways we create meaning in our lives as well as ways we enlist each other's help in building our lives and communities" (p. 44). Aida shared she would like to narrate how Eliza perceives some concepts and how Aida as a parent feel about technology. She continued,

Eliza loves crafts. she likes making something new. she seeks initiatives by any means. Eliza gets these ideas from YouTube. She can see a lot of crafts in the physical world, but her attention is drawn to ideas, furniture, crafts, or making any type of things that needs creativity when she sees it on YouTube. A few months ago, Eliza told me that she is dreaming to be a YouTuber in the future because she can get rich. She said "Whoever subscribes to my channel, I will get richer". Her father and I have set up filtering and restrictions on our cell phones so that Eliza cannot see some videos on YouTube because we believe that not all videos are watchable for her age, but sometimes we get shocked (Aida, October 2021).

I ask Aida does she think Eliza make a clear distinction between the real world and technology? Aida answered,

Now at this age, yes. she realizes. When she was younger, she did not. In my opinion, it depends on the creativity of those technological tools. If a designer

creates an application by which children are educated indirectly, yes, it has great positive effects on her. Also, Eliza is always waiting for Santa clause at Christmas, and she thinks he is real because she saw a live performance at her school last year in which Santa Clause was shown on stage with lighting. She told me after the show that “I am sure he is real because she saw him today at school. I feel like Eliza knows it's not real, but she likes to dream about it. She also has a similar view about mermaid. For Eliza, she is real and no one knows where she lives. We only know she is living in an ocean (Aida, October 2021).

By attending to the participants’ stories and recalling and telling my experiences in my childhood and now as an educator, I have attempted to realize where the line between reality and unreality is for children and to what extent and in what situations children perceive two worlds same or different. According to Aida (2021), when Eliza was younger, it was more complex for her to recognize the real from the unreal world; however, now she sometimes recognizes these two worlds, but she still likes to dream about them. The question arises here: Are dreams and imagination part of the between space between real and unreal? I believe children move forward and then move back from the blurred line between these two worlds. It seems that sometimes they are immersed in an imaginary situation, then suddenly come out of a dream and realize that the situation is not actual. Children are moving inward and then outward of a situation where the technology works so well and effectively that it sometimes confuses children, even adults, that whatever they watch is real.

Aida believed that the penetration of technology into life has sometimes caused concern and anxiety for families. This was disappointing for her to see she could not keep

up with some updates. She knew that her daughter learns through educational applications, but meanwhile, she was feeling insecure. Aida shared one of her concerns. She mentioned she feels insecure when Eliza talks about technology. She believes it is scary to witness how sometimes children are surrounded with huge amount of unnecessary information. Then she added

I am an advocate of technology. I know it has many positive effects on my child's learning. Meanwhile, though, it's somewhat worrying. Eliza does not like to be monitored. Sometimes I think that it is safer to play with natural toys in common playing environments such as in playgrounds (Aida, October 2021).

The technology could be sometimes educative, sometimes miseducative. Participants, Sarah and Aida, had some concerns about technology-based learning, including, but not limited to, their concerns about the amount of time their children spend in the virtual world, as well as how they communicate with peers and the outside world, children's vision problems, filtering issues, and the content that their children watch and learn from. Technology, according to Aida, has both educative and miseducative effects on Eliza's learning. When Eliza finds that a movie or an application has instructional purposes, she requests her mother to cease it (Aida, 2021). This emotion was not reflected in Natalie's or Sarah's accounts because Natalie is younger than Eliza; she may not be as excellent as Eliza at recognizing instructional programs or movies. Furthermore, younger children appear to be more enthralled by the pleasure of viewing the movie than by determining whether the characters in animations are real or not. As the children grew older, this process took on new dimension, and as Aida described, Eliza expressed interest in becoming a YouTuber in the future or asked Aida to publish Eliza's photo on Instagram. So, another aspect that may impact participants' impressions of the world is their age. Natalie is a

six-year-old girl. She was familiar with the 'YouTube' website, but she had no idea that it might be beneficial for video creators or that monetization existed. On the other hand, Eliza was older than Natalie and was aware of YouTube's earnings. She told Aida that she could make money on YouTube by posting videos.

According to Aida, when Eliza has a choice between playing at home or on the playground, she always prefers to play on the playground. Eliza has discovered that she will be able to touch things, use her hands, view with her eyes in a broader perspective than she can see through computers or cellphone monitors, and hear sounds and noises correctly with her hearing if she leaves the room. To put it another way, playing in nature allows her to touch objects, perceive and experience them with her senses, and internalize learning in a longer and deeper way.

Like some other parents, Aida was worried about technology entering her child's life. At the same time, she could not deny that technology has had many positive effects on her daughter's learning process. It seemed that Aida, as a parent, could not decide with certainty whether she was a fan of this new electronic world or not. I also saw this uncertainty in Sarah's words and stories.

Grecu (2013) made a comparison between the new and past generations, as well as their technological addictions. Grecu believed that most children are raised in an environment where they are exposed to television and various electronic devices from the moment they are born. Later, the always-busy parents allow their children to amuse themselves in front of the television, which, even when not being viewed, provides a sense of security due to the rich background it creates. So, another reason for determining the space in which children play is rooted in the parents' busy schedules. When parents are at work from morning till evening, they prefer staying

at home and resting in the evening when they return home. They do not have enough time to take their children out on the playground. Instead, they prefer to put the children in front of the TV to entertain them.

Parents are motivated by the same desire to give their children a new toy, such as a telephone, which is a musical instrument. The television will be a background fixture for the next few years, while the mobile phone will be a playmate. A couple of times, Aida talked about Eliza's interest in using YouTube during the research conversations. She added that YouTube is her favourite website as well, so Eliza likes it too. I think that children often imitate what their parents do.

From the conversations of the two children, it seems that over time, children have become more aware that some concepts of technology and its world are not real and are just fantasy. The question that has arisen for me is whether this awareness also exists in adults? Assuming that concepts such as children's play have real and unreal boundaries for adults, are the economic, educational, or other goals pursued by the designers of these technology-driven applications also clear to adults? Facebook has changed its parent company name to Meta in the last few weeks. When I googled to find out more about it, I realized that the rapid changes in families that I noticed during my research conversations would be much more significant soon. I found out that this new name refers to a hypothesized next iteration of the internet consisting of online 3-D virtual environments that people can access through virtual reality headsets, smartphones, game consoles and other devices. It can be scary and exciting for me at the same time. I am almost sure that the world of children and adults in the future will be affected by this technology, which will undoubtedly have many advantages and disadvantages. Technology and its positive and negative effects has always been one of my challenges in life. During this research, and taking into

account my own experiences, as well as the stories of the participants, I have come to the conclusion that all of us, children and adults, have to manage what content we watch, what application we use, how many hours we spend in the virtual world, and to what extent we accept inputs as real or unreal. Aida shared her experience as an adult, not necessarily as a parent, and mentioned that

as an adult, I sometimes use my cell phone for many hours and am immersed in different social media applications, for example Instagram. Sometimes I use social media for just having fun and sometimes I use it for the purpose of learning. When I am captivated by technology, I cannot force my child to only play in the natural world. I have always tried to take time management seriously, both for myself and for my daughter (Aida, September 2021).

Understanding these concerns, I believe, will help parents and educators determine how much technology can be included in their child's learning process. It also allows parents to become acquainted with other parents' experiences, hear their concerns and voices, and realize that many of their problems and challenges are nearly identical. Furthermore, by paying attention to the stories told by the participants and reflecting on my personal experiences, I have attempted to convey to the reader the message that many of us share similar concerns and emotions and that we can turn these negative emotions and feelings into positive ones.

CHAPTER FIVE

CONCLUSION

Introduction

Chapter one began with a narrative of my experience of using technology as a child and as a teacher. It highlighted moments of my own experiences with technology, how I was drawn to this new world as a child, how I witnessed as a teacher the effects of technology in the worlds of children I taught, and how as a researcher, I became curious to know what others think about the technological world. I considered two research wonders: How young children experience technology in terms of real and unreal and how play concepts help us understand young children's use of technology.

Chapter two explored previous works in the fields of play and technology. The expanding literature on the contribution of technology in learning highlighted that many scholars had found this phenomenon valuable in educational research (Culp, Honey, & Mandinach, 2005; Jobe & Peck, 2008; Dunleavy, Dexter, & Heinecke, 2007). Thinking about children's experience and conceptualizations of play and emerging new aspects of it, which results from the penetration of technology in various dimensions of educational systems, has framed my wonders regarding how the concepts of play help us understand young children's use of technology. In chapter two, I drew on Dewey's (1938) conception of experience to understand children's natural and physical play experience and their technology-based experiences to understand to what degree children perceive these two types of games as real and unreal worlds.

Chapter three concentrated on narrative inquiry as a research methodology, which is the process of sharing stories of lived experiences between the researcher and participant to implement the meaning of lived lives. The stories gathered in narrative inquiry are then

discerned through temporality, sociality, and place. We can find support, encouragement, and promising emergent practices moving forward with our stories to live by through sharing our stories. Chapter three also explored a history of narrative inquiry and the research approach. It also included the research process, procedures, and ethical considerations of this research.

Chapter four inquired into the lived experience of two mothers and their children. It first explored Sara's and Natalie's experience of the concept of play and highlighted their opinions and stories of using technology. Then, Chapter four explored the experience of Aida and her daughter Eliza. This chapter inquired into how participants define the concepts of play, technology, and learning and how they perceived real and unreal worlds.

This chapter explores common concerns and the social and educational significance, and future implications of this study. The chapter also reflects my experiences in the research process, then finishes with this inquiry's research wonders. Throughout this research, I learned from the participant experiences different from my own and felt encouragement in similar experiences. Through sharing our stories, I learned that we would be able to build trust and vulnerability that enabled us to share both success and critique.

Gender and Age

Children carefully observe their parents' behaviour and sometimes attempt to follow what they do. In other words, many children's behaviours are influenced by their parents' behaviours or the people around them. Children are intelligent observers who are constantly processing and imitating adults. Teachers, parents, peers, and older siblings have enormous influences on children's actions and reactions. Over time, many children's reactions become their habits and are often reflected in their adult lifestyle. The children's genders also affect their choices and preferences. Children who identify themselves as daughters often subconsciously imagine

themselves as a mother of the family and imitate their mothers' behaviours. On the other side of the coin, children who identify themselves as boys may imitate their father's behaviour.

The participants' genders in this study could be considered as one of the factors influencing their experiences and narrated stories. From the experiences of the two children who told the stories in this study, it seems that sometimes the girls were interested in playing in the kitchen. According to their mother's stories, the girls tended to explore utensils in the kitchen. Aida and Sarah both believed that their daughters were interested in cooking, and in the past, when they were younger, they explored kitchen utensils. This may be since women are still responsible for preparing food for the family in some traditional families. However, personally, I believe this cannot always be true. In a kindergarten where I am teaching, I often see boys who like cooking, and they pretend to prepare food for me and invite me to taste it. There are also girls in the classroom who are not interested in being in the kitchen at all. I think gender can influence children's preferences; however, it does not necessarily mean that children's personality has nothing to do with their choices.

Age could influence participants' perceptions of the world around them. Natalie is six years old. She knew the 'YouTube' website; however, she did not know that it could be profitable for the video makers, and she also was unaware of the concept of monetization. In contrast, Eliza, who was older than Natalie, knew about YouTube's income. She told Aida that she could make money by posting videos on YouTube.

Moreover, according to Aida (September 2021), when Eliza realizes that a movie or an application has educational purposes, Eliza asks her mother to stop it. I did not see this reaction in Natalie's stories nor in Sarah's experiences. Natalie may not be as good as Eliza at recognizing applications' or videos' educational purposes because she is younger than Eliza. Besides, younger

children seem to be captivated by the enjoyment of watching the video rather than recognizing if animated characters are real. This process took on a new dimension as the children got older, and as Aida explained, Eliza shared that she is thinking about becoming a YouTuber in the future or asked Aida to post Eliza's photo on Instagram. It seems that Natalie is just enjoying watching videos. What is very important here is to consider that the participants' personalities can be very different. There is no guarantee that when Natalie reaches the age of Eliza, she will think like Eliza, and this could be rooted in the personality differences of the participants, and age is not the only determining factor in how they perceive the technology's world.

Eliza (October 2021) narrated a story about an animated character named the Ladybug, and she mentioned that she should visit Paris in the future because her favourite animated character is living there; however, she confirmed that there is no equivalent of the animated. She realized that Paris is a real place; however, the animated character is not. When it comes to Natalie, she had no idea where Ryan, her favourite YouTuber, is living. She did not know where in the United States of America Ryan was living and she asked her mother, "Is it possible to go there one day" (Natalie, August 2021)? It seems that the technology world has helped children to increase their knowledge in many areas. For example, in this case, it has helped Natalie increase her knowledge that there is a country named America and has helped Eliza know there is a city called Paris, although neither has been there before.

Alone or in Groups/Partners

Communication has been one of the terms that I was wondering about as I conducted this study. I understood from the participants' stories that both children agreed that they preferred playing with a peer when there were two options, whether 'playing alone or playing with a peer'. Both children, Natalie and Eliza, mentioned (August 2021) that their priorities were playing with

their friends rather than playing with their mother's cell phone or watching videos and working with any tech devices. I think they enjoyed the communication created while playing with a peer, so they agreed to share toys with their friends. They both narrated that if they play with their friends, they would like to share toys; however, when I asked Natalie if she would like to share her mother's cell phone with Sophie (her best friend), she said "no" (Natalie, August 2021).

Furthermore, Natalie was not interested in playing with a partner while using her mother's cell phone, preferring to play with her friend on a playground in a natural environment. I believe that communication has taken on a new form in the new world of technology, even though many people still tend to communicate traditionally. Real communication and being far from technology seem to be better options for making a friendly relationship for the two participants. They could share ideas, take different social roles, and develop their imagination skills together.

I asked Sarah if Natalie had ever come up with a new idea that the family had never talked about at home, and if so, where did the idea come from? According to Sarah (October 2021), Natalie talked about camping with her parents and had told them, "I have to go camping with my friends" (Natalie, October 2021). What stood out for me was that Natalie never asked to go camping or to a playground alone. According to Sarah, Natalie showed interest in learning about setting up a tent and other camping-related activities. In contrast, the technology world encourages them to spend time alone. Interestingly, these ideas that sparked in Natalie's mind came from two sources, one from watching Ryan's videos on YouTube, and the other stemmed from the conversations she had with her peers in the kindergarten about their camping experiences. According to Sarah, Natalie was inspired more by her friends than the Internet.

The Different Spaces Where Children Play

As Sarah and Natalie narrated their camping stories, I wondered what the difference between watching Ryan's camping videos, and Natalie's experience of going camping in the real world is? In other words, what was the reason that Natalie wanted to experience camping in the actual environment instead of just watching Ryan's videos? I believe technology introduced the idea to Natalie that there is an activity called camping. However, deeper experience and long-term learning would be only possible through the actual experience of that activity, not just by watching videos. If Natalie goes to a camping site with her family, she would be able to do what she already watched in Ryan's videos, practically do those activities on her own, and thus engage more in-depth in the learning process by practicing camping activities. It seems that children learn skills superficially and record skills in their short memory by just watching activities. Instead, when those watched activities turn into actual activities and become a lived experience for the child, the quality of learning will be developed. Actual physical experiences will transfer to long-term memory and become a part of a life experience. They would be able to develop learned skills and apply them in various situations.

Having experiences outside the home and outside the world of technology gives children this opportunity to face unexpected risky occurrences. When a child plays on a playground, events are not predetermined. It might rain suddenly, and the child has to use the problem-solving skill to figure out what to do now. Children find themselves in an unexpected solution in which they need to solve this problem and find a solution not to get wet, so they have to ask for an umbrella. If rain occurs in Ryan's videos, it will not be Natalie's responsibility to look for a solution. Instead, it is Ryan's problem, and he should find a solution not to get wet. When

children and even adults solve a problem independently, this challenge will might help them develop their problem-solving skills significantly.

In the world of technology, perfect images and videos are designed for children; however, not everything is as ideal as what they might see in the real world. Something might happen that is not pleasant for them, and for example, in Natalie's experience, she might see that marshmallows in the camping site are not roasting as much as they should be, and something might go wrong in the roasting process so that they might not taste as good as expected. Natalie should experience a series of positive and negative events that she may not see in Ryan's videos. In the videos, the food always looks delicious, published videos and pictures most of the time look perfect. Natalie has to experience the difficulty of setting up the tent with her hands, getting physically tired, making mistakes in some cases, and finding herself in a situation that has to solve potential problems to look for solutions. She needs to learn how to ask people for help, and also she has to communicate effectively and learn social skills. By only watching videos, Natalie will not look for a solution because she will not face a particular problem while watching the video. Furthermore, by watching the videos, Natalie does not get physically tired because she has not done anything; however, in real camping, she has to use her hands and her physical strength to do activities, and this will enable her to consider if she likes engaging in these types of activities or she only enjoys watching them.

When children are doing something in the real world that they have already watched, they develop their sensory feelings and increase their knowledge about their preferences, personalities, and likes or dislikes. Sometimes we think that doing an activity is interesting for us, but once we practice it, we realize that we did not like it at all or it was not in our physical

and mental capacity to accomplish that activity. From my understanding, ideas and content sparked in our minds by technology-based applications can be inspiring for individuals; however, in reality, we need to internalize and practice those skills. Learning in-depth a skill or developing and making reality and interest occur through practicing, and children need to actually experience activities at home or outside the home with their perceptual senses.

As Aida mentioned (October 2021), when Eliza is at a crossroads between choosing to play at home or playing on the playground, she always chooses to play in the playground. Eliza has realized that outside the home, she would be able to touch toys, use her hands, see with her eyes in the broader perspective than watching through computers or cellphones' monitors, and hear sounds and noises properly with her ears. In other words, playing in a natural environment assist her in touching objects, perceiving and feeling them through her senses, and internalizing learning permanent and deeper.

The Process of Change

Clandinin et al. (2013) suggested that lives are composed as a process of change, involving the "temporal unfolding of their lives in different places and different relationships" (p. 48). During the writing of this thesis, I realized that from my childhood until now, the world has changed more than I imagined. Prior to starting research conversations, I knew that the world had changed a lot with the advent of technology; however, I was amazed that children could easily use terms that I had learned in adulthood. Using words like upload, download, and software were words I had learned in adulthood, but they seem to be like learning a first language for the younger generation at an early age.

If we imagine the world of technology and the world without technology as two different sides of a bridge, it seems that some parents are not sure which side of the bridge they want to stand on. Sometimes they want to use technology to increase their children's learning, and at the same time, they may like allocating their children a limited amount of time to use technological devices. It seems that both parents, Sarah and Aida, agreed that they could not keep their child away from the world of technology. According to Sarah and Aida (August 2021), they could only monitor the content their children watch, download the application their children use, and limit the hours they deal with technology. They basically could not and perhaps did not want to remove technology from their children's world.

This research explored the stories of two children and their parents so that other parents and teachers, like myself, may learn from these experiences. Further research on this topic includes gathering the stories from a broader range of individuals such as additional families, children, administrators, and community members.

Ending with the Research Wonders/ So What?

Himmelsbach (2019) asserted that classrooms in schools no longer have walls thanks to technology. There are no longer any restrictions on access to diverse information and different resources in learning contexts. According to Koole (2006), learners have the opportunity to benefit from dynamic and flexible learning environments in any place and at any time. Given this context, this research focused on understanding the effectiveness of digital games on learning and defining the concept of play in terms of technology through narrative inquiry for two children. Therefore, this research inquired into two sets of children's stories and parents' experiences to hear their voices, opinions, and experiences to understand what technology offers to us as teachers, facilitators, students, families, and learners. Children and parents' perspectives

on digital games and play and how they find it educative. During conversations regarding the incorporation of technology, participants had some concerns. They were worried regarding children's communication skills, vision problems, and the content which their children watch and learn from.

Inspired by Clandinin and Caine (2013), inquiring narratively into our lived stories and lived experiences, and sharing all of that, allows us to attend to our lives differently, in relation not only to ourselves but also in relation to other people's lives that we meet in the midst; and "recognizing this also means that there will never be a final story, that each story and experience begs for a new story to be told, for the experience to be retold and also relived" (Clandinin & Caine, 2013, pp. 175-176). Many people always think of play as organic interaction, but what if play was considered in terms of technology? To understand this, participants narrated their lived stories and experiences of how their children play 'without technological devices' in an organic environment and 'with technological devices' in a virtual environment. They shared with me how their children perceive technological-based play in which they can both learn and enjoy. My research puzzle created two wonders: How do young children experience technology in terms of real and unreal? How do concepts of play help us understand young children's use of technology?

One of my purposes in conducting this study was to find out how we can benefit positively from technology to enhance children's learning and become more aware of whether we have knowledge of the negative aspects of technology in our lives. By attending to the participants' stories and by recalling and telling my experiences in my childhood and now as an educator, I have attempted to realize where the line between reality and unreality is for children and to what extent and in what situations children perceive the two worlds similar or different.

According to Aida, many parents could not decide with certainty whether they are a fan of this new technological world or not. I also felt this uncertainty in Sarah's words and stories. They both were unsure if they would like their children to use technological devices. On the other side of the coin, I believe when their children grow older, many parents are proud if they find out that their children are knowledgeable in technology-driven topics. This may be rooted in the fact that during childhood, children do not have the power to distinguish between good and bad content. Parents also seem to be concerned about their children's eye condition, or in general regarding their physical health.

I believe this study could assist parents in understanding to what extent they could incorporate technology into their child's learning process. It also helps parents become familiar with other parents' experiences, hear their concerns and voices, and know that many of their concerns and challenges are almost the same.

Moreover, in this research with attending to stories told by the participants, and considering my personal experiences, I have attempted to convey this message to the reader that many of us have the same concerns and emotions, so we would be able to turn these unpleasant emotions and feelings into positive ones.

This study also attempted to encourage parents to supervise the content their children are watching or the application provided to teach them a lesson and evaluate technology-based applications' potential negative consequences and positive results. Furthermore, this research helps teachers increase their knowledge that sometimes technology can facilitate students' learning; however, it can never be considered a replacement for children's play in the natural environment. Children naturally need to play organic games, take on different roles, and play outside the home in a traditional way that past generations grew up. This research could

encourage readers and researchers to explore the extent to which technology is real and unreal for adults. In this study, the main focus was on children's learning; however, this topic could also be addressed in studying adult behaviour.

Finally, I reflect on Clandinin's (2013) words, when she reminded us that our past is open to sharing our lived stories, inquiring about who we are and who we are becoming. It creates the possibility of attending differently to our social relations, where our work and our lives can make a difference, not only for ourselves but also for the people who we meet during this unfolding fabric of life within the plurality of worlds and stories.

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APPENDIX A.

CONSENT FORM



UNIVERSITY OF SASKATCHEWAN
College of Education
USASK.CA/EDUCATION

Participant Consent Form

You are invited to participate in a research study entitled:

A Narrative Inquiry into the Experiences of Children and Parents with technology: What are real and unreal worlds?

Researcher:

Shima Naseri, Graduate Student (Master's Degree)

College of Education- Department of Educational Foundations, University of
Saskatchewan

(306) 966 7586 (Dedicated to this study), shima.naseri@usask.ca (Email is preferred)

Supervisor:

Dr. Shaun Murphy

College of Education- Department of Educational Foundations, University of
Saskatchewan

(306) 966 7586, shaun.murphy@usask.ca

Purpose(s) and Objective(s) of the Research:

We always think of play as something of more of an organic interaction. But what if play was considered in terms of technology. In this inquiry, the researcher will attend to children and their parents' stories and experiences to find out what is the definition of 'play' from their perspectives and how young children experience technology in terms of real and unreal. Many adults find the technological world quite different from children's perspectives; however, children in some cases consider technology-based games and natural play as the same world. The researcher will try to understand what the participants feel, think, and perceive from the concepts of natural play and technology-based games for facilitating the process of learning, and how participants recognize and differentiate between these two worlds. This research will help the researcher, as an educator, to get feedback from children and parents on how participants think about the different dimensions of the concept of play.

Procedures:

- The researcher will share her lived experiences and stories with the participants, explain the research questions, and ask participants to share their stories and express their opinions.
- The research will involve open-ended dialogue and interviews.
- The researcher will invite 4 participants to attend this research. Two parents and two students will be the participants in this narrative inquiry.
- Participants and the researcher will have password-protected Webex meetings individually, three sessions, for a one-hour duration over three months.
- There is an option if participants would like to participate by phone.

- There will be interviews and field notes.
- The interviews will be recorded, and participants may request that the recorder be turned off at any time.
- This research will involve internet-based interactions including sending e-mails and online meetings.
- Participants will know what the research questions are in this research.
- Children will need to give their assent to participate. A description of the activities involved will be communicated to the child in age-appropriate language. In a situation where the child dissents, that would override the parental consent.

Potential Risks:

The researcher will use narrative methodology, and during interviews the researcher will ask participants to share their lived stories regarding the child's use of technology. After the interview, participants may feel that they do not want one of the experiences that they shared to be published and ask the researcher to eliminate that story. The participants may also feel that they have forgotten or missed to share some parts of their experience, so they may ask to share an experience again. **To address these concerns**, if participants ask to delete some parts of their shared experiences, the researcher will eliminate that part of story from both the interview's recording and the dissertation text. The researcher will also assure participants that their real names nor their personal information will be published. Participants will be able to withdraw in any stage of conducting this inquiry.

Potential Benefits:

- Attending to stories helps the researcher as an educator to get feedback.
- It can also help families understand what their children mean by the concept of play.

- This study helps us to understand that if children see organic natural play and technology-based games as two worlds and what their stories and experiences are from these two worlds and how they describe each.
- This research allows for multiple perspectives and interpretations of lived experiences; within this perspective, listening deeply and inquiring into our changed lived and told stories calls forth the possibility of attending differently, of shifting practices, and of creating possible social-political or theoretical places where our work and lives can make a difference (Clandinin, 2013).
- These benefits are not guaranteed.

Confidentiality:

- As a participant in this research, a negotiation and consent process will be established within and ongoing relational inquiry space.
- After the interview, and prior to the data being included in the final report, participants will be given the opportunity to review the transcript of all interviews, and to add, alter, or delete information from the transcripts. Participants will have two weeks to review for the return of any revisions. If after two weeks and the researcher has not heard from participants, she will assume that participants are fine with the work and will move forward.
- Participants can choose not to be video recorded by turning off device's camera.
- The researcher will conduct the videoconference in a private area of her home that will not be accessible by any individuals during the data collection.
- The researcher advises the participants in advance that they are not authorized to record any meeting/interview.

- **Storage of Data:**

- Webex platform will be used for interviews (usask.webex.com).
- The researcher will make sure to ask, during regular intervals and at the end of the interview, if participants are experiencing any stress or discomfort.
- The researcher will not use cloud-session recording, which may store the data on a commercial server. Instead, local session recording will be used and saved the recording a USask managed device.
- The researcher will move the recordings to a USask managed server, and will move to her OneDrive.
- Only the supervisor and the researcher will have access to data.
- When the data is no longer required (5 years minimum as per University of Saskatchewan Guidelines), the data will be destroyed. In addition, the identifying information is stored separately from the data collected. The identifying information is destroyed when data collection is complete and it is no longer required.
- The data must be retained for a minimum period of 5 years of post-publication.
- The data from this research project will be published and presented at conferences; however, participants' identities will be kept confidential. Although the researcher will report direct quotations from the interview, pseudonym will be given to participants, and all identifying information will be removed from the report.
- Please put a check mark on the corresponding line(s) to grant or deny your permission:

I grant permission to be audio recorded	
I grant permission to be video recorded	

- Please only select one option below:

I wish for my identity to be confidential	
I wish for my identity to be confidential but you may refer to me by a pseudonym. The pseudonym I choose for myself is: _____	
You may quote me and use my name	
I would like to be acknowledged for contributing to the research	

Right to Withdraw:

- Participation is voluntary and participants can answer only those questions that they are comfortable with. They may withdraw from the research project for any reason, at any time without explanation or penalty of any sort.
- Should the participants wish to withdraw, at any time, any data that they have contributed will be destroyed at your request.
- After the final interview, the thesis is expected to be done in four months. Participants will be able to withdraw a month after participation.

Follow up:

- The researcher will provide participants with the results in a summary format.

Questions or Concerns:

Contact the researcher using the information at the top of page 1. This research project has been approved on ethical grounds by the University of Saskatchewan Behavioural Research Ethics Board. Any questions regarding your rights as a participant may be

addressed to the committee through the Research Ethics Office ethics.office@usask.ca
(306) 966-2975. Out of town participants may call toll free (888) 966-2975.

Consent: SIGNED CONSENT

Your signature below indicates that you have read and understand the description provided. I have had an opportunity to ask questions and my/our questions have been answered. I consent to participate in the research project. A copy of this Consent Form has been given to me for my records.

Name of Participant *Signature* *Date*

Researcher's Signature *Date*

A copy of this consent will be left with you, and a copy will be taken by the researcher.

APPENDIX B

CHILDREN ASSENT FORM

Title of Study: A Narrative Inquiry into the Experiences of Children and Parents with technology: What are real and unreal worlds?

Researcher: Shima Naseri

E-mail Address: shima.naseri@usask.ca

Study Supervisor: Shaun Murphy

E-mail Address: shaun.murphy@usask.ca

We want to tell you about the research study we are doing. A research study is a way to learn more about something. We would like to find out more about technology and play.

We would like to listen to your stories about your experiences of playing. We want to know how you describe the technology-based games and other forms of play. We would like you to share us your stories and feelings. You are being asked to join this study because if you share your experiences with us, we can better understand how you feel when you are playing the game and meanwhile how you learn new things from it.

If you agree to join this study, you will be asked to have three interviews alongside your parent with a researcher. The researcher will ask you some questions about your experiences of playing that you have had in the school, at home, in a park or wherever you like.

Correspondingly, you can share some stories related to those experiences. We will have an informal conversation. We will meet online for three times, 1 hour each.

You do not have to join this study. It is up to you. You can say okay now and change your mind later; if this happens, all you must do is tell us you want to stop. No one will be mad at you if you don't want to be in the study or if you join the study and change your mind later and stop. Before saying **yes or no** to participate in this study, we will answer any questions you

have. If you join this study, you can ask questions at any time. Just tell the researcher that you have a question.

If you have any questions about this study, please feel free to contact shima.naseri@usask.ca

- Yes, I will participate in this research study.
- No, I will not participate in this research study.

Child's name	Signature	Date
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Person obtaining Assent	Signature	Date
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