A MULTIPLE CASE STUDY OF CHALLENGES AND SUCCESSES EXPERIENCED BY FOUNDERS AND DIRECTORS OF NATURE-BASED PRESCHOOLS IN THE UNITED STATES

By

Alexandra Michaela Barnett

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

Liberty University

2016

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ABSTRACT

Nature-based preschools are defined as educational settings in which children spend three or more hours per school day in natural environments such as woods, meadows, and beaches (Knight, 2013). The purpose of this qualitative, multiple case study was to obtain a deep understanding of the challenges and successes of nature-based preschool (NBP) founders and directors in the United States and to develop recommendations for those interested in establishing and operating NBPs in the United States. A rich description of the phenomenon of founding and directing NBPs was developed by first answering the primary research question: "What can be learned from the challenges and successes experienced by founders and directors of NBPs in the United States?" The study's participants included directors and founders from three NBPs in the United States. Data was collected through semi-structured interviews, public documents, timelines, and through multi-media sources, such as each school's website. Within-case analysis and cross-case analysis was employed to analyze the data, generating the following key themes: experience, relationships, temperament, like-mindedness, mission focus, collaboration, leadership, worldview, and outlook. Recommendations are provided for other NBP founders and directors which may lead to an increase in the number of NBPs in the United States.

Keywords: Nature-based preschool, nature deficiency, outdoor learning, preschool administration.

Dedication

This dissertation is dedicated to my beloved husband, David G. Barnett, whose encouragement and support have meant the world to me throughout this journey. I thank God for blessing me with such a loving and godly husband, the true wind beneath my wings, who always puts my needs before his. IWALY

Acknowledgments

My dissertation would not be possible without the love and support of my Lord and Savior, Jesus Christ. I am forever grateful for His grace and the ways in which He works everything for good.

My husband David and our daughters, Destiny, Alana, Blessing, and Caty; thank you for your understanding and selflessness whenever I had to go "work on my paper." I am also grateful for my parents, Antonia and Ralph-Michael, who always believe in me. Thank you for your enthusiasm for everything I do and for your unconditional love!

I am grateful for Dr. David Nemitz, who generously provided advice and support throughout my dissertation journey. Thank you! Additionally, I would like to thank Carey Bailey, whose insight and wisdom I have valued greatly throughout this process.

I thank God for my Dissertation Chair, Dr. Lucinda Spaulding. Her unwavering support, encouragement, and guidance have allowed me to grow as a person as much as a scholar. Thank you for everything! My gratitude also goes to my committee members, Dr. Grania Holman and Dr. Clark Zealand. Thank you so much for your time, feedback, and support throughout this journey!

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List of Abbreviations

Attention Deficit Disorder (ADD)

Attention Deficit Hyperactivity Disorder (ADHD)

Autism Spectrum Disorders (ASD)

Bioecological Systems Theory (BEST)

Center for Disease Control and Prevention (CDC)

Early Childhood (EC)

Individual with Disabilities Education Act (IDEA)

Institutional Review Board (IRB)

National Association for the Education of Young Children (NAEYC)

Nature-based preschool (NBP)

Primitive Pursuits Ithaca Forest Preschool (PPIFP)

Process-Person-Context-Time Model (PPCT)

Research Question (RQ)

Research Question Sub-question (RQS)

Research Question Primary Question (RQP)

Social Impact Theory (SIT)

United States of America (US)

Waldorf School of Saratoga Springs Forest Kindergarten (WSSSFK)

CHAPTER ONE: INTRODUCTION

Opening Vignette

The rain pours down as ten preschoolers and their two teachers, dressed in raincoats and boots, walk through the forest to their "classroom," an open area in the woods. As the children navigate the narrow paths downhill, four-year-old Jane (pseudonyms used) and three-year-old Kevin begin to run. As they slip and slide down the muddy path both children squeal with delight. The teacher reminds them to "wait at the bridge for everyone." As their classmates catch up and come to a stop at the wooden bridge that crosses a creek, another student points to a bucket. "Do we need sand today?" he asks. The other children look at the wet bridge and decide to toss a few handful of sand onto the bridge, exclaiming, "So we don't slip!" Once they arrive at a wooden pavilion in the middle of a clearing, the children hang up their backpacks on hooks placed on the outside of the pavilion. John, Mark, and Jacob take a stockpot and colander and run to the creek where they stop to "build a house for the crawfish." Jessica collects smooth rocks from the creek and arranges them in a circle pattern. She and a teacher talk about her rock creation. Several of the other children begin climbing a fallen tree that is leaning against a wooded hill about 20 feet high. As the rain continues to pour, the preschoolers begin slipping and sliding as they hold on to the log to climb the steep incline. One of the teachers follows the children, staying about three feet behind them. Three-year-old Ella begins to slip but exclaims, "I don't need help; I can do it!" Ella tightens her grip on the log and with great effort, makes it to the top of the hill, shouting, "I did it!" Later that day, as the children gather around a campfire, several of them place lunch items such as bananas and oranges on the grill above the flames to explore if these foods taste good roasted. Their teachers watch as the children use sticks to remove their food carefully from the flames. Towards the end of the day, the children gather

their belongings and walk with their teachers to a meadow where parents are waiting to pick their muddy, tired, and smiling children.

Overview

The children described in the opening vignette are spending time in nature, exploring their environment, climbing trees, and discovering woodland animals, regardless of the weather. They are participating in a nature-based preschool (NBP). NBPs are often defined as preschools in which students spend three or more hours outside every day in all but the most extreme weather (Knight, 2013; Miklitz, 2014). The curriculum is child-centered and often incorporates projects based on the Reggio Emilia approach (Hočevar, Šebart, & Štefanc, 2013).

Preschoolers in NBPs have the freedom to climb, run, make noise, and use real-life tools in an outdoor, natural environment. Activities are child-led, and teachers act as facilitators who ensure proper use of the materials and safety (Knight, 2013; Kenny, 2013). Such a school sounds like a child's dream come true and an increasing body of research suggests that it is actually an excellent option for increasing preschoolers' focus and connection with nature (Ann-Atchley, Strayer, & Atchley, 2012), decreasing symptoms of attention deficit hyperactivity disorder (ADHD) (Taylor & Kuo, 2009; Taylor & Kuo, 2011), increasing resilience (Wells & Evans, 2003) and decreasing obesity (Knight, 2013; Vandewater, Shim & Caplovitz, 2004), while increasing engagement and achievement (Bowler, Buyung-Ali, Knight, & Pollin, 2010; Carrus et al. 2012; Dowdell, Gray, & Malone, 2011; Gustafsson, Szczepanski, Nelson, & Gustafsson, 2012; Kaplan, 1995; Louv, 2008; Nedovic & Morrissey, 2013; Ridgers, Knowles, & Sayers, 2012). Additionally, preschoolers' increased knowledge about the outdoors increases their parents' knowledge of the environment (Damerell, Howe, & Milner-Gulland, 2013). Lastly, experiences made in natural settings during childhood, positively influence environmental

behaviors and attitudes in adults, possibly leading to more engagement in nature preservation (Asah, Bengston, & Westphal, 2012).

Based on these established benefits of NBPs, one would expect many of them to be located in the United States (US). However, there are approximately twenty nature-based preschools in the US at this time as opposed to thousands of preschools where learning primarily takes place inside the classroom (Bailie, Bartee, & Oltman, 2009; Kids Count Data Center, 2014). This study therefore sought to describe the challenges and successes NBP founders and directors in the US have experienced in establishing and operating NBPs in order to formulate recommendations for others who are interested in operating such a school in the US (Patton, 2002; Green Hearts: Nature Preschools, 2014, Yin, 2009).

Background

Preschools in the US were first established in 1854 to encourage hygiene and to provide supervision for children of poor working parents (Andrews & Slate, 2001). Today, preschools in the US vary widely in their purposes and goals from academically rigorous to completely play-based (Duncan, & Magnuson, 2013; Early et al., 2007). In recent years, many traditional preschools have placed an increased emphasis on teaching academic skills, leading some to describe preschool as the new Kindergarten (Graue, 2010; Rose & Rogers, 2012).

In addition to increased academic demands, preschoolers today face challenges such as obesity (Chung, Skinner, Steinter, & Perrin, 2012; Karnik & Kanekar, 2012; Vandewater et al., 2004), and attention issues (Taylor & Kuo, 2009; Taylor & Kuo, 2011). Nature-based preschools, in which children spend three or more hours in natural environments each day (Knight, 2013), address these challenges by decreasing stress responses, obesity, attention problems, and social skill deficits and by increasing imaginative play (Ann-Atchley et al., 2012;

Bowler et al. 2010; Carrus et al. 2012; Dowdell et al., 2011; Gustafsson et al. 2012; Kaplan, 1995; Nedovic & Morrissey, 2013; Ridgers et al., 2012).

Well-known in Scandinavia since the 1960s and adopted widely in the United Kingdom and Germany since 1990, nature-based preschools do not appear to have gained popularity as readily in the US (Knight, 2013; O'Brien, 2009). While research has been conducted on the effectiveness and benefits of nature-based preschools, information on the challenges founders and directors of such schools experience had not yet been explored. Social impact theory (Latane, 1981) provided the theoretical framework for this study, as it relates to the presence of nature-based preschools in the US. The social impact as it related to the strength of the impact source, and the immediacy of the event or phenomena being impacted was explored. The number of people supporting social change was reviewed to establish a relationship between social impact theory and the presence of NBPs in the US (Latane, 1981). Additionally, Bronfenbrenner's bioecological systems theory provided a framework for exploring the influence various bioecological systems had on NBPs' founders and directors and their successes and challenges working with NBPs (Bronfenbrenner, 1994).

I conducted in-depth research through semi-structured interviews and qualitative data collection of documents and timelines in order to develop recommendations for establishing and operating a NBP successfully in the US; filling that particular gap in the literature with the goal of increasing the number of NBPs in the US (Rossman & Rallis, 2012; Stake, 1995).

Situation to Self

In this qualitative study, I first and foremost considered myself the *human instrument* of the study (Lincoln & Guba, 1985). As such, I recognized and addressed potential biases and prior experiences with the topic. Acknowledging these attitudes allowed me to bracket myself; thereby

emphasizing my ontological assumption that knowlee is subjective, and truth can be viewed differently by each person, based on his/her perspective and experience (Creswell, 2013). While minimizing bias for this study, it was important to recognize that, to understand the complexity of founding and directing NBPs, I had to immerse myself into their settings. Therefore, I took the epistemological stance that I had to interact with the research to develop a more comprehensive picture of the participants' views and challenges (Stake, 1995).

The language of this research was flexible, to allow participants a personal voice, which in turn allowed me to gain a more comprehensive understanding of the participants' experiences (Stake, 1995). The axiological assumption that the study participants contribute to the research based on their relative personal values, enabled me to draw possible conclusions between NBP founders and directors and their successes and challenges (Creswell, 2013). Identifying the assumptions above allowed me to conduct this study based on a pragmatic paradigm, as I sought to determine "what works" when establishing and operating a NBP (Creswell, 2014, p. 28; Patton, 2002).

I began the process of bracketing my previous experiences by reflecting on them here. For example, as a native German, I grew up in a country where frequent outdoor play with peers of varying ages is encouraged from an early age. Both my culture and my family strongly supported children experiencing nature for extended periods of time with minimal adult interference beginning at about age four. Experiencing this type of play in natural environments enabled me to build confidence in my physical skills as well as my decision-making skills, as I encountered hills to climb, nature paths to discover, and animals to observe. In the US, playing for hours without caregiver interference may be referred to as *free-range parenting*, a movement that gained media attention in 2008 when Lenore Skenazy, a New York City mom, was

ostracized for letting her then 9-year-old son ride the Subway home by himself. Skenazy continues to advocate allowing children to take age-appropriate risks, such as playing at a park by themselves and riding public transportation alone (Skenazy, 2015).

My experiences growing up in Germany, in a culture that recognized outdoor play as a prerequisite to healthy child development were exceedingly positive, leading me to seek that type of childhood for my husband's and my four daughters, growing up in the Eastern US. I discovered, however, that safety and early academic skill training, rather than time spent outdoors playing appeared to be priorities of parents and preschools in this country.

One possibility for this difference may have originated in American parents' fear of crime affecting their children. Interestingly, crime rates in the US have consistently decreased since the 1990s and are now comparable to crime rates in the 1970s, where many of today's parents spent their childhoods experiencing unsupervised time outside (Mueller, 2013). One reason for today's emphasis on safety, rather than developmentally appropriate risk-taking, may relate to preschool operators' fear of litigation. While public schools typically fall under the legal doctrine of Sovereign Immunity, protecting government funded educational institutions from litigation, private preschools do not (Harvard Law Review, 1961). As litigation rates in the US are higher than in other wealthy democratic countries, preschool operators' fear of litigation may not be unfounded (Ramseyer & Rasmusen, 2010).

The focus on early academic skill training and safety I observed in US preschools was surprising to me. I had been taught in Germany that an emphasis on play at a young age led to better educational outcomes (Edo, Planas, & Badillo, 2009; Ginsburg, 2007; Miller & Almon, 2009) and that outdoor play was essential for overall healthy development, assumptions that have found support in the literature (Burdette, 2005; Chawla, Keena, Pevee, & Stanley, 2014; Fisher,

Hirsch-Pasek, Golinkoff, Singer, & Berk, 2012; Weinstein, Przybylski, & Ryan, 2009). While spending time outdoors is associated with positive outcomes, it is important to note that some children, especially those suffering from asthma and allergies, may be negatively affected by spending time in the outdoors. These children's symptoms, such as difficulty breathing and increased mucus production could increase with prolonged exposure to outdoor environments (Fuertes et al., 2014). Interestingly, children who spend prolonged periods of time outside in natural environments appear to suffer from fewer allergies and asthma occurrences overall (Braun-Fahrländer, 2013). A lack of appropriate play spaces and environmental factors, such as poor air quality and neighborhood crime may also influence the amount of time children spend in natural environments. In large metropolitan areas, for example, smog advisories may keep preschoolers inside, while children in other urban areas may not have access to the types of environments typically associated with natural settings, such as forests and meadows (Bateson & Schwartz, 2007; Dias & Whitaker, 2013).

In addition to my experiences as a parent, I also observed differences in the way young children are taught in the US. While working as a special education teacher with children ages 3-5 at an inner-city, self-contained school for children with developmental disabilities, I found that the outdoor environment consisted of wooden and metal playground sets placed on a neatly cut lawn, without additional landscaping, instead of a natural environment affording opportunities for adventure play. Overall, these preschool children spent an hour or less outside during each 7:30 a.m.–3:30 p.m. school day. Interestingly, I often observed my students seeking the less manicured forest right beyond the playground, by attempting to climb over a fence to reach it.

In addition to the lack of time spent in natural environments, I observed my students' frustration having to complete some seemingly mundane assignments, such as worksheets and

coloring pages while still in preschool. These non-interactive, indoor activities appeared to lead to a reduced enjoyment of the school environment.

Having observed the benefits of children playing in natural environments and the negative effects of too much time spent passively indoors, my curiosity in NBPs, a common educational approach in Germany, increased. Today, my desire is to see the number of NBPs grow in the US, which is the reason for my having explored the complex challenges and successes NBP founders and directors in this country experience when establishing and directing such schools.

Problem Statement

Preschoolers in the US today experience stress, obesity, less active and imaginative play, and increased attention and social skill problems (Chung et al., 2012; Kimbro, Brooks-Gunn, & McLanahan, 2011; Niederer et al. 2011; Runco & Acar, 2012; Tandon, Zhou, & Christakis, 2012a; Wu, 2013). Spending time outdoors has been found to mediate these issues by improving preschoolers' cognitive functioning, mental health (Taylor & Kuo, 2009; van den Berg & van den Berg, 2010; Weng & Chiang, 2014) physical activity, motor skill development, and social interactions (Ann-Atchley et al., 2012; Bowler et al. 2010; Carrus et al. 2012; Dowdell & Malone, 2011; Gustafsson et al. 2012; Kaplan, 1995; Ridgers et al., 2012; Taylor & Kuo, 2009; Nedovic & Morrissey, 2013). NBPs allow children to learn in natural outdoor environments for most or all of each school day, enabling students to obtain the benefits of spending time outdoors (O'Brien, 2009).

Despite the demonstrated effectiveness of this educational approach, NBPs have not been widely adopted in the US; with only around 20 currently in existence (Green Hearts: Nature Preschools, 2014), creating a need to study the challenges and successes NBP founders and

directors in the US encounter, in order to formulate recommendations for others interested in starting NBPs (Yin, 2009).

Purpose Statement

The purpose of this qualitative, multiple case study (Creswell, 2013; Stake, 2006) was to explore the challenges and successes experienced by founders and directors of NBPs in the US. This inquiry was rooted in social constructivism and pragmatism (Creswell, 2013) and the theories framing this study were social impact theory (Latane, 1981) and Bronfenbrenner's bioecological systems theory (Bronfenbrenner, 1979). NBPs were defined for this study as schools in which two to five-year-old children spend at least three hours of each school day in natural environments (Knight, 2013; Miklitz, 2014). The study's phenomenon, or focus of interest, were the challenges and successes experienced by founders and directors in establishing and operating NBPs in the US. This multiple case study sought to provide a rich and vivid description of the unique experiences of founders and directors of three NBPs in the U.S. (Creswell, 2013; Stake, 1995; Denzin & Lincoln, 2000).

Significance of the Study

This multiple case study allowed for an in-depth exploration of elements surrounding the successful establishment and operating of NBPs in the US. Social Impact Theory (Latane, 1981; Stake, 1995) roots the successes and challenges of NBP founders and directors within a framework that addresses the influence of social forces on such schools. The theoretical significance of this study is anchored in further expanding the theories on which it is based. Latane's social impact theory (1981) has often been used to predict reactions of individuals and groups of people in response to a tangible situation. This study seeks to relate the theoretical assumptions of social impact theory to a less observable phenomenon, namely, the challenges

and successes NBP founders and directors encounter to determine if social impact theory can be generalized to more complex situations over longer periods of time.

Additionally, Bronfenbrenner's (1994) bioecological systems theory is a guiding theory of this study. By determining the interconnectedness of NBPs founders and directors with their bioecological systems, Bronfenbrenner's theory may be expanded. Specifically, how interdependence relates to the scope of social impact of NBP founders and directors and the subsequent challenges and successes they experience, may further expand applications of Bronfenbrenner's theory.

Practical implications resulting from this study include enabling those interested in establishing NBPs to glean from the experiences of those who have gone through the process of establishing and operating NBPs in the US. Additionally, recommendations for successfully establishing and operating NBPs in the U.S. may aid in increasing the number of such schools in the US. In the broadest sense, increasing the number of NBPs in the US may have wide-ranging benefits to the education system, based on the well-established benefits of NBPs (Andrews & Slate, 2001; Duncan & Magnuson, 2013; Slad, Lowerey, & Bland, 2013).

The empirical significance of this study lies in its ability to clarify contextual influences on NBPs' founders' and directors' challenges and successes, explicated further by this study. Participants' responses to interview questions, analyses of documents and timelines related to the establishment and operation of their preschool and a review of related multi-media sources all yielded observable data which in turn supported the empirical value of this study (Schwandt, 2007; Yin, 2009). Overall, this study seeks to fill the gap in the literature that explores the challenges and successes experienced by founders and directors of NBPs, to establish recommendations for increasing the presence of nature-based schools in the US.

Research Questions

NBPs address many issues with which traditional preschools in the US currently struggle. These issues include the lack of time designated for play (Trawick-Smith & Waite, 2009), limited time spent outdoors (Tandon et al., 2012a; Tandon, Zhou, & Christakis, 2012b; Witten, Kearns Carroll, Asiasiga, & Tavae, 2013), attention and social skill issues (Nedovic & Morrissey, 2013; Taylor & Kuo, 2009), as well as obesity (Boldemann et al., 2006; Kuhl, Clifford, & Stark, 2012). Regardless of their numerous benefits, NBPs are not common in the US (Greenhearts Institute, 2014). Therefore, I described the challenges and successes NBP founders and directors encounter when establishing and operating such preschools in the US. The research questions for this study were derived from both the problem and purpose statement, as these questions created a guide to the qualitative research that was concerned with creating practical recommendations for others who may consider operating a NBP (Stake, 1995). The research questions were stated broadly; accommodating the emergent nature of qualitative research, as narrowing the focus of the study early in the research process could have discouraged the emergence of information not currently drawn out by the interview questions. Additionally, to increase trustworthiness in my study, analyzing large amounts of data produced identification of patterns in the participant responses (Creswell, 2014). Those patterns were coded and ultimately translated into recommendations for practice, stressing the transferability of this study's findings (Stake, 1995). Trustworthiness was further established by employing member-checks, ensuring that participants' responses captured the participants' intended meaning (Lincoln & Guba, 1985).

The central research question that framed the overall study was derived from the research surrounding NBPs. Currently, despite its many demonstrated benefits, NBPs are not common in

the US (Green Hearts: Nature Preschools, 2014). To explore this phenomenon and to develop recommendations for an increase of NBPs in the US, the primary research question was:

> What can be learned from the challenges and successes experienced by founders and directors of NBPs in the US?

This question addressed both the difficulties founders, and directors of NBPs might experience, as well as their successes. Creating a broad research question that began with "How" or "What" aligned with the case study design and overall qualitative design chosen for this study (Creswell, 2013; Patton, 2002).

The topical sub-questions were derived from the central question to provide more detailed understanding of the phenomenon (Creswell, 2013):

1. What successes do preschool founders and directors experience when establishing and operating NBPs in the US?
2. What contributes to the successes preschool founders and directors experience when establishing and operating NBPs in the US?
3. What challenges do preschool founders and directors experience when establishing and operating NBPs in the US?
4. In what ways do preschool founders and directors overcome challenges to establishing and operating NBPs?

Each of the sub-questions allowed me to move deductively closer toward the goal of discovering themes and patterns in my data (Creswell, 2013).

Research Plan

I explored the challenges and successes experienced by NBP founders and directors using a qualitative method. Since qualitative research is used to explore issues that are best observed in

natural settings and that delve deeply into the understanding of a phenomenon, a qualitative design allowed for exploration of the various elements related to my topic (Rossman & Rallis, 2012). An interpretive approach to case study research based on pragmatism was selected because it focuses on the practical implications of research and allows for the identification of "what works" (Creswell, 2013, p. 28). Since the goal of my research was to develop recommendations for practice, the study's focus on pragmatism was warranted (Richie & Lewis, 2003).

A multiple case study design allowed for an exploration of the complex issue in multiple settings concerning establishing and operating NBPs in the US (Stake, 1995). Choosing multiple cases allowed me to present varying perspectives on the phenomenon, which in turn yielded a higher possibility of establishing recommendations for practice in different regions across the US (Stake, 2006; Yin, 2009). By conducting semi-structured interviews, studying public documents and timelines, and analyzing multimedia sources to collect data for this study, I was able to ensure triangulation, thereby supporting the validity of my study findings (Denzin, 2000; Holliday, 2002). Furthermore, the transferability of my findings to NBPs in regions outside of the settings I selected in the Southeastern and the Northeastern US, both geographically and culturally was increased by selecting multiple cases for study (Shenton, 2004).

Delimitations

Several delimitations were applied in the selection of cases for this study (Lunenburg & Irby, 2008). To be included in this study, the setting had to be a NBP in tin which children spent three or more hours in natural environments each school day, in all seasons, and in all but the most extreme weather (Knight, 2013). Natural environments had to meet the criteria of being

non-manicured and not significantly altered by humans. Also, the curriculum had to be child-centered and play and/or project-based.

Each of the NBPs included in this study had to be in continuous operation for at least three months. This delimitation allowed for the stakeholders to have gained rich experiences; a foundation for responding to this study's interview questions regarding the operation of NPBs. Additionally, each school had to have experienced an increase in student enrollment of at least 15% since its opening to demonstrate a growth rate that would allow the school to double its size within five years (Flamholtz & Randle, 2000). Exceptions to this growth rate requirement were made on an individual basis as the maximum enrollment set by each school may not have allowed for this level of growth. Applying these criteria enabled me to select NBPs that I defined as operating successfully, which in turn gave validity to the recommendations derived from exploring those cases.

Narrowing the selected preschools to those in which children spent, at least, three hours of their time outside in natural environments was important, as this ensured that the particular schools I studied fell into the category of NBP, according to international standards (Miklitz, 2014). The delimitation to include only preschools that allow children to spend time in natural environments also made certain the alignment with the definition of NBPs as it is understood by educators in the US (Greenhearts Institute, 2014).

Definitions

The following definitions provide a context for understanding the literature and issues reviewed.

Nature-Based Preschool - A preschool for children ages two to six, typically child-centered, project-and play-based, in which students spend approximately three hours outside daily in

natural environments. Nature-based preschools may be privately owned or supported by churches, nature centers, or other non-profit organizations (Larimore, 2011).

Natural Environment - Woods, meadows, beaches, or other outdoor environments, largely unaltered from their original state (Larimore, 2011; Kenny, 2013; Knight, 2013).

Traditional Preschool – A preschool for children ages two to six, in which children spend approximately three hours daily, one to five days a week, participating in crafts, story time, and other early academic activities (Children's Health: Preschool, 2014).

Summary

Despite the benefits NBPs afford students, the number of NBPs has not grown as rapidly in the US as it has in other countries. This study, investigating the challenges and successes of NBP founders and directors, was rooted in Latane's (1981) social impact theory and Bronfenbrenner's (1994) bioecological systems theory. This study led to recommendations for potential NBP founders and directors, in hopes of increasing the number of NBPs in the US.

CHAPTER TWO: LITERATURE REVIEW

Overview

Exploring the challenges and successes encountered by nature-based-preschool (NBP) founders and directors to develop an in-depth understanding of their stories was the purpose of this qualitative study. This literature review, illustrating the need for this study, therefore, begins by grounding this research in the theoretical framework of social constructivism (Vygotsky & Cole, 1978), social impact theory (Latane, 1981) and Bronfenbrenner's (1994) bioecological systems theory. After the need to fill the gap in the literature that develops a deeper understanding of NBP administrators' experiences and that makes recommendations for increasing the number of NBPs in the United States (US) has been established, preschoolers' cognitive, physical, spiritual, and social/emotional development is discussed. Traditional and NBPs are compared, and the benefits of NBPs are explained. A comparison of NBPs in the US and Europe is also made in this literature review. To explore possible reasons for the low prevalence of NBPs in the US, the parenting values of parents from both the US and other countries are discussed. Factors affecting parents' preschool selection are also described. The literature review concludes with a description of founders and directors of NBPs in the US, and an identification of the problem and gap in the literature this study addressed.

Theoretical Framework

Developing a theoretical framework for this qualitative study was essential to ensuring a robust research design. In addition to guiding the data collection and analysis, a theoretical framework can guide researchers towards the generalization of their studies' findings (Stake, 1995). Framing my study with theoretical perspectives allowed me to experience freedom within limits while conducting my research (Creswell, 2013). Employing Latane's (1981) social impact

theory (SIT) and Bronfenbrenner's (1994) bioecological systems theory (BEST) as this study's theoretical framework allowed me to focus on certain aspects of the phenomenon I was studying. The theoretical framework in which this study was also rooted informs its epistemological, ontological, and methodological foundations (Denzin & Lincoln, 2005).

Social Impact Theory

The first theory framing this study is social impact theory, developed by Bibb Latane in 1981. This theory states that the strength of an impact source, the immediacy of an event or phenomena being impacted, and the number of people supporting a social change impact the acceptance and success of new ideas or initiatives.

Impact source strength. The strength of the impact source may be determined by several factors. To illustrate, a well-liked community member who supports the creation of a city garden to provide local produce to those in need may have a higher social impact than a disliked or new member of the community. Impact source strength may be affected by intrinsic factors such as interpersonal relationship strength or likability, but most often it is related to the influence the impact source can exert to achieve positive or negative outcomes for a community or group (Latane, 1981).

Immediacy. This component of social impact theory refers to the proximity of the social influencer to those around him or her. The immediacy of an event also determines whether or not others will change their behaviors and follow the person or persons initiating the social change. An example of the immediacy component of social impact theory are children being influenced by one or two classmates to join in bullying another student.

Number. The number of social influencers provides the third component to Latane's theory (1981). Social impact increases as the number of influencers increases. Ten or more adults

going on strike at a workplace will lead to more individuals joining them more quickly than one or two adults beginning a strike, for example.

Social impact theory grounded this study in theory. This study's findings further supported this theory. By comparing the results obtained from this multiple-case study to social impact theory and determining whether the results were congruent with the social impact theory's propositions, I was able to add to the body of knowledge regarding factors that affect social impact.

Bronfenbrenner's Bioecological Systems Theory

In addition to the framework provided by SIT, this study was firmly planted in BEST, developed by Urie Bronfenbrenner (1979). Bronfenbrenner, an American developmental psychologist, was the primary theorist associated with bioecological systems theory. A pioneer in considering how environmental factors and proximal processes affect child development, his bioecological systems theory influenced the formation of the Head Start Program, with which he assisted. Kurt Lewin's views on bioecological systems and Lev Vygotsky's (1978) social learning theory influenced Bronfenbrenner's development of bioecological systems theory (Bronfenbrenner, 1994; Tudge, Shanahan, & Valsiner, 1997).

Bronfenbrenner's theory (1994) informed this study by describing the influence environmental systems have on development. This study sought to expand bioecological systems theory by relating ecological systems to the challenges and successes faced by those introducing a novel type of preschool, in this case, a NBP, to existing ecological systems.

Bronfenbrenner's (1994) theory relates the various ecological systems with which a child interacts with that child's development. According to bioecological systems theory, proximal processes, events, and experiences affecting an individual, such as parenting style, must occur on

a regular basis for effective development to occur. Bronfenbrenner determined four systems as influential in child development, later adding a fifth system that addressed extraordinary events related to the specific time in which the child lives, such as World War II in the late 1930s and early 1940s.

Bronfenbrenner's emphasis on the Process–Person–Context–Time Model (PPCT), which became a cornerstone of his revised ecological systems theory, emphasized proximal processes as essential to development. In particular, regular interactions over extended periods of time that become increasingly complex, propel a person's development, according to bioecological theory (Rosa & Tudge, 2013). Additionally, Bronfenbrenner acknowledged the role a person's characteristics have in eliciting responses from the environment, as well as how the environment may shape a person's characteristics (Bronfenbrenner & Morris, 2006). By analyzing the sites in the context of ecological systems, personal characteristics, and the proximal interactions between processes, this study contributes to further knowledge about Bronfenbrenner's revised theory, as it aligned.

Microsystem. Bronfenbrenner defined microsystems as those closest to the person both physically and regarding relationships. Typically, this would include a person's family. For example, it has been determined that adults who were exposed to nature activities as children by their caregivers consistently score higher on tests of nature appreciation than those whose caregivers did not stress nature activities (Lohr & Pearson-Mims, 2005). This directly correlates to the effect of the microsystem on the child's development as developed by Bronfenbrenner, as the most influential bioecological system. The microsystem, in turn, is relevant to this study of NBP founders and directors as it has the potential of illuminating possible motivations for starting an NBP and the level of persistence in founding and continuously operating an NBP.

Mesosystem. The mesosystem is explained by Bronfenbrenner (1979) as the relationships between the various systems. This could include how the home interacts with a school setting, for example. According to Bronfenbrenner, the more positive the interactions between the micro- and mesosystems, the more positive their influence on child development.

Exosystem. This component of Bronfenbrenner's theory refers to systems that influence one's development, even though one cannot directly affect those systems. Typically, this system is outside of the sphere of direct influence or interaction of a person, but nonetheless has the power to affect the person and his or her development. The influence of a father losing his job on the quality of life of others living in his family is an example of an exosystem affecting persons not directly involved with a particular system.

Macrosystem. The macrosystem includes cultural, political, and economic environments that affect persons' development. For example, implementation of universal early childhood education may lead to increased opportunities for children to attend preschools, affecting their development. Macrosystem events usually influence the exo-, meso-, and microsystems in some manner.

Chronosystem. Bronfenbrenner's fifth system, the chronosystem provides structure to this study by considering the influence of our current time, such as economic downturns, on the challenges and successes encountered by NBP founders and directors. Chronosystem events may be internal, such as physiological events in one's life, or external, for example, if a traditional preschool nearby closes, an NBP may see an increase in enrollment.

Grounding this study in the various systems of Bronfenbrenner' s (1994) bioecological systems theory as well as Latane's social impact theory (1981), provides freedom within limits

for this study, as it integrates findings with established theories, while also providing parameters in which I conducted this research (Bronfenbrenner, 1994; Yin, 2009).

Related Literature

In the very beginning of this research project, I used the search engine *Google* to review individual websites of outdoor preschools in Germany, Sweden, and Denmark. To locate these websites, I used the search term *Waldkindergarten*, as this is the term that was familiar to me growing up in Germany. This search term yielded good results, enabling me to view the schools' set-up, typical schedules, curriculum information, and photos of several NBPs' settings. Based on my web site observations, I developed a general picture of NBPs in European countries.

Additionally, I discovered that the term *Waldkindergarten* was sometimes used interchangeably with *outdoor preschool* and *NBP*. Using all three of these terms to search the Liberty University library database yielded many peer-reviewed articles suitable for inclusion in this literature review. The specific databases used include Education Research Complete, JSTOR, Google Scholar, and ERIC. In addition to these databases, I used Google to locate organizations that promoted NBPs or outdoor learning and play, in order to gain a comprehensive picture of current trends and issues surrounding NBPs. Through the use of Google, I was able to locate websites of current and developing NBPs in the US, which served as my resource list for contacting potential participants.

This literature review aimed to present a comprehensive picture of the history and current state of NBPs, both in the US and other countries, while also giving an overview of early childhood development, theories, and frameworks to lend credibility and purpose to the rationale of this study.

Child Development during the Preschool Years

All children develop at different rates, but there are typical stages of development all typically developing children encounter (Crandell, Crandell, & Vander Zanden, 2011). For the purpose of this dissertation, I began with a synopsis of the cognitive, physical, emotional, and social stages through which preschoolers, ages two through five, progress to give a more comprehensive picture of their developmental needs.

Cognitive. Considerable cognitive growth occurs in children during the first three years of their lives, as they begin to walk, talk, and develop independence during this period. Specifically, during the ages of zero to two most preschoolers pass through the sensory-motor stage, based on Piaget's stages of cognitive development (Piaget, 1952). Consequently, age-appropriate educational practice for two-year-olds would include many hands-on activities in real life settings that engage multiple senses to link current and past experiences and to enhance vocabulary (Piaget, 1952). Examples of such activities include finger painting and digging in the garden dirt.

Students age two to seven find themselves in the pre-operational stages. These learners display cognitive characteristics that include egocentrism, symbolism, and an emphasis on language development (Piaget, 1952). Based on these characteristics, age-appropriate educational practices include providing opportunities for pretend play and supplying the learner with various mediums of expression (Fatai, Faqih, & Bustan, 2014).

Cognitive processes during the preschool years are often rapidly developing. They include the ability to pay attention to activities and objects for a longer period, and the ability to solve problems in various ways. A preschool child may observe several ants attempting to cross a puddle for several minutes, for example, before building a bridge for the ants using a stick. If

that does not help the ants cross the puddle, the child may attempt to lift the ants over the puddle, demonstrating that he or she can attempt different solutions to solve a problem.

Social/Emotional. Intertwined with cognitive learning related to maturation is learning that relates to social interactions (Bandura, 1991; Vygotsky & Rieber, 1987). Children learn and develop through social interactions with those who are more skilled at certain tasks than they are (Vygotsky & Kozulin, 1986). This may lead to increased learning based on the number and quality of interactions within one's culture.

Vygotsky. The concept of internalization as described by Vygotsky (1978) explains the role of culture in children's development. For example, a child will learn to drink from a cup if that is a skill useful in his or her culture while a child from a different culture may drink liquids from a bowl, as is the custom in that child's culture. Once internalization of skills related to the child's culture occurs, he or she will move to the appropriation aspect of internalization in which the child will use objects from the child's culture to accomplish his or her goals.

An illustration of this would be a child who is taught how to use a crayon to draw a house and then proceeds to draw a dog, as this is the child's goal. To address preschoolers' needs regarding social interactions and culture, an in-depth knowledge of the child's culture is essential. Supporting each child via modeling and scaffolding of activities will enable the child to appropriate objects in his or environment as he/she wishes.

Erikson. Social behavior of preschoolers can be framed further using Erikson's (1963) stages of psychosocial development. Preschoolers may pass through several of these stages, beginning with an exploration of their will at around age two. This will lead them to develop a primary feeling of autonomy or shame and doubt, depending on their experiences during this time of emotional development (Erikson, 1963). Preschool educators can support students during

this stage of psychosocial development by allowing them to take calculated risks and to explore their environment, and by encouraging them to develop a sense of autonomy via age-appropriate self-sufficiency. For example, preschool teachers who wait for children to button their coats, or allow them to cut soft fruits with plastic knives support their students' sense of autonomy. Hurrying preschoolers along and taking over their tasks may potentially create a sense of doubt in their abilities.

During the initiative versus guilt stage, four to five-year-olds experiment with concepts of power and independence. They begin to make plans and carry out those plans for playing and creating. Preschoolers in the initiative versus guilt stage who live in supportive environments will conclude this stage by feeling a sense of confidence that encourages them to plan and pursue their own activities. Conversely, not allowing children age-appropriate independence during this stage of development may lead to a misplaced sense of guilt in preschoolers (Erikson, 1963).

The stages asserted by Vygotsky (1978) and Erikson (1963) can be observed in the social behavior of preschoolers in various ways. Preschool teachers may witness parallel play in children, meaning their students play next to each other, but not with one another. Cooperative games and simple group activities often first emerge in four and five-year-old play behaviors. Additionally, pretend play, such as playing house or dress-up, are frequently observed during this period of social development (Fein, 1981). Based on the discussion above, social behavior appears strongly impacted by the environment in which preschoolers interact with adults and peers.

Bandura. Based on the findings of Albert Bandura (1991), adults can either encourage or discourage aggressive behaviors in young children, depending on whether they provide a positive or negative role model. Self-efficacy, another component preschoolers need to develop

to regulate their emotions and to navigate social situations, can be supported during the preschool years when teachers ensure that children can take age-appropriate risks. Allowing children to pour their juice from a full pitcher is an example of an age-appropriate risk for a four-year-old. If the juice spills, he/she will navigate the situation by cleaning up the juice, and if he/she succeeds with little or no juice being spilled, the child will likely experience an increased level of positive emotions. Since the need for autonomy and self-sufficiency is strong for this age-group, encouraging age-appropriate risk-taking opportunities aids children in moving through the various stages of social development successfully (Bandura, 1991).

It is important for preschool teachers to realize that young children's social and emotional reactions will vary based on the antecedents to the event. For example, a preschooler who slept little the night before coming to school will have more difficulty self-regulating behaviors than one who had a full night's rest. Additionally, how the preschool teacher reacts to the child's behavior can determine the intensity and frequency of the behavior in the future.

As Bandura (1991) discovered, it is not only the response to the child's behavior or reaction that can lead to future behavioral difficulties, but also responses to behavior in the preschooler's environment. Observing an adult playing video games in which violence is condoned or encouraged can cause the child to act aggressively as well, for example, having observed no negative consequence to the violent behaviors in the video games. The child's immediate environment, its microsystem, as described by Bronfenbrenner (1994), therefore, influences the preschooler's response to social and emotional challenges; an important aspect for the preschool educator to consider.

Spiritual. Experiences in the area of spirituality influence children's development and shape their future as demonstrated by biblical examples, such as Samuel's call to serve the Lord

at an early age (Spitzer, 2006). Loving relationships with caregivers influence preschoolers' perceived personal bonds with God, but do not affect cognitive knowledge of God obtained in the family and school settings (de Roos, 2006). For some educators, spiritual development is related to a sense of connectedness, reflection, and simplicity in a child's life (Zhang, 2013).

Physical. As in other areas of development, preschoolers' physical abilities vary widely. Most three to four-year-olds can run, balance, hop on one foot, kick and bounce a large ball, ride a tricycle, and play catch. Fine motor developments during the ages of 2 and 5 include being able to assemble simple puzzles containing large pieces, holding a crayon correctly, and moving from scribbling to writing a few letters. Understanding preschoolers' physical development enables teachers to provide their students with age-appropriate environments and activities that encourage physical development of small and large motor skills.

The importance of providing preschoolers with ample opportunity for physical activity cannot be overstated. Physical activity in the early years of life is a predictor of both physical activity levels for adults, and levels of childhood and adult obesity (Kuhl et al., 2012). Therefore, it is imperative that preschool educators provide their students with opportunities for physical activity that allows maximum range of movement, exploration of various terrains to strengthen muscles and coordination skills, as well as environments in which children can select activities of high interest for physical play.

The development of motor skills depends on various prerequisites that preschoolers attain in supportive educational settings. Bilateral integration is an essential component to successfully moving one's body. This integration can be reciprocal, for example moving limbs in opposite directions when doing jumping jacks, asymmetrical, as in kicking a soccer ball with one foot, or

it can involve crossing the midline, as when drawing a rainbow with sidewalk chalk and crossing the imaginary, vertical midline of the body (Newell, 1991).

In addition to coordinating movements, successful bilateral integration is also a prerequisite for later academic success in areas such as reading and writing. Being able to cross the midline, for example, is foundational to reading lines of text, as eyes must cross the midline of the body to follow an entire line of text. Regarding writing, both midline crossing and asymmetrical bilateral integration are necessary for the successful formation of letters.

Preschool teachers can support students' bilateral integration development in various ways. For example, allowing students to climb natural surfaces, such as small boulders encourages asymmetrical bilateral integration, while age-appropriate cooking activities support the development of midline crossing, as students reach for ingredients and stir food in pots and pans. Preschool teachers can encourage reciprocal bilateral integration by incorporating movement games and finger plays into the curriculum.

Issues Facing Preschoolers in the United States Today

In popular media, parenting literature, and among researchers, increased concerns about today's children can be observed. Young children, in particular, appear to experience issues related to obesity, attention deficit disorders, mental health concerns, and motor-skill development in numbers unheard of until about fifteen years ago. Several of these difficulties are described to frame the current state of early childhood issues today (Halfon, McLearn, & Schuster, 2002; Holland, 2012).

Obesity. While recent numbers have shown a slight decrease in obesity in preschoolers overall, the percentage of overweight preschoolers remains alarming. Additionally, preschoolers from families of lower socioeconomic status continue to experience increased rates of obesity

(Centers for Disease Control and Prevention [CDC], 2014). The causes for childhood obesity are numerous: In addition to the increased consumption of low-nutrient food by young children, preschoolers are also not as physically active as recommended by professionals (Junger, Palanska, & Cech, 2014). Most preschoolers in daycare, for example, exercise less than an hour a day, which includes time spent playing vigorously. Young children in home-based care settings spend even less time engaging in physical activity. Overall, preschoolers today rarely meet physical activity requirements (Junger et al., 2014).

Another factor affecting the number of preschoolers who are obese is the increase in media consumption by children under five years of age. Children in this age group use electronic media seven hours per day on average (Schmidt et al. 2012). While some multi-media games requiring physical activity are available, most media offered for preschoolers requires them to move only their fingers (Kirkorian, Wartella, & Anderson, 2008).

Attention issues and mental health concerns. Attention Deficit Disorder (ADD) and Attention Deficit Hyperactivity Disorder (ADHD) rates among preschoolers have increased sharply in the last twenty years. Greater use of media at earlier ages, developmentally-inappropriate educational practices, increased time spent inside, environmental toxins, and genetic influences have been proposed as possible reasons for this increase (Eubig, Aguiar, & Schantz, 2010; Polanska, Jurewicz, & Hanke, 2013; Thapar, Cooper, Jefferies, & Stergiakouli, 2012). The role of media in the manifestation of ADD and ADHD is unclear; however, correlations have been made between media consumption and attention problems. Children who spend more time watching TV or playing multimedia games are engaged in more violent play and show more aggressive behaviors (Bushman, 2006; Hasan, Bègue, Scharkow, & Bushman, 2013). In addition to the influence of media consumption on ADD/ADHD, inappropriate

educational practices such as teaching abstractly, requiring extended periods of sitting, and teaching material beyond the scope of the students' abilities all contribute to problems with attention (House, 2011). For example, a teacher who attempts to teach the concept of magnetism to preschoolers via a poster explaining that opposite poles attract will be much less successful in keeping his/her students' attention than the teacher who allows her students to play with magnets, thereby enabling them to connect abstract concepts with concrete experiences.

Contributing to the expression of behavior and attention issues in preschoolers today is the lack of age-appropriate teaching practices applied to this age group (Baker, Grant, & Morlock, 2008). Preschoolers typically spend 12–40 hours in school each week as preschools become more like the Kindergartens of twenty years ago. There is an increased emphasis on academics, including a significant amount of the school day spent on completing worksheets or engaging in other passive activities (Hirsh-Pasek, 2009; Schweinhart et al., 2005; Vygotsky & Cole, 1978).

As preschools continue to emphasize academics over play and exploration, attention issues can arise. The average attention span of preschoolers, depending on interest level, is fewer than ten minutes. Attention issues can develop when children are exposed to lengthy direct teaching sessions or abstract academic activities, such as worksheet completion (Corkum, McGonnell & Schachar, 2010). Additionally, highly structured environments have been shown to reduce independent executive functioning (Barker et al., 2014).

Early childhood educators may present material that is too advanced for preschoolers to grasp. As standardized testing becomes more commonplace, preschool teachers feel pressure to prepare their students academically for elementary school (Arslan, 2015; Copeland, Sherman, Kendeigh, Kalkwarf, & Saelens, 2012; Tullis, 2011). Therefore, material that is too difficult for

the average 2-5-year-old to grasp is often presented in preschool settings, resulting in frustration on the child's part, potentially leading to attention issues and social problems (Burdette, 2005).

A preschool engaging in developmentally inappropriate teaching practice can contribute to a display of ADD/ADHD symptoms by students, however, what happens outside of school may also contribute to increasing rates of preschoolers inattentiveness, ADD, and ADHD. For example, only half of today's preschoolers play outside every day (Tandon et al., 2012a). Taylor and Kuo (2009) found positive effects of time spent in natural environments for persons with ADD and ADHD, therefore spending less time outside may be a contributing factor to an increase in attention problems in preschoolers.

Regardless of how much time preschoolers spend outside, environmental factors may also contribute to the rise in ADD and ADHD in preschoolers today. In particular, dyes and additives in food have been blamed, as well as in-utero toxins, such as nicotine, as more cases of ADD and ADHD, are diagnosed (Altink et al., 2008; Taylor & Kuo, 2009). Additionally, genetic causes of ADD/ADHD have been cited as a reason for the increase in attention problems in preschoolers (Crosbie et al., 2013). As the number of preschoolers with attention issues continues to rise, the search for solutions to ADD and ADHD becomes more urgent.

In addition to ADD and ADHD, preschoolers today may have an increased risk of anxiety and excessive worry as adults. Parental safety concerns and fears are limiting to the children's exploration of their environments. Limited exploration does not allow for the development of coping skills during exploration, which may lead to increased worry and anxiousness in adults (Saunders, Sayer, & Goodale, 1999; Spada et al., 2012).

Autism Spectrum Disorders (ASD). ASDs now affect one in every sixty-eight children (Centers for Disease Control and Prevention [CDC], 2014). Children with ASD experience

social-skill deficits and in some cases, cognitive delays, especially related to areas of language development. Up to 20% of cases of ASD can be connected to genetic factors. However, environmental toxins and better screening for ASD have also been cited as possible reasons for the increase in ASD diagnoses in children (Grinker & Cho, 2013; Manning-Courtney et al., 2013).

Social skill deficits. An increase in aggression has been observed in preschoolers (Olfson, Crystal, Huang, & Gerhard, 2010). Some consider this increase a result of more frequent exposure to violence through electronic media sources while others believe that a strong emphasis in early childhood education on academic, rather than social skills is to blame (McClelland, Morrison & Holmes 2000). In addition to aggression, a decreased ability to act sociable and to empathize with others has been raised as a concern for today's preschoolers.

Fine motor. The ability to grasp and manipulate small tools effectively develops rapidly during the preschool years. Activities that stimulate the muscles and cognitive processes associated with these skills are essential in encouraging fine motor development. Allowing preschoolers to work with a variety of materials in informal, exploratory activities further supports the development of fine motor skills. Preschool children who are developing typically can grasp crayons, markers, and other writing utensils and scribble on paper and other materials. In later preschool years, children may even be able to write letters and form simple words. Fine motor development typically progresses from an infant being able to grasp objects using his/her fist and a raking motion to the pincer grasp, typically developed around eighteen months of age, which allows for picking up of smaller objects, such as peas or beads (Carruth & Skinner, 2002; "Early Identification", 2014).

Today's young children spend more time using electronic devices that do not require as complex a skill set as more traditional fine motor activities such as coloring a picture. Often, preschoolers are adept at using their thumbs and pointer fingers due to playing games on devices such as iPads. Other muscles in the hand, fingers, and wrists have not been strengthened, however, as increased physical activities are needed to develop such skills, leading to potential difficulties manipulating writing utensils (Wrotniak, Epstein, Dorn, Jones, & Kondilis, 2006). While the use of media by young children may be related to delayed fine motor development, it must be noted that an increase in technology use by preschoolers has also been associated with positive outcomes, especially in the area of literacy (Neuman, 2012).

Gross motor. The large muscles of the body develop in a head-to-foot progression. As often observed, infants can hold up their heads and hold objects in their hands, well before learning to stand and walk. Preschoolers make great strides in their gross motor development between the ages of two and five. They transition from walking to running, jumping, and for some, hopping or standing on one foot. Their sense of balance increases and the ability to hit a target with a ball does as well (Roth et al. 2010). Preschoolers today often lack the prerequisite skills necessary for successful navigation of various terrains, heights, and surfaces. As children spend fewer hours playing and fewer times playing outside, in particular, gross motor skills continue to decline (Fjørtoft, 2004).

Preschools in the United States

Now that a basic review of child development and a discussion of issues facing preschoolers has been presented, the typical preschool model in the United States (US) is discussed.

The "traditional" United States preschool. While not all preschools in the US are alike, several characteristics emerge in what can be referred to as a *traditional preschool* in the US. Traditional preschools are often housed and/or affiliated with churches. They typically meet for about three hours (e.g., 9:00 a.m. to 12:00 p.m.), one to five days a week depending on the age of the student. Before and/or after school care is often provided for additional fees. Children will typically bring a snack and drink to school with them, which is then consumed during designated meal times. The average traditional preschool classroom engages between 8 and 16 learners and typically employs one teacher and one teacher's aide per class.

The curriculum in traditional preschools is often theme-based and heavily relies on seasons, holidays, and celebrations as the impetus for learning activities. A traditional preschool typically meets September through May and the daily schedule is often segmented into specific times for certain activities, such as reading, math, and craft time (see sample traditional schedule in Appendix A). The classroom is often set up using interest or subject centers and allows for a small group, large group, and individual learning. Toys are usually provided and consist of commercially available items such as plastic trucks or doll houses. A reading corner containing books and comfortable seating is often made available to students.

The use of worksheets and other abstract learning activities is implemented in most traditional preschools. For discipline, a behavior modification system leading to negative consequences for misbehavior is often employed. Poor behavior is often charted publicly using a red light, yellow light, green light, or another warning system, with the consequences for poor behavior becoming progressively more severe. Those consequences typically range from time-outs away from classmates to having a talk with the director or being expelled from school.

Parental involvement varies in traditional preschools but often includes assigning room moms to organize class parties and asking parents to speak on career day. Some preschools have "family clean-up days" on a couple of weekends a year to rake leaves, plant flowers, or otherwise beautify the preschool environment. Additionally, some traditional preschools may encourage parents to visit to read stories to students.

Outdoor play is usually a part of the daily preschool routine, however; it may be canceled for the day in case of rain, wind, or cold temperatures. On days when the outdoor play occurs, the traditional preschool teacher typically observes his/her students play on a plastic or wooden play-set in a fenced area, ensuring the students' physical safety. Playing with dirt, sticks, or rocks is often prohibited or discouraged in traditional preschool settings, due to safety concerns.

Preschoolers with disabilities in traditional United States preschools. Disability prevalence is approximately the same in the US and European countries. While disability labels and categories differ somewhat from country to country, the percentage of students considered exceptional learners is almost identical (Elsabbagh et al., 2012; Organization, 2000). In the US, in particular, speech and language disorders are most frequently diagnosed in preschoolers. Students with these disabilities are typically fully integrated into traditional U.S. preschool. In recent years, ASD have become prevalent in preschoolers as well, with one in every 68 children now being diagnosed with this disability (CDC, 2014). Additionally, preschoolers account for about 22% of all students served under Individuals with Disabilities Education Act (IDEA), (U.S. Department of Education, 2014). In federally-funded preschools, which require the inclusion of children with disabilities, young children with developmental delays are often able to participate in class with the assistance of a visiting special education teacher. However, this practice is still developing in the US (Barnett et al., 2006; Batsche et al., 2006; Muccio, Kid,

White, & Burns, 2014). Preschoolers with Autism and other disabilities, especially those who experience behavioral concerns, are often dismissed from traditional preschools (Education Law Center, 2010).

Non-traditional approaches to preschool in the United States. In addition to the traditional preschools noted above, the US is home to several other types of preschools. These are often considered non-traditional. The most common non-traditional types of preschools include Montessori and Waldorf schools, the Head Start program, and homeschooling.

The Montessori Method. This educational approach was pioneered by Maria Montessori in Italy in the early 20th century. Montessori, a physician by occupation, began working with children with disabilities in the hospital in which she worked. Influenced by Gaspard Itard, a French physician, and educator, in her philosophy of child development, Montessori found that allowing young children to explore their environment aided in the intellectual development of these children. Montessori applied this child-led approach to teaching to a group of sixty, one to six-year-old children from families with low socio-economic status and observed positive changes in those children's life as well. The multi-age classroom model continuous to be a hallmark of Montessori classrooms. Additionally, Montessori students are provided with large blocks of time, in which they follow their scientific and academic interests using Montessori-designed learning materials, in an aesthetically-pleasing, well-organized, and uncluttered classroom environment (Lillard, 2012).

Montessori schools enjoyed a brief period of popularity in the early 1900s. They became popular again in the US in the 1960s when American educator Nancy Rambusch became a passionate advocate for the Montessori approach after attending a Montessori conference in Europe. Today, there are about 4000 Montessori schools operating in the US and more than

twenty-thousand worldwide (Lillard, 2012; North American Montessori Teachers' Association, 2015).

Waldorf Schools. Austrian philosopher Rudolf Steiner, who believed that the body, soul, and spirit form an Anthroposophy, an inner wisdom of the human being, founded Waldorf schools in 1919. Steiner believed that children move through developmental stages at different chronological ages. Therefore, a child may be practicing advanced Math in a Waldorf classroom while simultaneously working on learning the alphabet. Waldorf School curricula emphasize the arts and appreciation of nature. A strong emphasis is placed on reverence for others (Bax, 2015).

The Head Start program. Another non-traditional approach to preschool education in the US is found in the federally-funded early childhood education program called Head Start. Developed in 1965 as a response to then-President Lyndon B. Johnson's *War on Poverty*, the Head Start program aims to support at-risk preschoolers. Students' needs are addressed primarily through school readiness programs, but Head Start also provides for preschoolers' and their families' medical, nutrition, and mental health needs. Recent studies show a positive impact of the Head Start program on preschoolers' development while attending the program that dissipates by Grade 3 across all developmental domains (Puma, Bell, Cook & Heid, 2010).

Homeschooling. Approximately half of all children ages 3-5 do not attend preschool ("Children ages 3 and 4," 2015). These children may or may not receive early academic skill training in their homes, typically provided by their parents. Homeschooling activities for preschoolers range from worksheets and pre-designed curricula to hands-on counting and science activities related to everyday tasks (Bentley, 2015).

Outdoor classrooms in preschool. Nature Explore, a program affiliated with the Arbor Day Foundation has certified over 200 outdoor classrooms in the US and Canada. Some of these

outdoor preschool classrooms are part of traditional and some part of non-traditional schools, but all are certified based on their efforts to connect children with nature during the school day (Certified Nature Explore classrooms, 2015).

Preschool licensing in the United States. Standards for licensing child care, including preschools fall within each U.S. state's purview. Individual states are required to develop and enforce policies that address three goals as outlined by Federal law: "Prevention and control of infectious diseases, building and physical premises safety, and health and safety training appropriate to the program setting" (Child Care Aware, 2015). However, some preschools are exempt from licensing due to their affiliation with an accredited private school. Those that are not exempt, typically fall under the same licensing requirements as child care centers, as preschools are not recognized by States as academic institutions (Child Care Aware, 2015).

Parental roles in United States preschools. Parental roles in U.S. preschools vary. Often, however, parents of preschoolers attend special celebrations, such as Christmas performances and Mother's Day tea in addition to reading stories to their child's class or attending their preschooler's "Super Star" week. Sometimes, parents are involved in fundraising for their child's preschool directly or indirectly through buying fundraising merchandise, for example. If the preschool has a parent association, mothers and fathers may also serve on the board of committees that further their children's and the preschool's interest. Overall, parental involvement is often a welcome part of preschools in the US and is a positive influence on students' academic success (Arnold, Zeljo, Doctoroff, & Ortiz, 2008).

How United States parents choose their child's preschool. Parents use various criteria when selecting their child's preschool. One common reason given for school selection are the hours of operation. Additionally, parents choose their child's preschool based on positive

interactions with the potential caregiver. The educational level of the preschool teachers is another factor influencing American parents' preschool selection (Rose & Elicker, 2008).

Other factors that influence preschool placement decisions relate to cultural and ethnic backgrounds of families. Latino parents, for example, are more likely to enroll their children in preschool based on affordability but are generally more inclined to seek out relatives as caregivers for their children, if child care of any kind is needed (Delgado, 2009). African-American children's enrollment in child care is double that of Latino children and the highest among ethnic groups, with Caucasian children following closely behind. Childrearing practices, including the importance placed on early literacy and other academic skill training, have been identified as factors for this trend (Liang, Fuller, & Singer, 2000).

In addition to culture and ethnicity, economic factors heavily influence preschool selection. Particularly for families at or below the poverty line preschool enrollment and selection are heavily influenced by tuition rates (Liang et al., 2000). It is important to note Shlay's (2010) finding that the overall desire of parents is to place their children in an emotionally warm and safe environment, regardless of the parents' socio-economic status, ethnic group, or race.

Differences in United States and non-United States parenting values and culture. Parents in the US have been labeled "helicopter parents," disallowing children the experience of a developmentally appropriate childhood and age-appropriate risk-taking (Ernst, 2013). In European countries, there is a strong emphasis on play and exploration in early childhood, especially in relation to spending time outdoors and accomplishing age-appropriate tasks independently. In Asia, parental values often focus on academic achievement, making play time less of a priority (Roopnarine & Johnson, 2001).

Parents in Europe and the US often cite their children's happiness as their primary goal for their children. In Asia, many parents value obedience and self-control, rather than happiness at the highest achievement for their children. American, Asian, and European parents have different values for their children, and their parenting styles differ.

For example, authoritarian parenting is often frowned upon in the US and considered unloving or antiquated, while, in Asian countries, a permissive parenting style might be regarded as neglectful (Van Campen & Russell, 2010). Relating specific parenting styles based on culture or geographic location can easily lead to stereotyping of cultures, as no two families are alike. It is especially important to recognize educator bias when evaluating parenting styles, culture, and school involvement, as cultural awareness is not sufficient in speculating about rationales for parental school involvement or lack of involvement (Nelson & Guerra, 2013).

Founding and operating a preschool in the United States. Preschool founders often begin their journey to opening their school by analyzing the existing market to determine if there is a community need for it. Factors influencing this need may include a community preference for enrolling children in formal educational settings at a later date (Bassok & Reardon, 2013). Additionally, research into preschool licensing requirements is necessary. Upon determining that a preschool could be successful in the selected area, founders must choose a setting for their preschool. An existing building may be used for this purpose, or a new structure may be built. Furthermore, being aware of local small business laws and policies is essential for the successful creation of a new preschool (Larimore, 2011; Loten, 2011).

Simultaneously, and in addition to the school's mission and goals, a curriculum or educational approach to learning should be decided upon. It is important to seek out certifications in the specific teaching approach selected to add credibility and value to the school.

The preschool's quality can also be enhanced by obtaining accreditation from the National Association for the Education of Young Children (NAEYC), which is highly regarded for promoting excellence in preschool education. Once the curriculum has been determined, materials to furnish the school and daily schedules and routines should be considered (Manuszak, 2008).

Corresponding with Latane's (1981) social impact theory, it is important for the preschool's leader to be a valued and trusted member of the community. Therefore, promoting a new preschool in the community is another important aspect of securing student enrollment. Community outreach may take the form of flyers, advertisements in local papers, or presentations at community events.

Selecting faculty and staff whose views on early childhood education align with the mission and goals of the new school should be paramount. Additionally, teachers should be selected based on their education and certifications, but also according to their experience level and the warmth they exude. It is imperative to conduct background checks for all faculty and staff to ensure students are protected (Clement, 2013).

Once the preschool opens, operating it becomes the focus of the director. Managing the day-to-day operations of a preschool requires a competent leader who can inspire and coach others to be their best while also maintaining a standard of excellence. Preschool directors may manage work and pay schedules, professional development opportunities, and a calendar of school events while also creating an atmosphere of respect and belonging for all stakeholders. Additionally, preschool directors often serve as the parent liaison and problem solver for any issues that may arise within the school (Carter & Curtis, 2009).

Preschool administration and leadership challenges. Administrators and founders of preschools experience unique challenges, as their field is becoming more strictly governed by educational reforms. While mandates are put into place to ensure high-quality educational programs for young children, many early childhood leaders are new to this more intense level of outside governance. In the past, being able to obtain a local childcare license allowed early childhood (EC) professionals to start their own school. Today, in addition to maintaining the basics of a safe, nurturing setting and curricula addressing preschool academic and social skills training, administrators must also ensure that students are prepared to meet the stringent academic demands of today's Kindergarten classroom (Stamopolous, 2012; Lesemann, 2012).

Other leadership challenges administrators and founders of preschools face include addressing diversity in their schools. A broad knowledge and understanding of various cultures, ethnic groups, and disabilities is required of preschool leaders today to provide the best school community for students (Sanders, & Downer, 2012; Stier, Tryggvason, Sandström, & Sandberg, 2012).

Early Childhood (EC) leadership also involves vision-casting, which can be difficult if the school's goals are not mapped out clearly. Therefore, preschool administrators must work to create or embody the vision of their schools. Communicating this vision becomes the administrator's challenge. A lack of early education leadership theories often leads EC administrators to incorporate general leadership elements into their roles (Aubrey, Godfrey, & Harris, 2013). As the preschool environment is traditionally built on a foundation of collaboration and warmth in caring for young children, EC leaders may find it difficult to apply these leadership strategies to their environments successfully (Heikka & Hujala, 2012).

Bioecological Systems Theory and Leadership. While EC leadership models are currently being explored, preschool administrators may find applying Bronfenbrenner's (1994) bioecological systems theory helpful in aiding their collaboration with team members. Leaders may interact more efficiently with faculty, staff, and the community, if they are aware of the ecological systems affecting them.

Micro- and Mesosystems. A preschool founder who realizes his/her community's stance toward innovation as conservative may be able to introduce the concept of a new preschool by promoting the traditional reasons for sending children to preschool. For example, socialization rather than more contemporary reasons, such as information literacy. This would be an example of using the meso- and microsystems of ones' target audience to achieve a desired result.

Chronosystem. The awareness and understanding of the chronosystem could aid the EC leader in working with parents regarding tuition payments, in the case of a local recession, for example. Being able to utilize the chronosystem and the remaining of Bronfenbrenner's (1994) bioecological systems in preschool leadership allows founders and administrators to evaluate environmental influences on their organizations and to address them accordingly.

Nature-Based Preschools

An in-depth description of NBPs (NBPs), including their history, teaching philosophy, and current state provide a framework for understanding the unique early childhood education experience NBPs provide.

Definition. A *Waldkindergarten*, outdoor preschool, or NBP is defined by the UK Forest School Network as "An inspirational process that offers children, young people and adults regular opportunities to achieve, and develop confidence and self-esteem through hands-on learning experiences in a woodland environment" (FSA, 2015). In Germany, the

"Waldkindergarten" is defined as preschool held in a natural setting in any, but the most extreme weather (Miklitz, 2011). In all countries with NBPs, such a school involves periods of three hours or more, spent outside in natural environments such as woods, beaches, or meadows (Knight, 2013).

History of NBPs and rate of development in Europe, Asia, and the U.S. NBPs have been in existence since the 1950s. They originated in Scandinavia where they were first founded by Goesta Frohm, who believed that exposure to nature was essential to a child's well-being. Sweden, in particular, adopted the nature preschool concept quickly, with more than 50 NBPs in existence by the 1970s. NBPs in the UK first appeared in the mid-nineties, following the Scandinavian model. Other European countries soon followed suit. In Germany, NBPs quickly gained acceptance after first being introduced in the early 1990s. NBPs have grown in number in Europe since the 1960s, with more than 60 in the United Kingdom, 1500 in Germany and 3000 NBPs operating Europe-wide (Maynard, 2007).

Teaching approaches and curricula unique to NBPs. While the approach to teaching and the curriculum NBPs employ may vary somewhat, all NBPs use a child-centered approach to learning that allows for student-led activities and interest-based exploration. While routines and schedules exist for starting and ending the school day, large group time, and meal-sharing, the majority of the NBP students' day consists of self-directed activities. Project-based learning is an approach often integrated into the NBP setting as well, especially the Reggio Emilia approach as pioneered by Loris Malaguzzi (Vodopivec, 2012).

Along with the concept of social constructivism, in which learning occurs by observing others and acquiring knowledge from them, the Reggio Emilia approach emphasizes project-based learning. Children in Reggio Emilia classrooms construct knowledge through the

exploration of their interests and interactions with their environment. Children in Reggio Emilia schools are encouraged to express themselves through the "hundred languages of children" (Edwards, Gandini, & Forman, 1993, p. 6), including art, music, and movement to further their learning and understanding of the world. NBPs also rely heavily on the concept of constructivism to frame their curriculum. While constructivism in early education is not a new concept, NBPs allow children to construct their knowledge via activities based on their interests in natural settings (Slade et al., 2013).

Setting. Natural environments, those that are not manicured or park-like, often a forest or other wooded area, are the setting of NBPs. Other environments for NBPs include beaches, mountainous areas, or meadows. Often, at least one water feature, such as a stream can be found in an NBP setting. Buildings or other structures such as Yurts or trailers can be found at some NBP sites. Such buildings are often used only as meeting places for dropping off and picking up of students. The remaining time of the school day is spent in the natural environment provided by the preschool (O'Brien, 2009).

Materials and equipment. Commercially manufactured toys are generally absent from the NBP environment. Students play with the materials available to them in the natural environment, often using their imagination to develop games and stories. Teachers may provide tools such as hammers and knives for specific purposes, such as whittling and wood construction. Many NBPs include story time. Teachers in such preschools will often bring a basket filled with books into the natural environment. Some preschools provide writing utensils and paper for children to journal and to record nature observations as desired, but many preschools encourage the use of natural materials for this purpose. Children may use sticks to

draw in mud, or small rocks to represent their observations in nature (Kenny, 2013; Knight, 2013; Larimore, 2011).

Furniture is not typically supplied in NBP environments. Children and teachers use fallen trees or tree stumps to sit on, or, they may bring blankets for seating. As naptime or quiet time is often part of NBPer's day; nap mats or hammocks are often used. Children usually carry these items in and out of the natural environment themselves, which also applies to any food and drink they may bring for snack or lunch (Kenny, 2013; Knight, 2013; Larimore, 2011).

Many NBPs favor community-style meal preparation and eating, providing equipment such as pots and pans for the children to use under the teacher's supervision as they cook meals over an open fire. Other equipment that is supplied for mealtime may include reusable cups, napkins, and other eating utensils. An emphasis on healthy foods is common in NBP settings (Knight, 2011).

Nature preschool advocates often state: "there is no bad weather, just bad clothing." By that, they are referring to NBPs' custom of holding school outside in all but the most extreme weather. Therefore, appropriate clothing is often deemed the most important *equipment* used in nature preschools. Since students spend three hours or more outside during the day, except during tornadoes, lightning, and other extreme weather conditions, preschoolers in NBPs often wear high-quality rubber boots, rain slickers, jackets, hats, and gloves. Wearing Water-resistant overalls and layered clothing in case of a change in weather during the day is also often part of nature-based classrooms (Kenny, 2013; Knight, 2013; Larimore, 2011).

Daily schedule. A typical day in a NBP often begins at a location outside of the natural environment where parents drop off their preschoolers with the teacher. From there, teachers lead the children to the woods or another natural environment, where the group spends the next

three to four hours. Once in the forest, teachers often begin by meeting with their students as a group to discuss the children's plan for the day, special tools or equipment brought to the forest, and any special circumstances of which to be aware (poison ivy, etc.). Also included in this large group time is often the singing of songs and story reading. After large group time, the preschoolers typically engage in activities of their choice within the natural setting (see sample NBP schedule in Appendix B).

Throughout the NBP day, teachers encourage safety and help to expand learning by answering children's questions, or adding knowledge during conversations with the children. Water in the form of a creek or pond is often available to children in NBPs, allowing for water play, mud creating, and general exploration and observation. After an extended play time, preschoolers often assemble for snack or lunch. Preschoolers may bring their meal from home, or, a community meal is prepared, often over an open fire. The students typically help with meal preparation, building the fire, cutting vegetables or other food, and with cooking the snack or lunch. After each meal, the preschoolers clean up their cooking and eating space and resume playing in the natural environment. Many times, naptime is incorporated in the afternoon schedule. Children sleep outdoors on blankets, mats, or in hammocks. After naptime, children may play outside for an additional amount of time. A song is often used as a signal to gather as a group and return to the morning meeting spot. The class typically meets with parents for pick up where the children were dropped off in the morning (Kane & Kane, 2011; Kenny, 2013; Knight, 2013; Larimore, 2011).

NBP stakeholder characteristics. The age of NPB preschoolers typically ranges between three and five, but some schools include children as young as 18 months or as old at six years of age. Most preschoolers attending NBPs are potty-trained, but may be asked to urinate in

a designated, private area in the forest, in the case of a bathroom emergency. Additionally, portable toilets are sometimes provided. NBP students typically can manipulate basic tools such as forks, spoons, and cups (Kenny, 2013).

The number of personnel supervising these preschoolers in an NBP classroom varies, with most NBPs employing one teacher for every four to eight children (Kenny, 2013, Knight, 2013). Educators in NBPs should have experience teaching preschoolers, but more importantly, they must love nature and learning as these are the building blocks of a successful NBP teaching career (Kenny, 2013). Depending on the state in which the NBP is located, lead teachers may be required to have a four-year degree in early childhood education or a related field, to work at an NBP. Recently, a Nature-Based Early Childhood Education certification became available at Antioch University in New England, where NBPs are more prevalent. While this is not an educational requirement for NBP teachers, it is a desirable one. Knowledge of certain play-based approaches such as Reggio Emilia's project-based learning and the Montessori Method also contributes to the accomplished NBP teachers' qualifications (Larimore, 2011).

NBPs welcome parents, but frequent visits are often discouraged to allow preschoolers to develop a sense of independence and accomplishment. Parents may be invited to visit the nature preschool setting on special days, such as a preschool open house.

Benefits of NBPs. Children who attend NBPs experience numerous benefits. Absences due to illnesses, for example, are lower than in traditional preschools (Grahn, Martensson, Lindblad, Nilsson, & Ekman, 1997). Additionally, NBP preschoolers' exhibit better gross motor skills than their traditional preschool counterparts; they avoid excessive media use and experience fewer incidences of obesity (Kimbro et al., 2011; McCurdy, Winterbottom, Mehta, & Roberts, 2010; Pretty et al., 2009). Furthermore, spending time in the outdoor environment

reduces symptoms of ADD and ADHD in those environments and other settings (Nedovic & Morrisey, 2013; Flom, Johnson, Hubbard, & Reidt, 2011, Taylor & Kuo, 2011). Appreciation for and connectedness to nature is higher in children who attend NBPs (Asah et al., 2012; Brownlee, Hallo, & McKay, 2012), as are their problem-solving abilities and levels of persistence (O'Brien, 2009).

NBP potential challenges. In addition to the positive effects of NBPs on young children, potential challenges must be discussed. Symptoms of asthma and allergies may increase with prolonged exposure to natural settings, for example (Fuertes et al., 2014). Additionally, parental fear of children experiencing injuries due to spending time outdoors may present challenges to NBP operators (Copeland et al., 2012). Due to the lack of formal academic skill training in NBPs, concerns related to school readiness may present challenges to NBP founders and directors as well, though studies have demonstrated the effectiveness of NPBs in preparing children for formal schooling (Fritz, Smyrni & Roberts, 2014; Kiener, 2004).

The Need to Increase the Number of NBPs in the United States

Based on the numerous benefits of nature preschools and the issues facing preschoolers in the U.S. today, increasing the number of NBPs could lead to a reversal of these negative trends. NBPs allow for exposure to the outdoors and natural environments as well as child-centered play; all found effective in mediating preschoolers' unique issues today (Burls, 2007). Even though NBPs have been found in the US since 1967, their numbers have not increased at the same rate as they have in other countries (Knight, 2013). To increase the number of NBPs in the US, one had to first explore why the presence of NBPs in the US is still minimal, with only about 20 currently in existence (Bailie et al., 2009). Exploring the NBP phenomenon by

investigating the challenges and successes their founders and operators experience in the US was intended to contribute to the body of knowledge regarding NBPs' prevalence in the US.

Summary

Both Latane's (1981) social impact theory and Bronfenbrenner's (1994) bioecological systems theory framed this study by setting limits on the inquiry and by providing a framework to establish the validity of this study (Creswell, 2013). Latane's theory allowed me to focus my inquiry on discovering the impact of social influence as it relates to building successful NBPs in the US while Bronfenbrenner provided another important framework: Looking at challenges and successes of NBP founders and directors through the lens of bioecological systems theory. This framework enabled me to relate my research to the influence, of bioecological systems on the successful development of NBPs in US communities.

An overview of early childhood development provided the foundation for understanding the various benefits of NBPs and the positive impact such an educational approach can have on all areas of a child's growth. While Piaget (1952) provided a framework for understanding cognitive development, Vygotsky, Bandura (1991), and Erikson (1963) informed the social and moral development of preschoolers. Relating established child development theories to NBPs allowed me to underscore the validity of the NBP approach. Also, several studies supported the benefits of child-directed play (Piaget, 1952), outdoor activity (Taylor & Kuo, 2009; van den Berg & van den Berg, 2010), and the importance of spending time in natural settings for both children and adults (Weng & Chiang, 2014; Cheng & Monroe, 2012), widely incorporated in NBPs.

In many European countries, preschool education is universally provided and subsidized by the government. Often, education requirements for preschool personnel include a vocational

education of at least three years that includes internships and Bachelor's degrees in pedagogy (Hagemann, Jarausch, & Allemann-Ghionda, 2011). Additionally, European parents are granted paid maternity and/or paternity leave and/or a sabbatical, for up to three years after the birth of a child (Dustmann & Schönberg, 2012).

Both nature and traditional preschools typically serve children ages two to five years of age. This may be where the similarities end, however. Traditional preschools focus on early academic skills development, and structured activities balanced with play time. Nature preschools focus on the providing children with guidance as they explore natural environments. Teachers in NBP settings support students by adding language where new vocabulary is needed, by ensuring their physical needs are met, and by setting safety limits where needed.

The Gap in Literature

Traditional preschools in the United States have been explored extensively, including the Head Start initiative meant to address many of the issues facing at-risk preschoolers (Yoshikawa & Weiland, 2013). NBPs in the US, however, remain minimally studied. If studied at all, the focus is often on further establishing the effectiveness of NBPs and on describing various approaches to the NBP curriculum. Having established the phenomenon of the proportionately slower growth of the number of NBPs in the US than in Europe, it appears that this lack of growth has not yet been explored. To increase understanding of the slower growth of NBPs in the US and to explore contributing factors to establishing and operating a NBP in the US successfully, NBPs' founders' and directors' experiences must be considered. Therefore, this study sought to fill the gap in the literature that explored the successes and challenges, essentially discovering what the stakeholders learned, (Stake, 1995) while establishing and operating NBP programs in the US.

CHAPTER THREE: METHODOLOGY

Overview

This study explored the challenges and successes experienced by founders and directors of NBPs in the United States (US), in order to establish recommendations for increasing the presence of nature-based schools in the US. In this chapter, I describe the selected design and the rationale for choosing that particular design. The research questions are presented, as well as a description of the study's setting and a rationale for choosing those settings. The participants and criteria for their selection are discussed. Additionally, procedures employed to conduct this study are presented, to allow other researchers to duplicate the study if desired, and to describe the empirically-based rationale for selecting the specified procedures. Further, my role as the human instrument of the study is addressed, and the data collection and analysis procedures are discussed. How trustworthiness was established as supported by the selected methodology is explicated as well. The chapter concludes by discussing the ethical considerations related to this study.

Design

This qualitative inquiry employed a multiple case study design. This method was selected as qualitative research seeks to study a phenomenon, with NBP establishment and operation fitting in the category of a phenomenon to be studied (Creswell, 2013; Stake, 1995). Qualitative research lent itself well to this study, as the challenges and successes of preschool founders and directors, when establishing and operating NBPs, could not easily be quantified through numerical data. Rather, an in-depth understanding of the challenges and successes encountered by the participants was presented via a rich description to relate their story fully and discover commonalities among the participants' experiences (Stake, 1995).

The multiple case study design was chosen because it allowed for an exploration of a complex issue in multiple settings concerning establishing and operating NBPs in the US (Stake, 2006). By exploring multiple cases, I was able to apply the iterative process of identifying common themes among all three cases, thereby further establishing the validity of my analysis (Marschan-Piekkari, & Welch, 2011). The replicative nature of this multiple case study increased its external validity while also supporting the analyses' validity (Yin, 2009).

The three NBPs included in this multiple case study each met the definition of a *case* because of the unique challenges experienced by each program's founder(s) and director(s). I included at least one administrator and/or one founder from each setting, as this allowed me to develop an in-depth understanding of the challenges and successes experienced by the participants. Each of the three cases was bound by its context (Stake, 1995), as each explored the challenges and successes of each NBP's founder and director(s). All three cases were located in the Eastern US and used a play-based approach to curriculum. An interpretive approach to case study research based on pragmatism (Denzin & Lincoln, 2005; Yin, 2009) was selected because it focused on the practical implications of research and allowed for the identification of best practice recommendations for establishing NBPs in the US (Creswell, 2013).

Collecting data by conducting semi-structured interviews, and obtaining public documents, email, and other correspondence participants shared, as well as media coverage, websites, and timelines provided by the participants aligned with the multiple methods approach to case study research (Creswell, 2013). The length of the interviews varied between 51 and 92 minutes (M = 68.75 minutes). The participants represented more than 55 years of experience (M = 18.3 years) working in education and nature education. Two of my family members transcribed the interviews, and I reviewed their work for accuracy. I emailed the transcripts to the

participants asking them to voice any concerns upon review of their interviews' transcription. None of the participants replied, except one who noted she would review her interview transcript and let me know if there were any concerns. No issues resulted from her review.

After obtaining permission (see Appendix C) to use Robert Stake's (2006) worksheets for case study analysis, I used Worksheet 2 (see Appendix D) to record my research questions. Next, I reviewed the data using Worksheet 3 (see Appendix E) as a guide and recorded my cross-case findings on Worksheets 4, 5b, and 6 (see Appendices F, G, and H) . Next, I used Worksheet 7 (see Appendix I) to plan my writing for Chapters 4 and 5. Chapter 4 contains detailed answers to the research questions, and a summary of each can be found below. Additionally, incorporating several sources of data also increased the construct validity of my study (Yin, 2009). In addition to observations, encouraging participants to provide timelines of founding and operating their NBP and the sharing of documents and multi-media information related to their experiences provided the rich description and context essential to creating a feeling of "being there" (Stake, 1995, p. 63), a central aim of qualitative case studies.

Research Questions

The research questions for this multiple case study were as follows:

Primary Question (P): What can be learned from the challenges and successes experienced by founders and directors of NBPs in the US?

Sub-Questions (S):

1. What successes do preschool founders and directors' experience when establishing and operating NBPs in the US?
2. What contributes to the successes preschool founders and directors experience when establishing and operating NBPs in the US?

3. What challenges do preschool founders and directors' experience when establishing and operating NBPs in the US?
4. In what ways do preschool founders and directors overcome challenges to establishing and operating NBPs?

Sites

Nonprobability, purposive sampling, was employed as this aligns with the qualitative nature of the research (Rossman & Rallis, 2012). Sampling procedures included a web search to determine nature preschools that matched the sampling criteria of being child-centered, defined as teachers using students' interests and skills to guide the curriculum, and nature-based, utilizing woods, beaches, or meadows as students' primary learning environment. A general search for NBPs and a specific search on State Department websites for licensed preschools was conducted to identify potential participants.

Maximum variation sampling was employed by choosing NBP preschools that had been operating for varying length of time and were set in communities with varying political, religious, and cultural orientations, and was comprised of varying community levels of socio-economic status where each NBP is located. The sample selected for this study consisted of three NBPs in the US and their founders and directors.

One of the NBPs chosen for this multiple case study was located in the Southeastern US while the other two were located in the Northeastern US. Selecting several NBPs in the US allowed me to ensure maximum variation in the settings (Creswell, 2013). The three selected preschools met this study's definition of *case* due to the unique challenges and successes child-centered, play-based nature immersion preschool founders and directors encounter in the US (Creswell, 2013). Each preschool also met the criteria of being nature-based, due to students

spending approximately three hours in nature during each school day, and the curriculum being both play- based and child-centered (Knight, 2013; Miklitz, 2011).

In particular, NBPs in the Southeastern and the Northeastern US were selected in part for their geographic location close to my home in Forest, Virginia, but were primarily included because they met the delimiting criteria of being child-centered and play-based, with students spending three or more hours per school day outdoors.

Ithaca Forest Preschool

One of the NBPs that served as a case in this study was Ithaca Forest Preschool in Ithaca, New York. The school is part of the Primitive Pursuits program, which began as a 4-H initiative in 1999 and continuously aims to foster a love for nature within its community. Primitive Pursuits offers nature experiences and education for all ages via camps, homeschool, and after school programs. It seeks to serve the preschool population via its NBP, founded in 2013, and was designed for three- to five-year-old children. Ithaca Forest Preschool is open from 9:15 a.m. to 12:15 p.m. daily Monday through Friday and children may attend between one and five days each week. The school runs on a typical school year schedule, September through June and students spend all of their time outside on the preschool's ten-acre forest property, except in the most extreme weather. As temperatures fall into the 20s or below during Ithaca's winters, preschoolers spend up to twenty percent of their time indoors in Primitive Pursuits' 4-H Acres building. The curriculum at Ithaca Forest Preschool is play-based and child-led, with adults providing guidance and enforcement of safety rules as needed. A teacher-child ratio of one to five allows the Ithaca preschool educators to be attentive and attuned to their group of students. The preschool currently employs three teachers, capping the maximum number of children enrolled at fifteen per class.

TKG Preschool

The second NBP that served as a case for this study is located in northern North Carolina. The preschool was founded in 2014 and is housed on an Episcopal church's grounds. The preschool uses a room in the church as a morning meeting place and space in case of dangerous weather conditions. TKG serves children ages four and five, offering both three- and five-day programs. Preschoolers attend Monday through Friday, or Monday, Wednesday, and Friday, from 9:00 a.m. to 1:00 p.m. September through May of each year. TKG's curriculum follows principles of the Reggio Emilia project-based approach, as well as the nature inquiry model. Currently, the Preschool Director and Assistant Director are also the two lead teachers to the nature classroom's total of six to ten students.

Waldorf School of Saratoga Springs

Located in New York State, this Waldorf School dedicates a class of three to six-year-olds to the NBP concept. The twenty-plus students attending this outdoor preschool classroom spend three hours outside Mondays through Fridays regardless of weather. Waldorf education principles, such as an emphasis on music, rhythms, and an appreciation of the environment impress the informal, child-led curriculum, but in the natural setting of the school's woods. Founded in 2009, the nature preschool classroom is guided by a lead teacher and one assistant. While the school is governed by a Board of Directors, the lead teacher also serves as the founder of the NBP classroom.

Participants

The participants are founders and directors of NBPs (see Table 1). In cases in which the preschool founder was also the director or teacher, an additional faculty member essential to the establishment or operation of the preschool was included in the study to increase triangulation of

data whenever possible. If the governance of the NBP did not delineate a founder or director, NBP founding teachers were also be asked to participate. The number of participants was increased until saturation was reached within and across cases (Creswell, 2013; Stake 1995).

Table 1

Description of Final Participant Sample

Case	Participant	Role	Gender	Age	Ethnicity	Credentials
TKG	M.K.	Lead Teacher and Founder	Female	Late 40s	White	-Master's Degree in Education, -Environmental Education. Certification, -30 years plus teaching experience
PPIFP	Tim Drake	Founder and Director Primitive Pursuits	Male	Late 30s	White	-Education not known, -Teaches Environmental Science at Cornell University, -20-plus years nature guide Experience
PPIFP	Melissa Blake	Lead Teacher and Preschool Program Coordinator	Female	Early 40s	White	-Master's Degree in Environmental Education, -20-plus years' experience in nature education and leading nature expeditions.
WSSP	Katherine Scharff	Lead Teacher and founding member, Waldorf School of Saratoga Springs Forest Kindergarten	Female	Late 40s	White	-Master's Degree in Early Childhood Education, -Registered Nurse, -Waldorf certified

Procedures

The procedures for obtaining the data for this study began with applying for and receiving IRB approval from Liberty University (see Appendix J). I approached three NBPs and asked their directors and founders, to participate in my study. Each case and setting was selected based on a web search of NBPs in Virginia, North Carolina, Maryland, and New York. The three

preschools in this study were chosen as potential cases based on being currently operating, using a child-centered, play-based curriculum, and spending approximately three hours of each school day outdoors in natural environments.

TKG, Primitive Pursuits' Ithaca Forest Preschool, and the Waldorf School of Saratoga Springs agreed to participate in my study. Once IRB approval was secured, and all necessary approvals gained, I scheduled interviews with the founders and directors of each of the three preschools. The interview questions were recorded with a digital device. I also took descriptive notes during the interview to capture its non-verbal aspects. All interviews were transcribed by me or one of my family members who signed non-disclosure forms. Within days of each interview's transcription, to remind me of the particular mood and atmosphere present during the interview, I proofread the transcripts by comparing them to the interview recordings and after that submitted them to the participants for member checking. Public and private correspondence and documents were obtained after the interviews, as the interviews yielded information that focused me on specific documents beneficial for triangulation of the data (Creswell, 2013; Stake, 1995).

A web search was conducted to locate media coverage and to obtain information from each school's website, and the participants were asked to create a timeline in a medium of their choice (computer, paper, and pencil, etc.) of their journey toward founding or operating their NBP before the interview. A digital timeline template (see Appendix K) was provided to all participants (Creswell, 2013).

The Researcher's Role

Acknowledging my role as the human instrument of the study was essential (Patton, 2002) and allowed me to increase the trustworthiness of my study by bracketing my own

experiences and minimizing possible biases (Rossman & Rallis, 2012). Since I chose the sites, participants, and all other elements of the study, it was important for me to recognize my existing thoughts and attitudes on the topic based on life experiences, including being a preschool teacher for students with and without disabilities.

Growing up in Europe, I enjoyed a hands-on, child-centered early childhood education that included frequent outdoor play. The *Kindergarten* (preschool in Germany), which I attended half-days between the age of three and six, provided a mixture of free play and semi-structured activities, such as singing as a group. My family and culture encouraged independent outdoor exploration beginning at an early age. Many fond memories of playing entire afternoons in nearby creeks and even on construction sites without parental supervision led me to personally appreciate the independence I gained through these experiences. As a parent of four children growing up in the US, I realized that my children would not experience similar exploration of their surroundings, as safety, supervisory, and cultural standards are different and appear more directive. While aligning myself with American parenting values, I mourned the loss of the free exploration and self-guided learning for my children that I had experienced during extended periods of self-directed outdoor play as a child in Germany.

Additionally, I discovered a strong focus on formal education in early childhood as an educator of preschoolers with disabilities in the US. I was surprised by what seemed like an overemphasis on safety and observed the children's frustration at developmentally inappropriate educational practices.

Remembering the benefits of outdoor play I experienced as a child has created a desire in me to see the number of NBPs grow in the US, as they appear to provide a more efficient, age-appropriate environment for children. As the human instrument of this study, I recognize my

attitudes toward NBPs; however, I believe my bias did not influence my study, as I was looking to explore the challenges and successes as reported by the participants, rather than the effectiveness of NBPs in general.

Data Collection

Data was collected via semi-structured interviews, public documents, email, and other information participants shared. Publically available photographs of the setting, media coverage, websites, and timelines were provided by the participants (Creswell, 2013; Stake, 1995; Yin, 2009). Obtaining data from these various sources allowed for triangulation of data, thereby increasing the reliability of my findings (Yin, 2009).

Interviews

Semi-structured interviews with predetermined, open-ended questions generated the data needed for a comprehensive analysis while still allowing flexibility for unexpected turns in the conversation (Denzin & Lincoln, 2000). Based on the literature on preschools in the US, as well as NBPs in both the US and Europe, the following interview questions were designed to explore the establishing and operating of NBPs in the US, while simultaneously discovering possible commonalities between cases that allowed for the formulation of recommendations for establishing and operating such preschools (Stake, 1995).

Table 2

Standardized Open-Ended Interview Questions for NBP Founders

Questions
Founders' Educational Background and Experience
1. Can you tell me about how you became interested in education in general and Early Childhood education specifically? (P, S1-4)
2. Please describe all of your educational and training experiences related to education in general and early childhood education in particular. (P, S1-4)
Founders' Relationship to Nature
3. Would you describe yourself as a person that loves nature and/or often spends time in nature? (P, S1-4)
4. What, if any, childhood experiences contributed to your appreciation of nature? (P, S1-4)
Founders' Decision to open an NBP
5. Please describe how you first learned about nature-based schools. (P, S2)
6. What authors, research or other resources contributed to your decision to open an NBP? (P, S2)
7. Please describe what else contributed to your decision to open a NBP. (P, S2)
The Process of Establishing an NBP
8. How did you begin the process of establishing an NBP? (P, S1, S3)
9. What literature, multi-media resources or other materials helped you in formulating steps towards establishing an NBP? (P, S2)
10. What persons or mentors did you approach to help you in establishing the NBP? (P, S1, S3)
11. What observations, if any, of other NBPs, did you conduct prior or during your process of

establishing an NBP? (P, S1, S3)

12. Please explain the rationale behind the particular goals and mission statement you chose for your NBP? (P, S1, S3)
13. How did you determine State guidelines for establishing a preschool, and in particular, a NBP? (P, S1, S3)
14. What difficulties, if any, did you encounter in obtaining licensure for your preschool? (P, S3)
15. Who were the key stakeholders involved in obtaining licensure for your NBP? (P, S2)
16. How did you determine the physical setting of your NBP? (P, S2)
17. What challenges did you encounter in securing a setting for your school? (P, S3)
18. Who were the key stakeholders involved in securing your school's setting? (P, S2)
19. Knowing what you know now, would you change how you secured your school's setting? If so, how? (P, S1-4)
20. How did you choose the particular physical design of your school building (or the lack of a physical structure) on the grounds? (P, S2)
21. What specific elements of creating the physical setting for your NBP did you find most challenging and why? (P, S3)
22. How did you overcome obstacles related to creating the physical setting for your NBP? (P, S1-4)
23. How did you decide to use the particular daily and yearly preschool schedule you are using? (P, S2)
24. How did you determine what curriculum approach to use? (P, S2)
25. What influenced your decisions in regard to your selection of educational materials for your school? (P, S2)
26. How did you determine the number of and ages of students that would attend your school?

(P, S2)

27. What personal characteristics were you looking for when hiring faculty and staff for your NBP? (P, S2-3)
28. What educational characteristics were you looking for when hiring faculty and staff for your NBP? (P, S2-3)
29. Why did you choose those particular characteristics as being essential to NBPs? (P, S2)
30. What steps did you take to hire faculty and staff for your school? (P, S2)
31. What challenges did you encounter in hiring personnel for your school? (P, S3)
32. How did you approach potential investors for your NBP? (P, S1-4)
33. What documentation did you provide to potential investors of your NBP? (P, S2)
34. What financial issues were the most difficult to navigate or address when you were in the process of founding your NBP? (P, S3)
35. What type of market analysis did you conduct to ensure that founding an NBP would fill a gap in your area? (P, S2)
36. What intrinsic and extrinsic factors contributed to how you establish your tuition amounts and payment schedules? (P, S2)
37. How did you determine what information would be included in your parent handbook? (P, S2)
38. How did you determine what information would be included on your website and any literature about your school? (P, S2)
39. Why did you choose the particular design of your website and literature about your school? (P, S2)
40. How did you inform the community of your NBP? (P, S2)
41. What kind of response did you receive from the community when you publicized the opening of your NBP? (P, S1-4)

42. How did parents respond to the concept of an NBP? (P, S1-4)
43. What part of establishing a NBP was most challenging for you? (P, S3)
44. What part of establishing a NBP was the most enjoyable and which part was the easiest? (P, S1)
45. What advice would you give to someone who is considering starting an NBP? (P, S4)
46. Is there anything else you would like to share about your experience of founding an NBP? (P, S1-4)

Note. P= Primary Question, S= Sub-Question. Numeral(s) indicate(s) specific sub-question(s)

Table 3

Standardized Open-Ended Interview Questions for NBP Directors

Questions
Founders' Educational Background and Experience
1. Can you tell me about how you became interested in education in general and Early Childhood education specifically? (P, S1-4)
2. Please describe all of your educational and training experiences related to education in general and early childhood education in particular. (P, S1-4)
Directors' Relationship to Nature
3. Would you describe yourself as a person that loves nature and often spends time in nature? (P, S1-4)
4. Please describe how you first learned about nature-based schools. (P, S1-4)
Directors' decision to operate an NBP
5. Please describe what contributed to your decision to work as a director of a NBP. (P, S2)
6. What authors, research, or other resources contributed to your decision to become involved with operating an NBP? (P, S2)
7. What, if any, childhood experiences contributed to your appreciation of nature? (P, S2)
Operating an NBP
8. How did you become involved with operating an NBP? (P, S2)
9. Why did you choose to operate an NBP, rather than a traditional preschool? (P, S2)

10. What literature, multi-media resources, or other materials helped you prepare for operating an NBP? (P, S2)
11. What persons or mentors did you/do you consult to help you operate the NBP? (P, S2)
12. What observations, if any, of other NBPs, did you conduct prior or during your process of becoming an NBP director? (P, S2)
13. How do you ensure State guidelines for operating your preschool are met? (P, S2)
14. What difficulties, if any, do you encounter in maintaining licensure for your preschool? (P, S3-4)
15. Who are the key stakeholders involved in the day-to-day operations of your NBP? (P, S2)
16. How do you maintain the physical setting of your NBP? (P, S2)
17. What challenges do you encounter maintaining your school's physical setting? (P, S3-4)
18. If you could, and based on your experience would you change anything about your schools current setting? (P, S2-4)
19. What safety rules do you employ at your NBP? (P, S2)
20. Please describe your preschool's daily and yearly schedule. (P, S1-4)
21. How do you determine what curriculum approach to use? (P, S2)
22. Why do you choose to implement your curriculum in the manner that you do? (P, S2)
23. How do you select educational materials for your school? (P, S2)
24. What is your teacher-child ratio and why did you choose this particular ratio? (P, S2)
25. What personal characteristics are you looking for when hiring faculty and staff for your NBP? (P, S2-3)

26. What educational background do you look for when hiring faculty and staff for your NBP? (P, S2-3)
27. Why did you choose those particular teacher and staff characteristics as being essential to NBPs? (P, S2)
28. What steps do you take to hire new faculty and staff for your school? (P, S2-4)
29. What challenges do you encounter in hiring personnel for your school and how do you overcome those challenges? (P, S3-4)
30. Do salaries for NBP faculty vary from those of traditional preschools? (P, S2-4)
31. What type of professional development do you provide for your personnel? (P, S2)
32. How do you train new personnel? (P, S2)
33. What documentation do you use to demonstrate students' progress? (P, S2)
34. How do you inform parents of their children's progress? (P, S2)
35. In what ways are parents involved in your NBP? (P, S1-4)
36. Is parent involvement important to you? If so, why? (P, S2)
37. Please describe how tuition is determined at your NBP. (P, S2)
38. How do you recruit new students? (P, S1-4)
39. What is the protocol for dealing with preschoolers' injuries while in school? (P, S3-4)
40. What type of weather would warrant school cancelation or moving indoors? (P, S3-4)
41. What is the demographic profile of your preschoolers' parents? (P, S1, 3-4)
42. Do you serve meals at school? (P, S2)
43. How does your NBP connect to its community? (P, S2-3)
44. What kind of response do you receive from the community about your NBP? (P, S1-4)
45. What feedback do you receive from your students' parents about your school? (P, S1-4)

46. What are the values you try to instill in your students? (P, S2)
47. How are negative student behaviors addressed at your school? (P, S1-4)
48. If applicable, please tell me how your alumni have reacted to attending other schools after graduating from your NBP. (P, S1)
49. Which part of your job do you find most frustrating? (P, S3-4)
50. Which part of your job do you enjoy the most? (P, S1, S3)
51. What advice would you give to someone who is considering becoming an NBP director? (P, S4)
52. Is there anything else you would like to share about your experience of operating an NBP? (P, S1-4)

Note. P= Primary Question, S= Sub-Question. Numeral(s) indicate(s) specific sub-question(s).

The purpose of the questions regarding the founders' and directors' prior experiences in nature during childhood and as adults, was to gather information about those experiences in order to establish the background of the participants and their possible motivation to be part of a NBP. Additionally, the interview questions provided information regarding the relationship of NBP founders and directors' successes to Latane's (1981) social impact theory. The questions revealed the participants' levels of expertise regarding NBPs and the community member status of each participant, furthering my ability to relate my findings to the theoretical framework of my study. Furthermore, the interview questions were designed to reveal the possible influence of bioecological systems on NBP founders and directors (Bronfenbrenner, 1994).

Questions 1 through 7 in Table 2 and 3 explored how the NBP founders and directors arrived at the decision to open and operate a NBP, respectively. Responses to these questions also supplied data that could be linked to the theories framing this study. The questions were

intended to draw out the various bioecological systems that may have influenced these NBP stakeholders' to arrive at their current occupation (Bronfenbrenner, 1994). Data obtained from asking those same questions were also used to establish the participants' role within the community, allowing me to determine possible parallels between the participants' community standing and social impact theory (Latane, 1981).

Obtaining feedback from the participants to these interview questions was essential in establishing possible relationships between the participants' actions and their NBP's success (Denzin & Lincoln, 2000). By asking Questions 8 through 46 in Table 2, I hoped to obtain the rich data needed to establish valid recommendations for others interested in opening a NBP, thereby addressing the pragmatic nature of my study (Stake, 1995). In order to obtain rich descriptions of challenges and joys of establishing an NBP, I designed Question 43 and 44. Additionally, these questions allowed the participants to express points of views they find most important to convey, ensuring the semi-structured nature of the interview (Bogdan & Biklen, 2007).

Questions 8 through 47 in Table 3 related to the process of establishing a NBP and also addressed many elements of founding a preschool. These questions produced data that could be linked to the elements typically present in NBPs as established in the literature review. Comparing participants' responses to those questions to NBP elements yielded data that could be analyzed with regard to similarities and differences between the cases for this study and the established characteristics of NBPs (Knight, 2013). For example, an NBP where students have to be placed on a waiting list each year, due to the popularity of the school, may or may not follow all of the general principles, such as avoiding commercial toys, of NBPs. The type of information

solicited by Questions 8-47 became essential to exploring the successes and challenges of NBP founders and directors fully.

Likewise, these questions provided multiple perspectives from various participants on the same subject of operating an NBP, confirming or rejecting the current literature regarding NBPs (Stake, 1995). Questions 43 – 51 provided data that enabled me to gain a deep understanding of the feedback NBP directors receive for their efforts of operating an NBP, allowing me to compare this data to the components of Latane's social impact theory (1981). The data obtained by asking Questions 43-52 aligned with, partially related, or wholly related to social impact theory constructs, thereby lending support to the theory and discovering cases that did not fit into their schemata.

Questions 51 and 52 in Table 3 related to the directors' day-to-day operating of NBPs and will establish a detailed picture of how operating such a school may be similar or different to traditional preschool management. In a more pragmatic sense, Questions 51 and 52 were designed to gather recommendations from those experienced in operating an NBP for those new to the role or considering that role (Creswell, 2013). The response to Question 51, in particular, yielded practical advice to those looking to further the NBP movement in North America.

Documents

Public documents reviewed for this study included multi-media information and public data illuminating the process of founding and operating an NBP (See Printed and Digital Documents in Appendix L). If participants provided email or other correspondence concerning operating and directing an NBP, this information was included in the data collection, while ensuring the privacy of the participants and other parties involved in the correspondence via the use of pseudonyms, as desired. However, only one of the participants felt it was necessary for me

to use pseudonyms to represent them in my study. Publically available photographs of the setting were included in order to contribute to the rich description of each case (Creswell, 2013). Media-coverage provided me with audio-visual information that contributed to a deeper overall understanding of the communities' response to NBPs (Creswell, 2013).

Timelines

In order to obtain data regarding the timeframe and steps in creating a NBP, its founders were asked to create a timeline particular to the creation of their NBP (see Appendix M and N for completed timelines). NBP creation milestones were offered with the timeline template (Appendix K). However, participants were free to choose whether or not to include them. These milestones included: Identifying community needs, visiting existing NBPs, gathering support, curriculum decision, philosophy established, location, staff hired, licensing, advertising, registration, and the first day of school (Larimore, 2011).

Upon receiving the completed timelines (see completed timelines in Appendices M and N), I analyzed them and followed up with any questions I had about them. This collaborative data collection method allowed the participants to reflect on their experiences when creating their timelines (Creswell, 2013; Guenette & Marshall, 2009).

Data Analysis

Yin (2009) considers data analysis the most difficult part of case study research. Therefore, both he and Stake (1995) emphasize the necessity of establishing data analysis protocols before data collection, which I describe here. Establishing data analysis protocols prior to data collection also decreased the risk of developing misconceptions while searching for meaning in data. While variations to some aspects of the data analysis protocols occurred, ascribing meaning based on careful segmenting of data into meaningful units remained pivotal

(Creswell, 2013; Stake, 1995). Additionally, data analysis was not confined to a set beginning determined by the researcher, but rather, consciously or sub-consciously, meaning was assigned to data as soon as data collection began (Patton, 2002).

A challenge to qualitative data analysis is the volume of data that must be analyzed (Patton, 2002). Recommendations exist on how to increase the probability of assigning meaning to significant, rather than trivial parts of data. Patton (2002) asserted that thoroughly detailing data analysis processes is essential and contributes to the reliability of findings. In this study, for example, observation notes were crucial to capturing analytical notes during observation that aided in determining meaningful elements of data. Further assisting me in separating significant from trivial data were the theoretical propositions related to my study's theoretical frameworks (Yin, 2009): Bronfenbrenner's (1994) bioecological systems theory and Latane's (1981) social impact theory. Both theories allowed me to focus my attention on certain data, by giving me a framework for applying significance to it (Yin, 2009). One proposition that emerged from my literature review and study of the influence of bioecological systems on children (Bronfenbrenner, 1994) is that those who spend time in natural environments during childhood are more likely to appreciate nature as adults, which in turn may influence their decision to open or operate a NBP (Lohr & Pearson-Mims, 2005). Another theoretical proposition, rooted in my literature review and the theoretical framework of this study, is the relationship of the *strength* of an NBP founder or director, as defined by Latane (1981), to the successful founding and operating of such a school.

Specific data organization methods that were applied to my data analysis were reading and memoing. By immersing myself fully in the data, reading interview transcripts, reviewing observation notes, documents, and timelines, I developed an overall sense of my data. Making

notes as a way of memoing during this immersion further contributed to my ability to categorize data into themes (Creswell, 2013). Pre-established codes, based on my review of the literature were used after reading and memoing to funnel further the significant data into meaningful themes (Stake, 1995). In particular, the codes derived from my study's theoretical propositions related to Bronfenbrenner's bioecological systems theory (1994) and Latane's social impact theory (1981) were applied to the data. Strength (s), immediacy (i), and number (n) were used to identify data related to Latane's theory (1981). In particular, the code of (s) was used to mark data related to the social standing, the level of education, prior relationships within the community, power, age, and intensity of each NBP founder or director. The (i) code was used to identify data related to the immediacy that affected the founding and directing of each NBP in this study. The publication of Richard Louv's book *Last Child in the Woods*, in 2005, which sparked discussion and solution-seeking regarding children's need for increased exposure to natural environments is an example of an event that would align with Latane's concept of immediacy (1981). The (n) code was used to note data associated with the number of people exerting influence on the community to establish and operate each NBP.

Data related to Bronfenbrenner's bioecological systems theory was coded as follows: microsystem (m1), mesosystem (m2), exosystem (e), macrosystem (m3), and chronosystem (c). The microsystem (m1) code was used to identify data related to the founders' or directors' experiences with environments with which they interacted and interact with frequently, such as their families, nature, or church, for example. The (m2) code was used to distinguish data that pertains to the mesosystem, in which participants' microsystems interact, for instance, when a person takes his or her child to work. The (e) code was used to identify data connected to the founders' or directors' exosystem, or indirect influences, such as financial hardships in the

community in which the NBP is located. The (m3) code, indicating the macrosystem, coded data related to the founders' and directors' belief systems and culture, while (c) identified data related to the chronosystem or the time period in which the participant lives and has lived (Bronfenbrenner, 1994).

Worksheet 4 (see Appendix F) allowed me to record my research question answers as possible themes. I added data to support to each and saw ten salient themes emerge: (a) growth, (b) relationships, (c) experience, (d) temperament, (e) like-mindedness, (f) mission-focused, (g) collaboration, (h) leadership, (i) worldview, and (j) witnessing transformations. I also used this worksheet to record the utility of each theme as low (L), middling (M), or high (H). For example, TKG works with the church in which it is housed, as well as the church's community garden. Ithaca Forest Preschool is located on 4-H grounds, and Waldorf NBP students play on land that belongs to the State of New York. Much additional data was found in all three cases to support the theme of collaboration, earning each case a score of "high" (H) on Worksheet 4 in regard to the collaboration finding. In contrast, "witnessing transformations" was a theme supported strongly by data, but only for two of the three sites. At the third site, Ms. Scharff commented on watching children learn as being enjoyable, but did not mention witnessing transformation specifically. A utility rating of low for that theme and site led to a rejection of the assertion of witnessing transformations for the cross-case analysis.

In order to discover common themes among the cases, I used Worksheet 5b (see Appendix G) to record in which cases the themes could be found and which research questions they answered. For example, Worldview had an H utility for all three cases. Furthermore, the theme of worldview provided answers to RQ 2, 4, and P. After ranking all of the themes as low, middling, or high, and ensuring that all of them were supported by substantial data across cases,

those themes rated as having high utility became my assertions. I used Worksheet 6 (see Appendix H) to note my assertions and in which cases evidence for them could be found and to which research question they related. Worksheet 7 and the dissertation template served as a guide for writing Chapter Four and Chapter Five, based on the assertions made on Worksheet 6.

Within-case Analysis

The data obtained from participants was analyzed using within-case and cross-case analysis procedures as recommended by Yin (2009). Each case was comprehensively described and themes particular to each individual case were identified using within-case analysis procedures (Creswell, 2013; Stake, 1995; Yin, 2009). Analyzing the rich descriptions of each case in this study, allowed themes to emerge during each analysis (Creswell, 2013; Yin, 2009).

Direct interpretation. This strategy was used to apply meaning to single instances of data among cases (Stake, 1995). The participants' body language, voice inflection, general demeanor, as well as their verbal responses led to *intuitive aggregation* of categories (Stake, 1995, p. 74) during the interview process.

Categorical aggregation. Recurrent themes in the data were identified using categorical aggregation (Stake, 1995). Patterns in the data were identified informally while interviewing, as well as while reviewing timelines and relevant documents, by recording the incidences of each repeating event. Examining these patterns led to the establishment of categories which, in turn, revealed themes within and across cases (Stake, 1995).

Identifying themes. Identifying themes within each case study enabled me to conduct a cross-case analysis to explore patterns among cases (Yin, 2009). Categorical aggregation aided in determining these themes within my data. Worksheet 3 (Appendix E) assisted in the identification of themes, and frequently repeated words used by participants were noted and

tallied, using the Microsoft Excel program. Worksheet 6 (Appendix H) was used for cross-case analysis to provide me with a visual representation of data that revealed patterns of information (Yin, 2009).

Specifically, Worksheet 1 (see Appendix O) provided me with a graphic representation of my study. I employed Worksheet 2 (see Appendix D) to accompany my analysis of the data to keep me focused on my research questions. Remembering themes while reviewing my data allowed me to look for answers to my research questions while analyzing the data. Two of my family members transcribed the interviews verbatim for me, using Microsoft Word. By reading each transcript several times and by listening to the interviews' recordings, I verified transcriptions were accurate.

Upon collecting all of my data, I analyzed each individual case. I created files with all of the information I obtained for each case. Stake's Worksheet 3 (Appendix E) provided guidance for the important elements to focus on during my analysis, and I used several copies of Worksheet 3 to note those components. Once each case was analyzed using Worksheet 3, I created a summary of my findings utilizing Worksheet 4 (Appendix F). In addition to listing each theme, I also rated my findings as low (L), medium (M) and high (H) as related to my perceived significance to the phenomenon (Stake, 2006) in order to attribute the level of manifestation of each. Once Worksheet 4 was completed, I printed out individual sheets of paper, listing each of my themes.

Cross-case Analysis

Similarities and differences between the cases were examined via comparison of themes and patterns. Based on the selected cases included in this study, the goal of my cross-case analysis was to determine if findings were replicated across all three cases (Yin, 2009). The

cross-case findings were analyzed using Worksheet 5b and listed on Stake's (2006) Merged Findings Worksheet 6 (Appendix H).

Naturalistic generalizations. If theoretical concepts were replicated across cases, generalizations could be established in the form of recommendations for founding and directing NBPs (Stake, 1995). By describe ng case study methods in "ordinary language," and "confirming and disconfirming major assertions" (Stake, 1995, p. 87), the validity of any naturalistic generalizations are increased. Presenting detailed and richly described research, data, and findings in a manner that leads readers to understand my experiences vicariously (Stake, 1995, p. 85) increased the likelihood of the readers' naturalistic generalizations matching mine.

For the purpose of organizing my cross-case analysis, each theme was coded: CCAT1 meaning "cross-case analysis, theme 1," for example. I then listed my key findings for each site and coded those according to theme and site. For example, "CCAT1S1" stood for "Cross-Case Analysis, Theme 1, Site 1." I added the notes listing the finding to the theme that aligned with the finding, aiming at including at least 10 findings as support for each theme, as recommended by Stake (1995). If a finding supported the theme particularly well, I added plus signs to it. Next, I used Worksheet 5b (Appendix G) to note the merged findings for theme-based assertions. I listed which cases supported each finding, in addition to which research question was answered by each. Then, I utilized Worksheet 6 (see Appendix H) to record my assertions, listing in which cases evidence for each assertion could be found. Finally, Worksheet 7 (Appendix I) guided my writing as a planning tool for Chapter Four and Chapter Five of this dissertation.

Trustworthiness

According to Lincoln and Guba (1985), establishing trustworthiness is essential to ensuring the results of any research are meaningful. Several strategies were employed to increase the confirmability, credibility, transferability, and dependability of findings.

Confirmability

Confirmability relates to the level of objectivity brought to qualitative studies, to reduce researcher bias and increase the possibility of corroboration of the study's findings by others (Patton, 2002). Ensuring that the participants' voices, rather than the researcher's, are heard is an essential component of establishing trustworthiness. Increasing the confirmability of findings via various strategies aided in accomplishing this (Lincoln & Guba, 1985). An audit trail (Denzin & Lincoln, 2000) was used to outline the research steps taken to obtain and analyze the data for my study. In particular, the Data Collection Timeline (see template in Appendix P) was used to track the various types of data gathered, as well as the dates and locations of my data collection. The analysis worksheets allowed me to organize themes and rate the significance of my findings based on worksheets previously used successfully in qualitative studies (Stake, 1995). Furthermore, the confirmability of my findings was increased by triangulating the data I obtained. Interviews, documents, timelines, multimedia sources and exploring three cases served this purpose (Stake, 1995; Yin, 2009).

Credibility

The credibility of a study refers to the extent that the data collected is confirmed as understood and recorded correctly by the researcher (Lincoln & Guba, 1985). Applying strategies to increase the credibility of my study allowed me to increase its overall reliability, ensuring that other researchers could repeat my investigation with similar outcomes (Patton,

2001). Therefore, triangulation of data within cases and including multiple cases ($N = 3$) increased the credibility of my findings. Additionally, member-checking was offered to all participants to verify the credibility of findings. By allowing participants to ensure that I represented their input correctly, the data on which I based my findings increased in its credibility (Lincoln & Guba, 1985). I used debriefing to increase further the credibility, and ultimately, the trustworthiness of my study, as my committee members reviewed my work numerous times.

Transferability

Transferability relates to the degree to which a study's findings can be applied to other settings or situations (Lincoln & Guba, 1985). To increase transferability of findings, I provided a detailed description of the design and a rich description of findings (Yin, 2009). Maximum variation sampling was employed to contribute to the transferability as well (Creswell, 2013; Stake, 1995). The variation in sampling was found in the region the NBPs were located, the number of years the preschools had been in operation, the number of faculty, staff, and students per school, as well as the use, or lack of use of permanent structures (a building, a trailer, or a yurt, for example) used by each school.

Dependability

Dependability addresses the extent to which a study can be replicated with similar outcomes (Lincoln & Guba, 1985). An audit was used to establish the dependability of my study. The audit was conducted by my dissertation committee members, experienced university professors, all with doctoral degrees, as part of their review of my dissertation. This allowed me to gather feedback regarding my interpretation of the data. Additionally, an audit revealed if more gathering of data was needed (Lincoln & Guba, 1985).

Ethical Considerations

In order to address any ethical concerns that could have arisen at any point in this study, approval from Liberty University's Institutional Review Board (IRB) and informed consent forms from the site and the participants was obtained before collecting any data (see consent form in Appendix Q and Participants' Confirmations in Appendices R, S, and T). In order to enable potential participants to make an informed choice when considering participating in this study, the purpose of the study (i.e., to develop recommendations for establishing and operating NBPs) was disclosed to all participants (Schaffer, 2009).

Additionally, copies of interview transcripts were emailed to participants and, while primarily used to increase the trustworthiness of the data, member checking was employed to allow the participants to ensure that their statements were accurately recorded and represented in the findings. On September 7, 2015, interview participants were sent a transcript of their interview and asked to respond with any questions or concerns. Ms. Blake responded the next day, stating her intention of reading the transcript and responding with any questions or concerns the following week. None of the participants responded with questions or concerns.

All physical data is under lock and key in a file cabinet in my home, and any digital data is kept on a password protected computer and/or phone for three years as required by Liberty University's IRB to ensure the privacy of the participants' responses. The use of pseudonyms was offered to all participants and sites. All but one of the participants and sites chose to use their real names in the research process, potentially creating conversations with others interested in starting or operating a NBP, as well as create positive publicity for the research site. Participants were assured that they could decline participation or withdraw from the study at any time (Creswell, 2013; Stake, 1995).

Summary

This multiple case study was designed to allow for an in-depth exploration of the phenomenon of NBPs' founders' and directors' experiences starting and operating such a school. The three NBPs included in this study met the delimiting criteria of being a NBP in the Eastern US, utilizing a play-based curriculum, and spending school days in natural environments for approximately three hours each school day. Data was collected from NPB founders and directors via semi-structured interviews as well as through the review and analysis of any documents about the process of starting and operating an NBP (Creswell, 2013; Stake, 1995; Yin, 2009). Additionally, participants were asked to provide a timeline of their NBP founding or operating experience.

Data was analyzed within and across cases using categorical aggregation and direct interpretation. The study's trustworthiness was established by ensuring the components of credibility, dependability, transferability, and conformability were addressed (Creswell, 2013; Lincoln & Guba, 1985; Stake, 1995). Ethical concerns, including the protection of participants from any undue stress and publication of confidential data, were addressed via various measures. First and foremost, no data collection occurred until IRB approval was obtained. In order to protect the data once it had been gathered, all interview transcripts were stored on a password-protected computer. Any physical data was kept in a locked file cabinet in my home. The use of pseudonyms was offered to all participants, who were also informed that they could cease their participation at any time (Creswell, 2013; Stake, 1995).

CHAPTER FOUR: FINDINGS

Overview

An increase in childhood obesity, attention issue/s, and social skill problems has been well-documented in the literature (Chung et al., 2012; Kimbro et al., 2011; Niederer et al. 2011; Runco & Acar, 2012; Tandon et al., 2012a; Wu, 2013). Spending time in nature has been found to remedy many of these problems in young children (Ann-Atchley et al., 2012; Bowler et al., 2010; Carrus et al., 2012; Dowdell et al., 2011; Gustafsson et al., 2012; Kaplan, 1995; Knowles, Ridgers, & Sayers, 2012; Nedovic & Morrissey, 2013; Taylor & Kuo, 2009; van den Berg & van den Berg, 2010; Weng & Chiang, 2014). The purpose of this multiple case study was to develop a deep understanding of the challenges and successes experienced by NBP founders and directors. In order to develop this understanding, I posed the following, primary research question:

1. What can be learned from the challenges and successes experienced by founders and directors of NBPs in the United States (US)?

Additionally, I developed the following sub-questions derived from the central question to increase further my understanding of the phenomenon (Creswell, 2013):

1. What successes do preschool founders and directors experience when establishing and operating NBPs in the US?
2. What contributes to the successes preschool founders and directors experience when establishing and operating NBPs in the US?
3. What challenges do preschool founders and directors experience when establishing and operating NBPs in the US?

4. In what ways do preschool founders and directors overcome challenges to establishing and operating NBPs?

Cases

After completing an extensive internet search and generating a list of potential NBPs, I contacted the four NBPs closest to my location geographically. Three of the NPBs I contacted were enthusiastic about talking with me while one school expressed reluctance. That school later declined to participate due to the transition from a preschool to a summer camp only.

In addition to conducting interviews at all three of my chosen settings, I gathered timelines and publically available information, ensuring triangulation of data (Stake, 2006). Below, I begin with an in-depth description of each site to provide a feeling of "being there" (Stake, 1995, p.63), and conclude with a synthesis of my findings**.**

Case 1 TKG

TKG in northern North Carolina is a non-denominational, NBP. It served children ages three to five. MK founded TKG in 2014 with four students. MK was a wife and mother who has taught adult computer classes, elementary school grades K-6, and preschool. She has also owned her own consulting company. MK's impetus to start an NBP was losing her teaching position in August 2013. She reiterated this in her interview and listed this job loss as the first event on the timeline she completed for this study. On MK's website, this lead teacher and founder described herself as an outdoor person who loves teaching. She listed her credentials as having taught for more than twenty years and as being certified as an Environmental Educator. Upon meeting MK at her preschool, one morning in June 2015, she was dressed in shorts, a t-shirt, and hiking boots, looking the part of an outdoor person. Later in her interview, she confirmed loving the outdoors. When asked about the frequency with which she spent time in nature, she laughed and

responded, “Every day.” MK’s co-teacher, who was also her sister, was dressed similarly, and shared her sister’s love for nature and teaching. While she did not have her Environmental Educator certification yet, MK’s sister was taking classes at the time of my visit to obtain it. The lack of certification did not appear to keep her from sharing her wealth of nature knowledge. Throughout the school day, she identified plants and animals for her students, explained a worm’s diet, built bug habitats, and explored insects with the children. In addition to working at TKG, MK’s sister often left for her second job as a swim instructor right after the preschool day ended. Having taught using the Reggio Emilia approach in the past, MK’s sister applied principles of this teaching philosophy, such as child interest-based projects, within TKG’s NBP.

During her interview, MK explained that she had always been interested in becoming a teacher. When asked whether MK considered herself a leader, she answered, “I am a leader by default,” citing being a teacher as a leadership position in a classroom. While answering a second question about her leadership skills, MK expressed wanting to start a NBP “on a whim,” and that she “just sort of went down that road…” While MK reported that she did not prefer to take on the role of administrator and director, she acknowledged the necessity of stepping into that role to ensure the school’s success. During my observations, MK competently fulfilled her role of administrator, as when updating the school’s website, but she seemed most joyful when working with the children out in the woods.

MK responded to questions about her childhood and the role nature-experiences played by mentioning her mother’s love of the outdoors. MK credited being sent to Wilderness Adventure camps as a teenager for igniting her love for the outdoors. Talking with the family of a student, she worked with prior to opening her NBP, exposed her to the concept of nature-preschool for the first time. After her student moved to Oregon, she stayed in touch with the

child and her family. During their communications, she heard that her former student was now enrolled in a nature school in Oregon, causing MK to look up further information about the NBP concept. In addition to reading articles about nature preschools, she read Richard Louv's Last Child in the Woods.

Following her decision to open an NBP, MK noted on her timeline and explained in her interview that she rented a classroom in her home church in September 2013. She also attended a workshop on rules and regulations about preschool licensure in North Carolina and learned that the insurance required for NBPs did not differ from that of traditional preschools. MK expressed during her interview that she was surprised that even when she revealed to the agencies that the children would spend at least 90% of their day outside, the licensure and insurance requirements did not change. After offering week-long summer camps in June of 2014, MK started her NBP school year in August 2014 with four students. She excitedly shared during her interview that for August 2015, her student roster was already full with her ideal number of students per classroom; twelve. She considered opening a second class to accommodate students that would arrive once the school year had officially started and appeared ecstatic about her preschool's growth.

Regarding the mission and purpose of her school, MK acknowledged her desire to foster nature appreciation in her students: "So that our goal is to get kids more involved in nature. And also, sustainability. For gardening –where is our food coming from?" She also described the physical benefits she believes her students will glean from spending times outdoors: "Get your child involved in this, to get them outside, it's healthier. For your brains, for your bones, for every aspect of your being, it's healthier to be out." MK's statements aligned with the information found on her school's website as well as the observations I made while visiting her school. Weather that would warrant the students moving to the indoor classroom included

lightning or temperatures that put the children at risk for heat stroke or hypothermia. MK's school followed its county's public school schedule for weather-related closings. However, as emphasized in her interview and during my observations, TKG appeared to be such a part of MK that she even opened her NBP during snow days, if the roads allowed her to drive to TKG safely.

With regard to the marketing aspect of setting up and running her NBP, MK explained that word-of-mouth was the most efficient way to promote her school. An expensive advertisement for her school in a magazine produced no enrollments. However, former students' parents heard about MK's new school and enrolled their children. MK cited social media as another valuable tool for creating interest in her school. In addition to her Facebook page, MK designed and maintained her NBP's website.

Upon arriving at the TKG site, I noticed the woods surrounding the church building which housed the classroom in which this NBPs' students assembled to start the day. The church was tucked away behind another building at the end of a long driveway that connected to a busy street. However, the forest surrounding the church blocked the road noise and let it appear like an oasis in this busy North Carolina city. On this particular June morning when I arrived at TKG, the temperature was already 90 degrees and climbing steadily to over one hundred degrees in the afternoon. Upon approaching the indoor classroom, I could hear the NBP's owner and her co-teacher and sister discussing the morning's activities, laughing and appearing joyful. MK stressed in her interview that one of the greatest benefits of owning an NBP was being able to spend time with her sister, "I love her methods of teaching, and her creative ideas. That has been one of the most enjoyable things is getting to work with her, and getting to work with these kids, and owning a school," an assertion that appeared supported by the positive interactions I observed.

This typical day at TKG began in a relaxed manner. The students arrived between 8:50 and 9:30 a.m. at their classroom. This flexible arrival time, with some students arriving even after 9:30 a.m. was indicative of the non-judgmental attitude also seen in MK's interview responses. Describing her philosophy of treating children with respect she said, "… we don't humiliate." That morning, one of the teachers offers a planned "table top" activity, an optional, high-interest activity at the preschool classrooms table that children can participate in while waiting for other classmates to arrive. MK described the process of developing the materials used in her preschool as intuitive: "I've just had so many years of teaching preschool that I knew, kind of, from that, and I knew the curriculum and that I needed to accomplish. What I had to work with and my sister has been key in this, in making it more nature-based." That day's particular activity was related to the current topic the class was studying. Since it was bug week, the teacher poured dirt and worms onto a tray for children to observe. While her students were touching the worms and picking them up, the teacher explained that those worms were like the worms found in the woods by students and teachers the previous day. After activating their prior knowledge and asking them to recall that experience, the teacher explained what the worms liked to eat. She then talked about the worms' appropriate habitat. Both teachers encouraged each child to build a mini-worm habitat in a plastic container to take home at the end of the day but did not insist that children participate.

In addition to the table top activity, students also had the choice to engage in free play in the classroom. Open-ended toys, such as doll houses and a kitchen area were readily available. As children began to play, they could be overheard negotiating for toys by asking how long it would be until the other may have the toy. After a few minutes, the children switched toys. The

question of "How many minutes?" could be heard several times throughout the day, resulting in sharing without adult intervention.

A book corner and a place to store lunch boxes and backpacks also existed. By the door leading to the playground sat a large bucket full of boots. Some of the children changed into boots while others were more comfortable removing their shoes for the time being. As more children arrived and joined their friends in the classroom, the teachers continued to talk about the table top activity, chatted with parents about lunch items possibly lost the previous day, and discussed any questions the parents had.

Once all of the students had arrived, the children were asked to join one of their teachers in the book corner, while some chose to clean up the table top activity. The children read a book about bees, a topic they recently studied. Rather than reading the text word-for-word, the teacher pointed to the pictures of the bees and explained their characteristics and purpose. While she was reading the story, the teacher passed out plastic models of a bee and its various stages of development, as well as plastic bee body parts. The children handled these materials quietly and passed them to other students as the story was read. As one child became restless, the teachers made eye contact, and the lead teacher called the child over to help her with cleaning up. He readily got up and talked to the teacher in a whisper while assisting her with wiping the table.

After the children independently used the restroom, located off the church's hallway, they lined up at the back door that led to the playground and garden. Once all classmates assembled, the children and teachers walked outside. Once outside, the children ran to the playground that was about 50 yards away. Some rolled sideways down the small, grassy hill leading to the playground, while others preferred to run or walk using the concrete pathway. The children entered the fenced playground once the teachers arrived at the unlocked gate. Inside the

playground area were a swing set, sandbox, and picnic tables. Several of the preschoolers headed towards a tree about 15 feet in height and began to climb it. The teachers placed the children's snacks and drinks, which they had brought from the classroom, on a picnic table and then began to chat briefly about the surroundings and weather. As the children played, one teacher checked on the ones in the climbing tree. The teacher encouraged those children who asked for help reaching more than the 4-6 foot height of the tree where they already were, to try and climb higher. After about 15 minutes, the students were asked to eat their snack at the picnic table. This was also one of the frequent times that day students were reminded to drink water to stay hydrated. While water was the only drink brought to school, the children's snacks varied from gluten-free and organic to processed foods. However, the teachers did not comment or evaluate their students' food, but rather chatted with the children about the birds that could be heard in the trees above the playground. One of the teachers asked a student what the bird was that he heard. The child smiled and said, "A crow, an American Crow!" The teacher confirmed the student's answer as correct and then used her iPhone's bird identification app to play the American Crow's sounds for the other students. As TKG's goal according to its promotional literature and nature was to develop appreciation for nature, this student's interest in birds demonstrated the support of that mission. Additionally, it represented what MK considered one of the greatest successes of operating an NBP, "And I love children walking out of here with, a greater appreciation and respect for nature, for garden, for everything outdoors."

After snack time, some of the children resumed playing on the swing and in the tree, while others participated in an optional parachute activity. Each student held one of the colorful parachutes loops to move a cloth doll, placed in the middle of the parachute, up and down. More children joined the activity until all children were engaged in the parachute game. As the activity

became exuberant, one student jumped into the middle of the parachute, sat down, and began to laugh. While the other children were dumbfounded at the sudden stop to their game, the teacher calmly acknowledged that the child was having fun sitting in the middle. She then asked him to observe his friends faces and determine whether he believed they were having fun. When the students answered, "no," she asked him to move off the parachute so they all could have fun together. The child quickly moved off the parachute, and the gameplay resumed. Situations in which the teachers evoked empathy to help their students understand the effect of their actions on others occurred several times throughout the day. Each time, empathy was induced in a manner that demonstrated respect for the child who was working on understanding the significance of her/her behavior on others.

Following playground time, the children walked around to a side of the church, where a large, fenced-in garden was found. The garden held at least ten raised garden beds. The students found their particular raised bed in the garden to observe the vegetables they had planted. The children watered a church member's vegetable bed due to its owner being on vacation. The teachers provided a commentary on the activity and explained its purpose. The teacher noted that food from the preschool's garden was donated to a local food pantry for those in need. Once the garden had been watered, the students and teachers crossed the small church parking lot into a wooded area of about five acres. A wagon held students' water bottles and other materials needed for the day's activities. Some of the children chose to walk or run the "long way" with the teacher to accommodate the wagon, while others ran through a garden gate at the beginning of the forest, choosing the steeper route. A small dirt path led through trees to an area of the woods that contained this NBP's outdoor center areas.

A teepee created out of large sticks served as a reading area and contained a basket of books and some tree stumps to sit on. The science area consisted of a small wooden bench and a plastic tub while the construction area contained "loose parts," such as plastic pipes, wood planks, and tools such as pliers. The mud kitchen, an upcycled feeding trough, served as the cooking center and contained pots and pans as well as a gallon jug filled with water. A child-sized picnic table and a basket of writing utensils and paper provided the writing nook. The art center consisted of paper, paints, and lines on which to hang finished paintings to dry.

A dirt path led around all of the centers and through the adjacent woods. The children were free to roam through the five acres of woods, or to play in the centers. One of the teachers supplied a science activity about a high-interest topic in the science area while the other teacher offered a related art project near the art center. Most of the children participated in at least one of the activities, but spent their remaining time in the forest running, climbing, balancing, and moving from center to center. Observing the children participate in the projects based on their interests, mirrored what MK expressed during her interview in this regard. MK described her approach to the daily routine as based on "how our day goes." She mentioned being responsive to the children's interests and switching unit of study whenever the children's interest waned. Some of the day's activities were determined by the weather as well. MK noted that she aimed to be in the forest at a certain time based on how hot or cold it is outside. She cited "just thinking about, talking about how we want our day to flow," as the way she and her co-teacher determined the daily routine.

Throughout the day, teachers provided information to the children's questions, and the students were delighted to talk about and find the plants and animals whose names they knew. Light filtered through the trees creating a beautiful, serene play space in which the children engaged in

activities of their choice for almost two hours, until it was time to go back to the indoor classroom. In order to assess her students' development throughout the year, MK used a portfolio approach, starting with the students' self-portraits at the beginning of the school year. She described adding other student artifacts to the portfolio as students' progress throughout the school year and stated that worksheets were not part of the portfolios or her curriculum in general. An assessment created by MK and her co-teacher guided the evaluation of children's social, emotional, and academic skills throughout the year. Parents were informed of their child's progress via a mid-year conference, and MK emphasized however that she and her co-teacher were available at any point if parents desired to speak to them about their child's progress. She mentioned appreciating parents sharing about any special education services their child receives outside of school and sought out collaboration with occupational or speech therapists "so we can make it consistent with what they're doing here, so it will help, better help their progression."

At the end of this NBP day, all of the children helped clean up the forest play space, returning items to the centers in which they belonged. Students helped to fill the wagon with items that needed to be brought back inside, such as the now empty mud kitchen water container and toys brought from the classroom. Upon returning to the church building, the children used the bathroom and washed their hands. Afterward, they joined their teachers at the table to resume the lunch brought from home. During lunch, the children engaged with each other and their teachers, telling jokes and talking about the day's discoveries at the playground, garden, and forest. After cleaning up from lunch, the children played freely in the classroom until their parents arrived between 1-1:15 p.m. Even parents who arrived after the official pick-up time, stayed up to twenty minutes to chat with the teachers and other parents while their children (and those students' younger siblings) played in the classroom. The teachers also demonstrated their

easy-going attitude while interacting with parents before or after school. Based on my observations, the teachers spoke with parents honestly about their children, while maintaining an attitude focused on the maintenance of a positive relationship with both parents and students. Even while talking about challenges related to the founding and operating an NBP, MK's positive attitude prevailed. An example was MK's response to a failed ad campaign: "And the return was…live and learn."

One parent wondered why his child did not have a worm habitat to take home. The student did not respond to his parent, so the teacher explained matter-of-factly that the child chose not to create one but could create a habitat the next day if he would like. The parent nodded and began to talk to his toddler, also in the classroom, about leaving for home.

Case 2 Primitive Pursuits Ithaca Forest Preschool

Ithaca Forest Preschool is located in Ithaca, NY. Two lead teachers facilitated this outdoor preschool classroom of fourteen students ages three to five years of age. Children spent the entire three hours of each school day outdoors in a wooded setting on Primitive Pursuits' 4-H Acres grounds. Since the school's inception in 2013, preschoolers have been assembling on the school grounds on weekday mornings. On this rainy and unusually cold, 50 degree July morning, students arrived between 8:30 a.m. and 9:15 a.m., meeting their teachers at the large oak on the expansive green meadow. Several of the teachers engaged in conversations with parents during this drop-off time, underscoring the importance of communication with parents both Ms. Blake and Mr. Drake emphasized during their interviews with me. For example, when talking about how he gathered input about starting an NBP Mr. Drake stated, "I always tried to get feedback from the people that we are going to be doing this for." Ms. Blake described the importance of

communicating with parents during her interview, stressing the leadership skills that prepared her for the NBP director role, “Communicate, a lot of communication with parents, also.”

While waiting for their classmates to arrive, impromptu games of tag and hide-and-seek passed the time. Allowing students to take initiative and choose their own activity during wait times, while some of the teachers played along while others observed the free play, aligned with the child-centered focus of the program. Mr. Drake related the importance of children’s interests influencing curriculum decisions in his interview with me, a foundation of this NBP program. I also found explained throughout the preschool brochures and online media published by Primitive Pursuits, by saying that the curriculum is “influenced with decisions that can only be made in the moment.”

The backpacks, which contained lunch and snack, as well as water were stored under a large oak tree to keep them from getting soaked in the rain. Once all of the children had arrived, the day typically began with circle time near the oak tree. The students and their two lead teachers and two assistants were dressed in boots and raincoats. While all of the children were encouraged to attend the circle time group activity, some chose not to participate and were allowed to do so as long as they were not disruptive and within sight of the teacher. A welcome song, greeting each child individually was sung, followed by native songs from various cultures. By exposing children to music from other people groups, PPIFP demonstrated its adherence to its foundational value of connecting with others and those who have *gone before us*. Mr. Drake also mentioned connecting children to nature as a core value of his NBP program, stating, “Well, our mission statement says to steward the health of our community, by fostering life-long relationships between participants and the natural world.”

While still standing in a circle, one of the instructors asked the children to guess what he had hidden in his hands. After a few students guessed, he revealed the snails observed climbing a tree that morning by several of the children. After discussing the various characteristics of the slug and naming it, the teacher made a point in telling the students that it was time for the snail to be returned to its original habitat. The teacher's initiative to share during circle time what children had become excited about during arrival time again demonstrated the preschool's value, explained in the school's publications both in print and online, that education should be interest-driven. Additionally, the instructor embodied one of school's core values listed on its website, of taking care of the earth. At the conclusion of circle time, the students gathered their belongings and met their teachers at the entrance to the forest. Together, the group of four girls and ten boys walked to their classroom at the bottom of a wooded hill. After crossing a bridge over a small creek, the forest opened up a little to reveal a space, approximately 60 by 80 feet that served as the NBPs classroom. A wooden pavilion provided a small pantry in which the students' extra clothes and shoes were stored. There was also a potty chair, for students to use who preferred not to use the woods behind the pavilion to relieve themselves. Across from the pavilion was a fire pit, surrounded by logs on which the children sat during snack and lunch times. These shared meal times in the outdoors aligned with the school's mission of nurturing connections to self, others, and nature. Several trees connected by a string, guided children on quiet walks as some attempted to navigate the area with their eyes closed. While no commercial toys were present in this forest space, teachers stored several colanders, ladles, and a large stainless steel pot in the pavilion for children to use. Additionally, teachers provided scarves for dancing and pretend play, and students and instructors used a table to display nature finds important to the children, such as acorns or leaves. A few wooden baskets rounded out the supplies available to the

preschoolers. A popular feature in this nature classroom was a large log, about 20 feet in height that had fallen vertically down a steep hill. As they entered the nature classroom area, some of the children began scrambling up the tree, slipping and sliding in the mud surrounding the fallen log. Their teacher, Melissa Blake calmly walked behind her students, ready to catch any children that slid down the hill dangerously fast, but without assisting them in reaching the top of the hill. During her interview, Ms. Blake described her experience assessing risks and benefits of outdoor activities, something she appeared to employ in the log climbing scenario. During her interview, she also related her expertise in risk assessment, noting, "And, I [am] pretty highly trained in risk management in a wilderness setting. And so from that background, I believe that you can't possibly make a rule for every situation that might occur."

It was also evident that Ms. Blake implemented what PPIFP's parent handbook noted as one of the school's values: believing children are inherently competent. Once the students reached the top of the steep hill, Ms. Blake asked the children to wait for all others who were climbing the log before moving any further. From there, the group walked on a path through the forest and passed a tepee, a camp site, and an empty horse riding ring. The preschoolers climbed over logs and navigated narrow paths down the hill, prior to arriving back at their classroom's pavilion.

At the same time, some of the other students played in the creek, supervised by another teacher, or a 4-H intern, one of several who often accompanied the class. Those children worked on catching crawfish, building homes for crawfish, or collecting rocks, and arranging them into interesting patterns. Other children were sitting on a log that served as a sort of see-saw, as it fell across another log. After about an hour of free play, the children were asked to the pavilion to gather snack items from their backpacks stored there. Everyone assembled around the fire pit,

sitting on logs and eating snacks. The lead teacher told a story in an animated way, using the inflection in her voice to add drama and interest to the nature story she was telling the children. Since storytelling was listed as one of the core routines on PPIFP's website and in its parent handbook, it was employed often during the school day. At the story's conclusion, the students asked for more stories, and the teacher complied, extending storytelling and snack time to almost an hour. The children remained enthralled with the stories and were excited to learn that they would have visitors to their classroom that afternoon.

The lead teacher explained that in order to be hospitable, the class would collect edible plants from the forest and prepare tea for their guests. By involving the children in selecting these natural, edible plants, teachers encouraged their students to connect with nature, one of PPIFP's core values, listed on its website and mentioned by both Mr. Drake and Ms. Blake in their interviews. Ms. Blake remarked, "So that's our basis. We call what we do "deep nature connection." Mr. Drake supported the nature connection value by stating, "It's about a personal relationship with the natural world." The students were excited about their mystery guests and quickly cleaned up from snack time. One child quietly refused to clean up her snack items, and the teachers left her items after encouraging her to put them away.

After snack, some of the children chose to go with one of the teachers to collect mint leaves and clover for the planned tea, while others went back to climbing trees and playing in the creek. A hike to the horse pasture led to patches of clover the children collected in their wooden baskets. To collect the mint leaves, the group hiked to one of the 4-H buildings where mint leaves grew near a window. Several of the children sampled the mint leaves after their teachers reminded them how to identify mint. The children noted that the leaves tasted like toothpaste.

This activity aligned with the school's website mention of sensory awareness activities being a core routine of the program, which was also noted in the NBP's parent handbook.

At the classroom site, children collected sticks, supplementing what had already been collected by them previously in a kindling box. The teacher guided the students to find sticks that were dry enough for the fire by asking them to listen to the correct *snap* noise fire-ready branches would make. The group gathered around the fire pit, and the teacher lit the fire. The children began gently blowing into the fire to allow it to burn brighter. While being close to the fire, none of the children attempted to touch the flames. Ms. Blake noted the importance of teaching awareness rather than fear, a principle that appeared to have been put into action as the children acted calm, but responsible around the fire. She believed that, "It's good to minimize the number of rules we are giving them." Additionally, the school's core value of teaching primitive skills, cited in all its literature and online presence, was demonstrated by the teachers. They explained the various ways to build a fire, how to keep a fire burning, and how to make it burn more brightly.

Once the group of students with the tea leaves arrived, the teacher filled the pot previously used for creek play with drinking water and set it on the fire. The students pulled the flowers off the clover they collected and added their mint leaves and clover blossoms to the water. As the water began to boil, the teacher took the pot off the fire and moved it to a primitive table close to the fire pit. There, he added honey to sweeten the tea. As the expected visitors were delayed, the teachers asked the children to bring their cups to him to fill with tea, if they would like to try. All of the children did so and gathered around the pot, awaiting their tea, which the teacher sifted through a small colander, prior to giving it to the children. The preschoolers sat around the fire on this cold and rainy day, sipping their tea and commenting on their drink's

flavor and temperature. The visitors (a class of older children participating in a Primitive Pursuits summer camp) only stopped by briefly before disappearing back into the forest. After consuming their tea, the teachers facilitated a play where each child chose a character to represent as they acted out a fable. The students acted out the story several times, before resuming free play in their nature classroom.

Following about twenty minutes of playtime, the teachers asked the children to retrieve their lunch items and to gather around the fire to eat lunch. The teachers told stories as the children consumed their food. After lunch, the children put away their lunch bags and cleaned up their classroom by returning the pots and colanders to the pavilion's pantry. Once the forest was restored to its condition prior to the class's arrival, the group gathered at the base of the bridge and then hiked back to the meadow where their day began. Parents arrived between 1:00 and 1:15 p.m. and stayed for several minutes chatting with teachers and other parents, prior to departing for the day.

Once the students and parents had left, one of the teachers led a meditative exercise to calm bodies and spirits after an exciting day with the children. After completing this activity, the teacher asked his co-teacher and the visiting practicum students to reflect on their best and least enjoyable experiences of the school day. Upon each person voicing their joys and concerns, the group brainstormed solutions to the concerns and discussed how to evoke more positive experiences like the ones shared that day. This activity of voicing gratefulness aligned with Jon Young's Core Routines described by both Ms. Blake and Mr. Drake as one of the foundations of their NBP. Once the teachers concluded their reflection session, they parted ways to go to their various other job and personal commitments, signaling the end of the NBP school day.

Case 3 The Waldorf School of Saratoga Springs Forest Kindergarten

The Waldorf School of Saratoga Springs was located in New York and served children ages three to six in their forest kindergarten. Twenty-plus students attended this outdoor preschool for three or more hours daily, Monday through Friday. A lead teacher and one assistant facilitated the nature preschool classroom. Students assisted with meal preparation and consumed their snack while at school.

After turning off a busy street, an oasis of green opened up while I drove down the street through Saratoga Springs State Park. This NBP's site, located within the park, was secured in 2008 by Ms. Scharff's collaboration with State Park representatives. Ms. Scharff described the initial steps toward this collaboration by saying, "I thought here they have all this land. Maybe there's some little corner of land that they might have that we could use." Her timeline also named collaborating with State Park representatives as one of the first events facilitating the opening of Ms. Scharff's NBP, noting that in October 2008 she, "Wrote proposal to the state park and met with them to see if they would be interested in having us form a Preschool/Kindergarten group using state land."

Arriving at the home of the Forest Kindergarten of the Waldorf School of Saratoga Springs, the old farmhouse that sat at the beginning of the 300-plus acres space rented by the school from the state park, looked old but cozy. A large, blacktopped parking area allowed for several cars to park and move in and out of the property easily. A tenant occupied the upstairs of the farmhouse, while the NBP used the downstairs for cooking, having lunch and snack, and if weather conditions outside were extreme, as in the case of thunderstorms, for example. A small room served as storage for the identical-looking, waterproof overalls and rubber boots each student keeps at school. Another large family room housed wooden toys, a large rug, and a

couple of chairs. The kitchen, while basic and older-looking, was equipped with everything needed for children and teachers to fix their daily lunches and snacks together. In an adjacent room, a large table with benches all around it provided an area where the children and teachers shared the meals they cook together. On one side of the room, a large open shelf contained the students' tin drinking cups and other reusable dishes. The atmosphere in the farmhouse was one of calm and simplicity, aligning with the Waldorf philosophy explained on the school's website, as well as Ms. Scharff's confirming the Waldorf curriculum as the one utilized at this NBP, "But the ideas and the ideals are still based in the Waldorf education curriculum." Once outside, the large fenced-in garden-plot and chicken coop caught one's eye. The coop was home to four chickens, cared for by students during the school year. The children also tended the garden when school was in session. A fire pit in the middle of a flat, grassy area near the garden was surrounded by logs for sitting, and two wooden picnic tables with benches were nearby. An area to the left of the farmhouse was sectioned off using small logs, which allowed this NBP's youngest students to remain in a more defined space while on the grassy area. Next to that area, a pizza oven, built by elementary school students was covered by a tarp due to not being in use at the time. Another elementary school project from which the preschoolers benefit was a hole dug about two feet into the ground and covered by a wooden roof, which was propped up on wood posts to serve as the opening to the small cave. Evidence of the preschoolers' projects could be seen throughout the meadow and its various features. Child-created bird houses and wind chimes decorated the picnic tables and trees while a small shed housed multiple child-sized wheelbarrows, buckets, and other gardening equipment. The real-world materials and open-ended natural wood toys, all aligned with the Waldorf educational model described on the

school's website, in the media, and by Ms. Scharff, "Again, they're very much based on what one would want in a Waldorf education…"

The farmhouse and meadow were surrounded on three sides by forest. In addition to working on meal preparation, garden chores, and animal caretaking, the children spent the majority of their time at school in these woods. There were three distinct pathways, named the Mama Bear, Papa Bear, and Baby Bear trails. The Baby Bear Trail was most popular with the youngest preschoolers, as it was the shortest. After walking through the dense forest for about 50 feet, one arrived at the Baby Bears' main "classroom area." Wide, but close to the ground, moss-covered rock formations served as climbing spaces for students, while a homemade teepee demonstrated the children's building abilities and was used for imaginative play. The wooded surroundings and absence of commercial toys matched Ms. Scharff's mention of one of the motivations for starting her NBP, "the other inspiration, of course, comes from the fact that children don't have enough experience of nature and physically moving in nature." WSSSFK's website further supports the notion of nature connectedness by stating, "Nature is front and center in the FK experience." Fallen trees functioned as balancing beams as well as seating. No commercial toys could be seen and there appeared to be no items, other than natural ones, in the forest for student use for play. The Mama Bear and Papa Bear paths featured very similar landscaping but were longer than the Baby Bear path. Older children often preferred to play along those longer paths, while the three-year-olds preferred the shorter path.

Themes

The purpose of this study was to understand the challenges and successes faced by NBP founders and directors in the US. As Stake (2006) suggested, patterns in each case were discovered before conducting the analysis of findings across cases Therefore, each case was first

analyzed individually to answer this study's research questions Reviewing all interview transcripts, observational data, documents, and timelines served as the basis for each case's analysis (see Appendices U, V, and W for Visual Representation of Summary of Findings for Case 1, 2, and 3).

Merged findings from all cases arose that led to the discovery of patterns among cases. Those findings and patterns resulted in the development of this study's final assertions (see Summary of Research Question Findings from All Three Cases in Appendix X). Worksheets 3-7 (Appendices E-I) were used for this purpose. What follows is a summary of multiple answers to my research questions and a merging of my findings into assertions.

The first research question asked what are the successes experienced by founders and directors of NBPs in the US. Answers to this research question included growth of their schools, witnessing transformations in their students, building relationships, connectedness, and the community's response. The responses unique to the first research question are discussed below while RQ1 themes that also related to the primary research question are discussed in this chapter's summary.

Growth

The participants described growth in enrollment of their program as a highlight of their forest preschool operating experience. During all of the interviews, participants mentioned full enrollment of their preschool programs or expansion of their existing NBP. Additionally, all of the participants described the community response to their school, notably as growth of the school. MK remarked, "And then they started coming to us. And then we got a student that signed and then immediately brought their friends, so all of a sudden there was three more students." All participants stated the number of students enrolled and pointed out the full rosters

of their NBP classrooms, further supporting growth as an indicator of success for NBP founders and directors. Mr. Drake explained, "This last spring, we're in summer now, in the spring, we put out dates for the fall, and the rest of the year. And we had already filled, we have 10, we wanted 10 kids each day." Furthermore, two out of three sites' participants described the need for a second school location or classroom. MK talked excitedly about the possibility of a second classroom, saying, "But we're all ready for the fall; we've already filled ten spots, and then I've given three tours who wanna commit. So, I think we will open a second."

In order to feel successful in founding and operating an NBP in the US, their founders and directors must experience growth. An increase in enrollment as well as the addition of another classroom or setting indicated a positive outcome to NBP founders and directors. All participants mentioned the success indicator of growth. One of the participants related it this way when describing how she felt about an increase in student enrollment from the previous year, "Wow, I can rest easy this summer because I've already got the spots filled, so anything we do from here on is sort of icing on the cake."

Witnessing Transformations

Several of the participants provided data that indicated witnessing transformations as a form of success. Mr. Drake described the importance of this concept by saying, "It just, it also made sense to start working with families at a youngest age as possible because they will often become lifelong participants with us." Two of the participants, in particular, described their students' progression from shy and unsure of themselves in nature to being fully engaged with it. Both participants also mentioned those children's caregivers' reactions to this transformation. While all three cases supported this theme, it scored as having a low utility for WSSSFK. MK, Mr. Drake, and Ms. Blake all referred to witnessing transformations in their students as one of

the successes experienced as part of their NBP involvement. For example, MK relayed the story of a child whose father was initially skeptical of the NBP concept, “In the end when he sat there, big hulking man, sat at that table almost in tears how much his daughter had grown.” Ms. Scharff reported enjoying watching students transform as they learned in general, rather than specifically, in regard to nature, “The children need to really move and have, have gone through all these different particular movements all the way from birth, actually through their early childhood years in order to f—to build the foundation of academic learning.”

Connectedness

In a similar vein, connectedness to nature and others was an indicator of success for all three sites as all participants expressed their goal to develop nature connectedness in their students. Developing respectful connection with others, as well as a connection with oneself in the form of self-awareness were goals of two sites. MK stated, “They wanna go in and play video games. So, that our goal is to get kids more involved in nature.” Ms. Blake echoed MK’s sentiment by saying, “the goals of the preschool are to connect, to help children connect with themselves, very much like our kindness and respect—themselves, with other people, and community, with the earth, and also with ancestors.” Each sites’ website, also described this goal of connecting children to nature, which was further underscored in any literature about the schools. All of the participants wanted their students to appreciate nature in order to preserve it and live in harmony with it.

Community Response

All of the participants described the community response as an indicator of success experiences as a result of their NBP experience. Ms. Scharff mentioned her forest kindergarten boasting full enrollment at the beginning of its first year, “[We] had enough interest and we filled

the program, already the first year…" while MK relayed how parents in the community specifically seek the NBP experience for their children, "A majority of the parents are very, very much into it. And that, they're looking for that, seeking it out." PPIFP stakeholders also related the community's positive response to their NBP as an indicator of success. Ms. Blake described how a community member used her NBP as a basis for his school, "There was a childcare program, a cooperative childcare program, being coordinated by a good friend of Primitive Pursuits, um, that used us as a bit of a model."

Research questions two asked what factors contribute to the successes NBP founders and directors experience. Participants at all three sites contributed to the response to this question. The themes that emerged related to this research question were experience, adaptability, worldview, outlook, networking, commitment, and parent education. Those themes that were unique to RQ2 are described below, while experience and worldview will be discussed in-depth in this chapter's summary.

Adaptability

The concept of adaptability emerged when interviewing the participants and observing their interactions. All participants displayed a relaxed and calm attitude. I also observed the way the participants dealt with change in a flexible manner and positive manner. At two of the three sites, I witnessed the flow of the school day change to match the children's interests, to accommodate for weather patterns, and for ensuring the students' enjoyment of their time in nature. Additionally, all of the interview participants related times in which adaptability was required and used to ensure the successful outcome of a situation. Mr. Drake related adaptability to low enrollment during his NBP's first year of operation when the NBP was offered only once a week. Mr. Drake explained, "in the fall and we'd sort of tested it out, and said 'well, that

worked . . . okay . . . good.'" My observations at all three sites included examples of adaptability of the NBP founders and directors. At PPIFP, a student was upset about a minor injury, and the lead teacher asked another staff member to stay with him while the lead teacher left on a nature walk with the other children. At TKG teachers adapted the day to reduce gardening time in favor of playtime in the shady forest due to the extremely hot weather. WSSSFK allowed its students to choose which of the three wooded trails to spend time on each day, leading to teachers adapting their daily plans based on the interest of their students.

Outlook

All participants appeared to have a positive outlook and a firm belief in their students' ability to navigate the natural environment with appropriate adult supports. Ms. Blake acknowledged, "I believe that you can't possibly make a rule for every situation that might occur." She also demonstrated her faith in the children's abilities when allowing them to roast some of their lunch foods on an open fire. While she ensured another staff member was present at the campfire, I observed Ms. Blake remaining relaxed and upbeat. Additionally, all four participants expressed an attitude of trust in positive outcomes of their work and daily interactions with the children, appearing free of fear related to potential injuries due to the usage of mediums such as fire and sharp objects by their preschooler students. Ms. Scharff called the children's participation in outdoor chores such as chopping wood, "the opportunity to imitate healthy, good work that we need to do in our life." At TKG, I was able to observe this positive, fearless outlook when students began chasing each other through the forest. The teachers did not ask the children to slow down, or to be careful, despite the uneven terrain, but rather smiled and appeared to enjoy watching the children's active outdoor play.

Networking

Another factor for success described by all participants in various ways was networking. All founders and directors made connections with others that aided them in founding and operating their NBP. From securing the schools' locations to recruiting students for enrollment, networking appeared to be an important contributor to each school's success. All of the participants reported situations in which networking helped them advance their schools. For example, Ms. Scharff worked with the state park board that houses her school to use the park's land. Mr. Drake recalls networking to learn about NBPs, "we started our own school here, and our own program in Ithaca, and started connecting with other people doing very similar things."

Related to networking, all participants noted education of parents about the forest preschool concept as essential for NBP success. In particular, the interviews yielded information regarding the importance of educating caregivers on the differences between traditional and forest preschools and how to prepare for participating successfully in an NBP. Three out of four participants stressed parent education in regard to dressing children appropriately for the weather as especially important. Ithaca Forest Preschool, for example, held a yearly workshop for parents described by Ms. Blake as, "a two-hour workshop on how to dress young children for winter." My observations confirmed the prevalence of networking with parents, as MK and Ms. Blake spoke with parents before and after each school day about their child. Ms. Scharff also networked with parents, explaining how she surveyed parents of the Waldorf School of Saratoga Springs to determine interest in an NBP program, "We started with a survey of our own parents and to find out if they would be interested."

Commitment

Participants from all three sites exhibited a strong commitment to their mission of connecting children to nature. Two of the sites' websites were filled with information pertaining to this worldview while the third provided some information and various web links regarding the child-nature connection and its benefits. The observations at all three sites further underscored the commitment to providing children with learning experiences connected to nature. For example, at TKG, I observed children playing for hours in a wooded area, connecting with nature via bug collecting, identifying trees, and playing in the dirt. MK, TKG founder and director underscored this by referring to the preschool's mission as, "incorporating nature more into the learning so that kids aren't afraid to go outside anymore." Ms. Blake described PPIFP's commitment to the nature connection model by saying, "that's our basis . . . deep nature connection." Ms. Scharff expressed her preschool's dedication to connecting children with nature by relaying that school hours were extended to allow for extended time in the forest setting, "However, we recognized very quickly even before we opened the program that in order to really walk into the forest that we really wanted for the children, that it would need to be longer, a longer timeframe."

I observed all sites providing outdoor spaces with few, if any commercial toys and engaged in projects directly related to the environment in which students spent their school days. The participants emphasized the importance of taking care of nature to their students during my observation at two of the three sites, as there was a distinct atmosphere of respect in regard to nature and others, including the children. For example, when one of the children at PPIFP became upset after a minor injury, he was allowed to collect himself and rejoin the group when ready, without fear of punishment. MK stressed this concept of respect for others, self, and

nature by asserting, “We don’t humiliate. I don’t think you can ever teach a child anything by, ‘Look, look what she’s doing, that’s…not what you’re supposed to be doing at all.’” During my observations at all three sites, an alignment with the mission appeared to permeate all decisions and interactions regarding each NBP. At PPIFP, I observed the teachers naming animals and plants and describing their characteristics. MK and her co-teacher explained how to catch bugs for observation without hurting the animals. Ms. Scharff explained that children live out the school’s mission in part by “chopping vegetables, kneading the bread, working in the garden, chopping wood.”

Parent Education

Another contributor to the NBP stakeholders’ success was the emphasis on parent education, both formally and informally. Through conversations with parents or caregivers before and after school, participants from all three sites educated parents on their students’ daily successes and challenges while offering advice on addressing any issues. I observed Ms. Blake discussing with a mother her child’s propensity to invade other children’s personal space, generating solutions to the issue as they spoke. PPIFP also offered an orientation for parents at the beginning of each school year, educating them on the various NBP concepts, values, and routines. Additionally, PPIFP, in particular, hosted yearly, free community workshops educating caregivers on the best way to dress preschoolers for safe outdoor play in the winter. Ms. Blake further emphasized her frequent interactions with parents by saying, “Communicate, a lot of communication with parents, also. That’s a huge part of my job.” WSSSFK offered open house days when parents could tour the farmhouse and grounds of the NBP and learn about the teachers’ approach to curriculum and learning. TKG offered tours of its NBP by appointment in addition to checking in daily with parents, advising them on any NBP-related questions.

The challenges of which potential NBP stakeholders need to be aware are described below as a result of the exploration of difficulties this study's NBP founders and directors faced. The themes that emerged in response to the third research question included maintenance, multiple roles, funding, professional development, and recruiting.

Maintenance

One challenge all interview participants frequently related was maintaining the NBP setting. The participants described Poison Ivy as a major maintenance issue. Additionally, the participants named keeping trails free of debris, replacing natural materials, and maintaining the on-site structures used as a shelter in extreme weather, as challenging. TKG in particular specified having to replenish the wood chips and other pretend-play pieces of its outdoor mud kitchen almost daily, "We are always out there, replenishing the supplies of path markers. We gotta put more wood cookies on the, on the mud kitchen." Ms. Blake of PPIFP noted that a pavilion that didn't have to be shared with other groups would make maintaining the class' supplies easier, saying, "it's a shared space. So having our own weather, um, weather-proof space. Heated weather-proof space. Um, would be probably the biggest priority." When asked about her greatest challenges to directing and establishing her NBP's physical space, Ms. Scharff stated that the school's large garden required a lot of time and effort to maintain, "Keeping up with the weeding. (Laughs) And the garden."

Multiple Roles

Another challenge faced by NBP founders and directors at two of the three sites, noted by three out of four participants, was serving in multiple roles. In particular, taking on roles of teacher, director, and sometimes maintenance person, in addition to participating in events to promote the school and working on the school's finances was noted by the participants as

challenging. MK remarked how she built and maintained her website in addition to, “I’m telling you, I, every aspect. I clean the bathrooms, I vacuum the carpet, I teach the children, I run the business.” She communicated the impact of filling all of these roles by explaining, “It’s, it’s been a very busy year. I’m very, I’m going hoarse now. A wonderful year, and a big learning curve. Very big. Because I’m going from just being a teacher to director, administrator, and everything else.” Ms. Blake described her multiple roles as program director and lead teacher, “My role is, I have a dual role, as instructor and (Coughs) coordinator, program coordinator.” Ms. Scharff did not consider having multiple roles a huge challenge as it was housed under the patronage of the Waldorf School of Saratoga Springs’ administration, which relieved Ms. Scharff of some of the business related roles like filing taxes.

Funding

Participants from TKG and PPIFP mentioned funding of their school as a challenge. MK stressed how additional funds would allow her to create an even more appropriate outdoor space for her students and how that would allow her to pay herself a salary, “In my particular school, my salary is nill. Everything goes right back into the school.” Mr. Drake commented on the difficulty of hiring qualified staff with limited funding, “I’d say getting everything you’re looking for, for the rate you can afford to pay, is kind of what makes it the most challenging.” In addition to the interview with this participant, his school’s website demonstrated an emphasis on showing appreciation to and recruiting sponsors.

Professional Development

Challenges to finding time to plan and provide professional development were expressed by three of the four participants. Additionally, participants saw their schools’ rapid growth as a positive, but also challenging process. MK admitted not engaging in professional development at

this time because, “And it’s just the two of us. It’s hard. It’s not such a formal situation.” In particular, one participant mentioned the challenge of keeping the mission of the school paramount while lacking time to provide in-depth training on it, “we’ve been developing the program together. So, it’s, it’s something I would like to develop more as a staff training. But we don’t really have it yet.” Three of the participants who found professional development challenging expressed a desire to offer more educational opportunities for their staff in the future. Ms. Blake described her vision for professional development this way, “we haven’t, that I know of, like brought in any outside trainers or anything. But we, we’re working towards that. I’m planning to do a half-day training with the preschool staff this August; that’ll be a new thing.” MK planned to engage in professional development with her co-teacher by attending a conference for NBP leaders, noting, “So, I’m excited for the conference in August where we all get together.”

Recruiting

Another challenge described by participants at all three sites related to recruiting. WSSSFK experienced recruiting difficulties for the first time this year. Ms. Scharff explained, “For some reason we have [had a] harder time finding assistants this year for this new, coming year.” The three other participants revealed the difficulty of finding staff with a background in early childhood and nature education. Mr. Drake shared, “You may find only half of what you’re looking for in one instructor.” Additionally, one of the participants, MK at TKG, predicted an increase in paperwork and government regulations when hiring a benefitted employee as a challenge, “But once we get into an assistant, I am gonna have to start looking into a package that can, track hours, and tracks pay, and federal and state, taxes coming out.”

The fourth research question asked how NBP founders and directors overcome challenges related to founding and directing their schools. Findings for this research question were found and corroborated at all three sites, indicating experience, mission-focus, tenacity, commitment, collaboration, and outlook as themes mediating challenges NBP founders and directors encounter. The themes of tenacity and outlook are discussed below while a discussion of the themes overlapping with answers to this study's other research question, experience, mission-focus, and collaboration can be found in this chapter's summary.

Tenacity

Participants from all three sites demonstrated tenacity as a characteristic used to overcome challenges. MK of TKG for example continued to hold class even though she started the year with only four students, recalling, "And then the next one was a five day-er, I was like, 'We got three students!'" Mr. Drake solicited sponsors to help fund his school and sought out helpful contacts to find the school's second location. He described the effort involved in addressing the sponsor's needs, saying, "What's the language that funder's use and basically translating, so to make the [language], not just one voice…I mean it should be a unified message, at the same time." Per her timeline and interview, Ms. Scharff worked with state officials, preparing a proposal and collaborating with stakeholders until a setting for her NBP was secured. Student recruitment efforts also emphasized the tenacious spirit of the NBP founders and directors. In addition to offering outdoor preschool movie screenings, Mr. Drake remembered, "We put together little booklets for that, so a lot of sort of side door, peripheral kind of ways, at first." MK's tenacity was also evident throughout the student recruitment process, even when an investment in a magazine add yielded few results. MK continued to find ways to advertise her

school, by hanging up flyers in public places, for example, “But just roaming around saying, “where can I put something up so that people can see it.” And Starbucks.”

Outlook

Also related to the relaxed and positive outlook expressed by participants at all three sites were strategies for overcoming the challenge of taking on multiple roles within their school. The participants acknowledged the difficulties that were part of trying to attend to several aspects of their schools’ operation while approaching their situation with a sense of humor. For example, MK described how an ad she had placed did not yield any interest in her school. Although the ad’s cost was substantial, MK summarized the experience in a positive light saying, “And the return was…live and learn.” Three of the participants also expressed this relaxed attitude in relation to the challenge of providing professional development for their staff, acknowledging recent progress in this area, rather than focusing on what they would still like to accomplish in this area. Ms. Blake in particular, while recognizing the need for more formal professional development, indicated progress in this area, “I’m planning to do a half-day training, with the preschool staff this August; that’ll be a new thing. It’ll be, um, training in conflict management.”

The study’s primary research question asked what could be learned from the challenges and successes experienced by founders and directors of NBPs in the US. All of the participants provided answers to this question. All sources of data for this study, interviews, observations, timelines, and media all informed the response to the primary research question. The themes that emerged, include experience, temperament, mission-focus, leadership, relationships, like-mindedness, collaboration, and worldview.

Experience

The participants communicated extensive experience in the field of nature interaction, education, and leadership. Ms. Blake commented on her experience this way, "Oh I definitely consider myself a leader. I had that training at a National Outdoor Leadership School, and I taught leadership for a long time there." Additionally, participants from all three sites had eight or more years of teaching experience. MK of TKG recalled more than twenty years of teaching experience, "So pretty much since '86, I've been teaching," a fact also described on her website. Two of the sites had been in existence for over fifteen years in the same community. Mr. Drake described the positive response of the community to the forest preschool by referring to Ithaca's prior experiences with Primitive Pursuits, "People, already know who we are. And there's a lot of trust in us, as an organization, when we started."

The experience of interacting with nature and spending extensive amounts of time in the outdoors was expressed by all of the participants, all recalling childhood memories of camping and playing outdoors for days. Ms. Blake credited her mom for providing outdoor experiences during Ms. Blake's childhood, "But I have to give my mom a lot of credit, too, because my earliest camping memories are with her. And was a, she loved the outdoors, too." Mr. Drake remembered, "… it was just, started out as my childhood and the way I grew up, was just roaming the forest and literally, spending most of my time out there and having parents that just let me do that, very, very comfortable, very free, …" Ms. Scharff also recalled spending lots of time outdoors when she was a child, "I've always loved to be outside. I've been a gardener even when I was in my, [a] young child."

Experience emerged as a contributor to the success of NBPs in the US that is simultaneously a means for overcoming challenges NBP founders and directors face is

experience. One site founder, Mr. Drake, spent more than 17 years leading nature expeditions and teaching primitive nature-related skills, such as fire-making. Ms. Blake mentioned leading wilderness expeditions for over ten years, "I was really passionate about wilderness 'expeditioning.'"

Leadership experience was also evident in participants at each site. Ms. Scharff had been a registered nurse, Ms. Blake had leadership positions in other early childhood programs, and MK had run her own business prior to starting her NBP. Mr. Drake had been leading nature program at Primitive Pursuits for seventeen years prior to founding PPIFP. Primitive Pursuits and the Waldorf School of Saratoga Springs provided patronage and leadership to PPIFP and WSSSFK respectively, with years of experience teaching children and administering educational programs.

Temperament

Every participant exhibited a relaxed attitude and a friendly disposition. While speaking intensely about fulfilling their NBP's mission and goals, the participants' observed personal characteristics included a self-assured demeanor and a peaceful spirit. At all three sites, the participants appeared open, trusting, non-judgmental and positive. When asked about what she enjoyed most about working at an NBP, Ms. Scharff expressed her sanguine temperament, "Well enjoy[ing] is easy. Being with the children. (Laughs) And imagining new things that you can always bring to the children."

Successful NBPs able to overcome challenges are led by individuals with a sanguine and easy-going temperament. At all three sites, I encountered teachers, staff, and administrators who displayed kind and compassionate dispositions. Upon arriving at PPIFP for my second day of observations, I was greeted with smiles and hugs, as if I were an old friend. At another site, the

flow of the day had to change due to the extreme heat during the June days during which I was observing. The teachers modified the school day to meet the children's need for shade and frequent water breaks in a cheerful manner. All three sites' online resources showed preschoolers happily engaged in activities such as climbing trees and working around fire, with teachers either taking the picture or participating in the activity, looking relaxed and joyful. As children ran through the forest, laughing and yelling cheerfully, I observed the teachers at two of my settings observing the children with content smiles on their faces. Even as the children experimented with cooking various parts of the lunches they brought from home on an open fire, the staff stayed calm and observed, rather than intervening in the children's activity. One of the lead teachers saw me wincing as I observed her and her tiny charges climb a huge fallen tree to the top of a steep hill. She said to me, what I believe summed up the attitude and temperament observed at all three sites, "For every activity out here, I evaluate the risks, benefits, and the likelihood that something bad will happen. Often, I am more worried about the effect on the children if they don't take the risk."

Mission-Focus

NBP founders and directors in the US focus on the mission that they identified for themselves and their schools. At all three sites, I observed settings, materials, and interactions congruent with each site's mission. One staff member at PPIFP relayed to me the various ways he was preparing to open his own NBP after receiving experience and training at this particular site, and an intern at PPIFP stressed her dream of bringing nature-based schools to her the inner-city of her hometown. All of the participants supported their mission-focus with action. At TKG for example, food from the preschooler-maintained garden bed was shared with a food bank. MK said about this activity, "And we talked to the kids at the beginning of the year about who's

getting this food and how we all have food and it comes easy in our house but some people don't, it's harder." At another PPIFP, water and tea were served to visitors as a way of connecting with others, a fundamental part of PPIFP's mission. Every publication about and created by the sites I studied explained the schools' mission and how that mission was lived out during the school day.

A strong sense of commitment to the mission of their school appeared to motivate participants to overcome challenges in all areas. An intense tenacity could be felt throughout my interviews with these stakeholders. The stakeholders' focus on their mission of nature-connectedness seemed to be a strong influence on tenaciously overcoming challenges related to establishing and operating their NBPs. For example, Ms. Blake and Mr. Drake had been involved in nature education for more than 15 years each at the time of our interviews, underscoring their long-term commitment to the goal of nature-connectedness.

The stakeholders' commitment to their mission of connecting children with nature also appeared to influence their approach to recruiting, as they sought to hire employees with nature expertise and experience in early childhood education. To strengthen new staff members' skills in both areas, Ms. Blake related, "I do a lot of role modeling for the staff and also for the children."

The participants also demonstrated an intense commitment to the mission and purpose of their school in other ways. TKG and PPIFP established their resolve to connect children with nature in every facet of their NBP facilitation. For example, TKG offered outside play to students even during winter weather when other schools were closed. MK used this approach to snow days, asking parents, "Do you feel comfortable, are you safe driving on the roads? If not, stay home, enjoy your snow day. If you would like to bring them in, bring them in."

WSSSFK demonstrated a strong commitment to the Waldorf teaching philosophy and the emphasis on outdoor play. Ms. Scharff explained, "Again, they're very much based on what one would want in a Waldorf education, as much as possible natural things that come from nature." While the philosophies slightly differed at each side, each stakeholder was fiercely committed to his/her school's mission and goals. In addition to being able to articulate the concepts applied to their NBPs, both verbally and throughout each school's literature, all participants spoke with enthusiasm about their mission and the challenges they had overcome continually to fulfill their NBP-related goals.

Leadership

NBP founders and directors in the US demonstrate leadership. All of my participants considered themselves leaders. MK stated, "I'm a leader by default. I just, I don't know how to describe that. But just, any teacher has to be a leader." Mr. Drake said about himself, "yes, I consider myself a leader." Ms. Blake described the training that supported her in becoming a leader, "Oh I definitely consider myself a leader. I had that training at a National Outdoor Leadership School, and I taught leadership for a long time there." Ms. Scharff explained her leadership abilities this way, "I would say that I always . . . the leadership qualities that I have are the next in—I have the next idea or the next inspiration. And have the energy and the vision I guess to make it happen."

The participants' creativity, vision-casting, willingness to mentor others, and tenacity was apparent throughout my interviews with them, as well as during my study of their timelines, media, and observations. While each defined leadership slightly differently, all participants exhibited leadership in regard to establishing and operating his or her school. Whether leading the project of obtaining grounds for their forest preschool like Ms. Scharff, contacting potential

sponsors for their school as in the case of PPIFP, or creating public videos explaining their school concept, NBP founders and directors lead. Mr. Drake summed the leadership aspect of being an NBP founder or director up by saying, “A lot of my leadership style is, is about looking for opportunities, and being creative in the process of pulling together, scant resources, to create something.”

Relationships

Placing value on relationships with others was observed at all sites. At TKG, MK especially appreciated her relationship with her co-teacher and sister, saying, “I love her methods of teaching, and her creative ideas. That has been one of the most enjoyable things is getting to work with her, and getting to work with these kids, and owning a school.” At PPIFP, the relationship to nature, self, and others permeated all aspects of the school, as it was part of its mission. I observed interns talking with students about the reasons for returning animals they had caught in the creek back to the water. Additionally, teachers spoke kindly with students and respected individual differences. For example, when a child did not want to be part of an activity, he did not have to participate. WSSSFK placed a value on relationships as well, but did not appear as deeply affected by these relationships as the participants. Ms. Scharff did note however, the positive relationships with parents of her NBP students. Regarding the parents’ feedback to the NBP she mentioned, “I mean, generally, incredibly positive. You know that they’re excited.”

Successes experienced by the founders and directors of all three sites included building or strengthening existing relationships and forming new ones. Three out of four participants emphasized this heavily, discussing the relationship with their staff as friends in addition to being co-workers. Mr. Drake described Ms. Blake and another key person in starting PPIFP by

saying, “I mean she, is an employee, but she’s also a very much a co-collaborator. … So and then also, other, I guess you’d say, other friends and other employees, I mean Hillary a friend and an employee.”

Additionally, participants described forming relationships with parents and the community as a positive outcome of their involvement in establishing an NBP. MK even cited her relationship with one of her former student’s parents as pivotal to finding out about the NBP concept, “They moved off to Oregon, and I kept in touch with them and was Facebook friends with them, and she put her in this school, Mother Earth School. And I was fascinated by it. I said, “Really? Oregon, dead of winter, and you’re out there, in the snow …”

Like-mindedness

Founders and directors of successful NBPs demonstrated like-mindedness. At each site, the mission and purpose were slightly different. However, I observed that each site’s founders, directors, as well as staff and even parents agreed upon the same mission. When discussing personal space issues of one student with his parent, the conversation appeared harmonious rather than adversarial. The parents and teacher discussed solutions, such as reminders and making the student aware of others’ feelings, both parties aligning themselves to the concept of treating children with respect. All sites promoted their mission through social media, websites, and in two of the cases, via online newspapers. The mission of nature-connectedness, and self- and other-awareness was a consistent message across schools and media platforms. For example, MK noted how being mindful of one’s environment helps mitigate dangers, “What I wanna do is get them more comfortable being outside, and then any part of it, being aware.” Additionally, at PPIFP, a co-teacher, and an intern both expressed wanting to further the PPIFP’s mission by opening their own nature-based schools in other cities. The like-mindedness of all NBP

stakeholders was also expressed by the participants themselves. For example, when determining if PPIFP is a good fit for a student, a parent interview determines the like-mindedness of all stakeholders. Mr. Drake explained, "And, even though parents may be very excited, we're not unless we really know the family or know what… believe they know what they are getting themselves into." A lack of like-mindedness can lead to issues for students as Ms. Scharff described, "And those parents who have withdrawn or actually mostly gone to our kindergarten in town, have been those parents who found it difficult to be on top of checking their children for ticks every day or the mosquitos just were too much …"

Collaboration

The importance of working with others to achieve common goals was evident in data sources such as interviews and observations, as a component of participants' at all three sites' approach to establishing and operating an NBP. Ms. Blake described how she collaborated with Primitive Pursuits to start Ithaca Forest Preschool, "I approached Primitive Pursuits where I had worked previously and they said, 'We were just thinking the same thing! We should start a preschool.'" The characteristic of collaboration appeared to mitigate challenges as all of the participants encountered several obstacles, such as school ground maintenance, many times. MK collaborated with her church to secure her school's location, for example, "I looked into several different options and my church here that I go to, the director said, 'Do it here, why not do it here?' So I submitted a proposal to them, and went before the vestry and they okay-ed it."

Participants collaborated with other team members to address the issue of maintenance, for example. Ms. Blake noted, "So, you see Jed out here whenever he can to prune trees and take out trees that need to come down or do maintenance on that little pavilion. And I also put in some time." Collaboration also appeared to mitigate challenges in funding as working with

sponsors as well as family members at one site, aided the NBPs in overcoming funding issues. Founders and directors working together with others on various aspects of the preschools' operation were supported by data gathered from all participants at all three sites. All participants acknowledged collaborating with parents as a way to ensure the most positive outcome for NBP students. For example, two of my participants talked about working with parents to ensure each child is properly dressed for the day's weather. One of the NBP teachers noted the importance of showing compassion when working with parents, "I mentioned being compassionate with the children, but we also need our staff to be compassionate the parents. We say that on the job description. To be able to empathize even with parents."

In addition to collaborating with others, teachers also worked together for the best student outcomes. At two of the sites, interview participants demonstrated gathering feedback from their co-teachers throughout the school day. One site implemented an afternoon reflection time for teachers, which also served as a problem-solving session in which ideas for solving preschool-related issues were exchanged.

Another area of collaboration was working with the community. One site provided vegetables and fruits to a local food bank; another participates in a yearly parade and hosted movie nights. Mr. Drake explained, "We did a lot of movie screenings, a lot of, like how to dress your child for the winter. …you could just come if you just want to know how to dress your child for the winter." WSSSFK offered open-house days and a community store, which stocked weather gear for NBP students.

Worldview

NBP founders and directors each had a distinct worldview that permeated all aspects of their lives. Each participant had a slightly different worldview, but an overall commitment to

connecting children to nature, and to be respectful towards others and self, as well as a positive outlook on life, could be observed in each participant's life. In addition to expressing a well-defined worldview, the participants lived out the principles and beliefs associated with it. One NBP founder mentioned his connection to nature, "I grow blueberries and apple trees, and bushes and spent a lot of time that way, and go camping every… you are up in the Adirondacks here and swimming in the creek on my way home from work, most days…" Another participant noted, "And I go hiking every weekend…"

NBP leaders let their worldview guide them in the establishment and facilitation of their school. Their website, brochures, and timelines, in addition to their interviews and my observations, relate to the participants' worldview about nature and people. For two participants, passing on ancestral knowledge was especially important. Ms. Blake noted, "Ancestral skills, ancestral knowledge, people in the past, things that have come before us. And then trying to, when we talk about that, we sometimes also extend that to think about the future. What will come, what will come after us?" This emphasis on primitive skills has led to the incorporation of bow-making and many other ancestral craft projects into their school's curriculum.

A firm belief in their students' ability to navigate the natural environment with appropriate adult supports permeated the stakeholders' worldview. A sense of respect for children as persons with feelings and input of value emerged in talking with the participants. When asked about her NBP's classroom rules, for example, Ms. Blake replied, "You've heard us talk about our two camp rules of kindness and respect. So that covers a lot as well. Kindness and respect, to self, others, and the earth." All of the participants described their school with a tangible positive attitude towards their work. The participants' worldview of believing in nature connectedness, respect for others, self, and the world, as well as in ancestral knowledge was revealed in all of

my interviews with them. The same worldview was emphasized on all of the schools' websites, as well as their parent handbooks.

Summary

This study examined the challenges and successes of NBP founders and directors in the US to determine the lessons learned from their experience. After interviewing all participants, conducting observations, gathering timelines, and reviewing electronic media, each case's data was analyzed independently, using Worksheet 3 (Appendix E) as a guide. Upon determining themes for each case, the cross-case analysis began with me rating the themes by case. The utility of each possible theme as an assertion was rated as low, middling, and high using Worksheet 4 (Appendix F). Recording my merged findings on Worksheet 5b, I selected the themes with high utility across all cases as my assertions. The primary research question was, "What can be learned from the challenges and successes experienced by founders and directors of NBPs in the US?" The assertions that emerged support the importance of experience, temperament, mission-focus, leadership, relationships, like-mindedness, collaboration, and worldview for those considering establishing and operating an NBP.

Specifically, all of the participants had experience related to spending time in nature, nature education, working with children, and leadership. Additionally, these successful NBP leaders displayed a laid-back, relaxed temperament, which enabled them to overcome challenges connected to establishing and operating an NBP (i.e., having multiple roles within the NBP setting). All participants demonstrated a strong commitment to their school's mission, keeping it in mind and acting upon it so it permeated their work and home lives. Along with a strong focus on their mission, collaborating with like-minded individuals and groups allowed the participants to develop successful NBPs. By building relationships with others, NBP founders and directors

were able to learn from others, collaborate with others, and build thriving NBPs. Finally, a worldview that supported the concept of deep connections with others, self, and the earth supported all participants in establishing and operating a successful NBP.

CHAPTER FIVE: DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Overview

The purpose of this study was to understand the challenges and successes encountered by NBP founders and directors. In this chapter, I discuss how the study's findings relate to the research questions and theoretical framework of my study. Specifically, a brief summary of my findings is followed by a discussion of those findings as they relate to the literature and theoretical framework of this study. The implications of my study, as well as its limitations, are described. The chapter concludes listing recommendations for future research. The summary of findings that follows provides the answer to this research question disaggregated by the study's four sub-questions.

Summary of Findings

To answer the research questions, I conducted a multiple case study of three NBPs in the Eastern US. The sites were selected based on being nature-based, with children spending time outside in natural environments for at least three hours daily, and play-based, encouraging the construction of meaning through play. The data sources providing triangulation included interviews, websites, articles, timelines, and observations. Interviews were conducted with MK, the founder, director, and lead teacher of TKG, Tim Drake, founder and director of Primitive Pursuits Ithaca Forest Preschool (PPIFP), Melissa Blake, PPIFP director and lead teacher, and Kathrine Scharff, founder, director, and teacher at the Waldorf School of Saratoga Springs Forest Kindergarten (WSSSFK) during June and July 2015.

RQS1. Data gathered from all three sites provided answers to the research question asking about successes NBP founders and directors experience. The success indicator confirmed across cases was the growth of the participants' NBPs. Growth was described

regarding enrollment and as an increase in the number of NBP's classrooms or locations. Two of the NBP participants also described building relationships as a benefit of creating an NBP and one mentioned the excitement of leaving a legacy by establishing an NBP. Furthermore, participants noted witnessing transformations, connectedness, and their communities' response to their NBPs as success indicators.

RQS2. This research question asked about the contributors to the successes NBP founders and directors experienced. It was answered by data obtained from all three sites. Contributors to these successes include experience, temperament, like-mindedness, mission-focus, collaboration, leadership, and worldview. All participants had eight-plus years' experience in education and nature education. Additionally, the participants' unperturbable temperament was evident throughout my observations. The NBP teachers in my study were also calm and self-assured.

A strong sense of like-mindedness, common worldview, and focus on each school's mission, all related to the participants' desire to foster nature connectedness, was evident in all data sources that contributed to this study. Collaboration with the community, parents, and staff members and leadership experience and training were two additional contributing factors to an NBP's success. All participants considered themselves leaders and noted collaboration as vital to the success of their schools. Relating the NBP participants' leadership style to social impact theory, NBP leaders would be categorized as having a high impact on the behaviors and beliefs of others. This social impact strength could be based on the leader's experience, community standing, and the actions of these collaborative leaders.

RQS3. Challenges NBP founders and directors experience were the focus of the third research question for this study. Data from each research site provided insight into answering

this question. Maintenance was listed as a challenge, both regarding the work involved in maintaining the setting and as related to a lack of definition of responsibility to determine who maintains which parts of the school grounds. Funding presented a challenge for participants at two of the three sites.

Managing multiple roles was another challenge noted by the participants. While several participants had extensive teaching experience or experience running a business, the participants noted the challenge of doing both at the same time for their NBP. Another area in which NBP administrators identified challenges was regarding providing professional development for their staff. Additionally, recruiting qualified staff with a love for nature and an early childhood teacher education proved difficult.

RQS4. The fourth research question asked about ways NBP founders and directors overcame challenges. Data to answer this research question was obtain from participants at all three sites. The participants' extensive experience in the areas of education and nature education provided one path to overcoming the challenges related to establishing and operating their NBP. Additionally, participants' tenacious and easy-going temperaments allowed them to continue working towards their NBP's goals even when facing challenges. Being like-minded, having a well-defined mission, and common worldview also enabled participants to overcome challenges related to founding and operating an NBP. Collaborating with others to solve difficult issues and demonstrating leadership further contributed to the NBP founders' and directors' ability to overcome challenges.

RQP. The primary research question asked, what can be learned from the challenges and successes experienced by founders and directors of NBPs in the US. Participants at all three sites provided answers to this questions. The importance of several characteristics of the

founders and directors of NBP emerged from the data. Specifically, having experience teaching and extensive time spent in nature, are essential contributors to successful NBPs and for overcoming challenges to NBPs. Adherence to a clearly defined mission and worldview by all NPB staff are two other components that emerged as essential to successful NBPs. A positive outlook and relaxed temperament are additional cornerstones for NBP founders and directors. Furthermore, building relationships and collaborating with others are important components for a successful NBP. Being a leader who can cast a vision for others, inspire them to make that vision a reality, and keep stakeholders focused on the NBPs mission emerged as another prerequisite to establishing and operating an NBP successfully.

Discussion

NBPs have been operating in Europe since the 1950s but have not gained widespread popularity in the US despite the extensive literature suggesting positive educational and personal outcomes for NBP students (Ann-Atchley et al., 2012; Bowler et al. 2010; Carrus et al. 2012; Dowdell & Malone, 2011; Gustafsson et al. 2012; Häfner 2003; Louv, 2008; Nedovic & Morrissey, 2013; Kaplan, 1995; Ridgers et al., 2012). Much research has been conducted related to preschoolers' spending time in nature, especially in play-based activities. However, I was unable to discover research that explored the challenges and successes NBP founders and directors experience in the US, where NBPs are much less prevalent than other countries. Therefore, this study provides a rich description of these successes and challenges, as well as the lessons that can be learned from those currently operating NBPs in the US.

This discussion begins with a description of how this study's findings relate to its theoretical framework. Thereafter, the potential benefits of NBPs to students, as discussed in Chapter Two, are analyzed in light of this study's findings. The final part of this discussion is

dedicated to how the results of my research contradict or align with previous research related to starting and operating an NBP.

Theoretical Framework

Latane's (1981) social impact theory relates to this study's findings in several ways. Latane (1981) asserted that the strength of an impact source is one component that determines a social change. Affected by extrinsic and intrinsic factors, source strength may be linked to community status, likeability, or ability, among other characteristics. The findings from this study support the strength of the impact source being related to the successes experienced by NBP stakeholders at all three sites. Each interview participant confirmed having years of experience in education or nature education, and two of my sites had been operating in the community for over 15 years. All participants built relationships with potential students' families prior to opening their NBP and appeared to be well-liked by those families.

Findings from participants at all three sites confirmed Latane's (1981) second component of social impact theory, immediacy. This component of the theory refers to the proximity in regard to time and space of potential followers to the social impact source. The participants at each site were able to expose others to their ideas due to working with most of them at a school or nature program. Additionally, the timing of the introduction of their NBPs aligned with the increased consciousness of the importance of children spending time in nature brought to the forefront of parenting discussions by Richard Louv's (2005) *Last Child in the Woods*.

The third component of Latane's (1981) theory, number, also related to my study's findings. According to Latane, social changes increase as the number of supporters of the change increase. This facet of the theory was confirmed via my participants at all three sites.

TKG's program grew quickly as one influential community member encouraged two other families to sign their children up for TKG, for example. Both Ithaca Forest Preschool and the Waldorf School of Saratoga Springs' Forest Kindergarten credit parents and former students as being essential to recruiting others to their programs.

Regarding Bronfenbrenner's (1994) bioecological systems theory, my study revealed congruency with the theory as all participants recalled highly positive experiences with nature during their childhood years. The participants confirmed that these experiences, all facilitated and encouraged by immediate caregivers, led to the participants' love of nature as adults. Additionally, this finding aligns with Lohr and Pearson-Mims' conclusions (2005) indicating that adults who were encouraged as children by their caregivers to spend time in nature score higher on nature appreciation tests.

The Process-Person-Context-Time (PPCT) model of Bronfenbrenner's (1994) revised theory is also consistent with this study's findings that all participants regularly spend time in nature. All of the participants credit spending time in nature as influencing their development to appreciate nature. The evolution from spending time in nature as children to obtaining certifications in primitive skill knowledge and nature risk management as adults are two examples of the increasingly complex relationship between the participants and nature, as described by Bronfenbrenner's PPCT model.

If nature is defined as a microsystem, then the mesosystem relationship between nature and the participants' homes also further confirms Bronfenbrenner's (1994) theory that positive mesosystem interactions positively increase development. All four participants exhibited joy and passion when describing their current nature school work, lending further support to the mesosystem as an influencer of a person's development.

Two of the four participants described exosystem influences, circumstances out of their direct control that influenced their lives. One participant mentioned tension in the home as the primary reason for becoming a leader, crediting disliking some parental dynamics with creating a desire to change his circumstances. Another described her stepfather's dislike of the outdoors, but her mother's insistence on sending her to nature camps as a reason for enjoying nature as a child.

The macro- and chronosystems (Bronfenbrenner, 1994) appear to have affected the success of participants at all three sites' NBPs by current emphases on nature preservation and a general call for helping children reconnect with nature. Two of the three sites were located in towns that stressed recycling, organic food consumption, and a natural lifestyle. This macro- and chronosystem influence correlated with my finding that those two sites grew the fastest regarding student enrollment.

Students' Social-Emotional Development

Children's social-emotional development was supported by participants all three sites. As a result of the participants' emphasis on the importance of caring for others, nature, and themselves as part of all interactions. The culture of each NBP supported Vygotsky's concept of internalization. At all three sites, students were immersed in a culture of mutual acceptance, shared meals, being excited about nature, and using resources wisely.

Participants at all three sites implemented Erikson's (1963) concept of developing autonomy to further positive behavior development. Children were allowed to take risks, such as climbing trees, lifting and rearranging heavy objects, such as tree stumps, and play in creeks and mud. Due to the non-shaming behavior of their caregivers, the students appeared happy to share their accomplishments and expressed confidence in accomplishing challenging tasks.

Age-appropriate risk taking, as encouraged by participants all three sites, is also a component of Bandura's (1991) social cognitive theory. Additionally, participants at all three sites practiced positive role-modeling, encouraging self-efficacy in students. At two of the sites, participants expressed their likes and dislikes in a mature manner, allowing the children to help them problem-solve in an effective manner.

Students' Spiritual Development

Regarding spiritual development, it appeared that participants at two of the three sites practiced an agnostic approach to God. Participants at one of the sites, emphasized the spiritual connection with ancestors, Native Americans, and nature as primary spiritual connections. Based on deRoos' (2006) findings, spiritual beliefs may be influenced by positive caregiver relationships, leading to the probable adoption of the spiritual beliefs expressed at school, unless different beliefs are modeled at home by loving family members.

Students' Physical Development

Participants at each of the three sites provided ample opportunity for students' physical development. Children were encouraged to climb trees and hills, to walk over uneven terrain, and to play in and with water. Supporting these activities encourages bilateral integration (Newell, 1991). Being able to cross the midline of the body successfully is an essential component for the development of skills such as reading (Murata & Maeda, 2007), making the NBP environments' physical movement opportunities I observed a supportive environment for developing academic skills that employ prerequisite skills such as midline crossing through dancing and climbing activities.

Students' Cognitive Development

Academic skills observed at TKG and PPIFP included students creating patterns, discussing scientific concepts, such as differences in animal species, and being able to identify tree, bird, and plant names. According to the Virginia Foundations Blocks for Early Learning – Comprehensive Standards for Four-Year-Olds (Virginia Department of Education, 2013), sorting objects to create patterns is a foundational skill. NBP students demonstrated engagement in sorting and pattern activities when they built spiral shapes out of rocks they found in the creek, for example. Additionally, NBP students participated in discussions about their environment and used tools to accomplish goals, activities that aligned with Virginia's Foundation Block of *Scientific Investigation, Reasoning, and Logic*. Furthermore, story-telling and acting out plays in the NBP setting addressed the Virginia Foundation Block of *Vocabulary*.

NBP activities also aligned with Common Core State Standards (State Standards Initiative, 2010) for Kindergarten children such as the *Comprehension and Collaboration* domain, which requires children to be able to, "Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups," (p. 23). The NPB preschoolers engaged in storytelling and role play which matched the Common Core standard, "Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences," (State Standards Initiative, p. 23). The children were observed measuring and pouring while playing with pots in a creek, meeting the Common Core State Standard to *describe and compare measurable attributes* (p.9). Photographs at WSSSFK showed students creating artwork, and during my interview with one of the NBP's lead teachers, she explained the children's participation in measuring and pouring materials for making lunch. These prerequisite activities to learning

academic skills needed in Kindergarten align with Häfner's findings (2003) which determined that NBP participants' school readiness equaled that of traditional preschool participants.

ADD/ADHD, Autism, and Behavior Problems

This study found a lack of most of the issues facing preschoolers today in the NBPs that participated in this study. For example, obesity is named as a major health concern affecting preschoolers today (CDC, 2014), yet none of the children appeared overweight at the sites I studied. Additionally, mental health and attention concerns, including ADD and ADHD appeared absent from those sites. Children were very active during certain times of the day while concentrating on quiet or collaborative activities during other parts of the day. Due to the age-appropriateness of the settings and the schools' support of unstructured play, it was difficult to determine how a student might have acted in a traditional preschool setting. As of yet, the relationship between the display of ADD/ADHD and age-inappropriate school settings has not been clearly defined. However, this study confirms Taylor and Kuo's (2009) finding that children appear to concentrate better after spending time in natural environments. For example, at one site, children elected to listen to teachers' storytelling for more than 45 minutes after engaging in forest play for most of the morning. While this is an unusual amount of time for preschoolers to engage in a quiet group activity, it was also observed at another site, as students spent time observing insects for an extended amount of time without becoming distracted. It must be noted however, that the monthly tuition at all three sites, was in the middle to high range for its area (see NBP and Local Tuition Comparison in Appendix Y). Based on these higher tuition amounts, one might conclude that these NBP students are growing up in middle to high SES families. The lower level of problem behaviors can therefore not be attributed to the NBP setting alone, but must be considered within the context of research which links lower SES

to higher incidences of behavioral issues, including ADD and ADHD (Morgan Farkas, Hillemeirer, & Maczuga., 2008).

Additionally, children with autism are diagnosed at alarming rates today (CDC, 2014). Children with identified disabilities were not observed at the sites I studied. However, participants recalled children with severe sensory issues as becoming much more comfortable with their environment as the nature preschool year progressed.

While Olfson et al. (2010) reported an overall increase in aggressive behavior in preschoolers, this trend was not observed at the sites I studied. At each site, a strong emphasis on community and respect for others, self, and nature was evident in the participants' behavior. Any conflict was resolved through conversation and emphasizing with the other person's point of view. This more time-consuming, but effective method of conflict resolution (Mashford-Scott & Church, 2011) appeared possible due to the low teacher-student ratio of approximately 5:1 at the research sites.

Fine and Gross Motor Skills

While Wrotniak et al. (2006) discovered preschoolers' difficulties manipulating small objects due to an increased use of electronics. Such issues were not observed at this study's sites. Some of the fine motor skills at the three sites I observed included preschoolers being able to button their clothes, use zippers, open lunch containers and pour water into containers.

In the case of gross motor skills, Fjortoft (2004) found a decline in the ability of preschoolers to navigate various terrains successfully. This finding was not confirmed by this study. Fjortoft's study did not focus on NBP students, who spend three hours or more daily outdoors on different surfaces and at different heights, however, underscoring the continued validity of his findings based on the general preschool population.

Other NBP Benefits to Students

This study's findings anecdotally support discoveries regarding the benefits of NBPs. Specifically, I observed high levels of persistence by students overcoming challenges supporting O'Brien's (2009) finding that NBPs increase students' self-confidence.

NPB History

The current study's findings support the definition of NBPs as outlined by the Forest School Association (2015), Miklitz (2011), and Knight (2013). Participants at all three of this study's sites held class in natural settings; students spent three or more hours outside daily, and each setting provided hands-on learning experiences to students. While an internationally or nationally recognized definition of NBP has not been established, this study contributes to the development of such a definition by supporting previously proposed versions by the Forest School Association (2015), Miklitz (2011), and Knight (2013).

Maynard's (2007) accounting of the history of NBPs aligns with the sites that I studied as she recounts the development of Danish NPBs in the 1950s and 60s, the start of NBPs in England in 1993, and the expansion to more than 3000 NBPs throughout Europe. While a known concept in the US since 1990, there are only about 30 NBPs in the U.S. at this time. Ithaca Forest Preschool and TKG were founded in 2013, and The Waldorf School of Saratoga Springs' Forest Kindergarten in 2009. This supports Maynard's finding that NBP development has not been as dynamic in the US as it has been in Europe.

Comparison to Traditional Preschools

The NBPs studied do not align with the concept of a traditional preschool in the US. While both models employ a general daily schedule, set times for certain subjects, worksheets, or behavior modification rewards systems are not part of the NBP setting. Outdoor play is often

part of a traditional preschool routine but does not happen for the duration of several hours as in the case of NBPs, and is often eliminated altogether on cold or rainy days. Children with diagnosed disabilities were not observed at the settings I researched, but all of the participants expressed that their NBP often served as a "last resort" for children with behavioral difficulties. Parents of students who had been expelled from other preschools due to behavior issues appeared to seek the forest preschool experience for their children.

Non-traditional approaches to preschool include Montessori, Waldorf, and the Head Start program in addition to homeschooling. Of these approaches, the Waldorf philosophy of teaching was implemented at the Waldorf School of Saratoga Springs' Forest Kindergarten. The strong emphasis on respecting others by participants all three sites is also a component of the Waldorf curriculum. Additionally, the Waldorf curriculum supports the appreciation of nature, much like the forest schools observed in the current study. The three NBPs that served as sites for this study were not found to employ curricula that align with the typical Head Start curriculum implementation which includes early writing activities and alphabet knowledge as part of its outcomes for preschoolers (Sanchez, 2010), but the homeschooling characteristic of individualized instruction was observed in at all three of this study's sites.

The observations of the three sites are congruent with the principles implemented in Nature Explore classrooms, another non-traditional approach to preschool education. Nature Explore, a program of the Arbor Day Foundation, assists preschools in designing outdoor spaces that encourage nature exploration, much like the sites observed in this study. Additionally, NBPs are similar to Nature Explore as both promote the education of teachers and parents regarding nature immersion for children.

Parents' Preschool Selection

The current study's findings contradict Ernst's (2013) assertion that American parents tend to be overprotective of their children. However, it must be noted that this contradiction is likely rooted in the general difference in parents who choose an NBP for their child. NBPs are inherently encouraging of children's age-appropriate risk-taking and independence, components of the NBP curriculum of which parents are made aware prior to enrolling their children.

My study did not determine whether NBP parents choose their child's preschool differently from parents in traditional preschools. Interactions observed between NBP parents and teachers as well as NBP parents and children appeared warm and supportive. Communication between all preschool stakeholders and clearly articulated expectations appeared paramount for participants at my study's sites for the successful implementation of the NBP approach with American parents. However, this study only supports this finding anecdotally.

NBP Licensing

The findings of this study indicate that licensing for NBPs differs somewhat from that of traditional preschools. One of the sites did not fall under preschool licensing regulations because of its program length being under three hours. Another was licensed through the school under which patronage it fell. The third site was licensed as a childcare center. Therefore, daily program length, after school care, and state-specific regulations should be considered prior to starting an NBP.

NBP Parent Involvement

The current study's findings highlight the differences between parent involvement in traditional preschools and NBPs. Parents in traditional preschools are often involved by

organizing seasonal parties for their child's classroom or by attending performances presented by their child's class. In the NBPs observed for the current study, parental involvement occurred almost daily via conversations with the child's teacher about the student's day. This study's findings emphasized the importance of partnership with NBP parents to develop a positive NBP experience for students.

Goals and Mission Statement

Each NBP in this study had a clearly defined mission statement and goals. These findings support Manuszak (2008), who recommends creating goals and a mission statement as the foundation to starting the school in his 2008 article in the journal *Principal*. Additionally, each school provided background and support for its mission by explaining its educational philosophy and worldview. Furthermore, two of the sites' web pages offered links to resources further underscoring the importance of each school's particular mission and goals.

NBP Curriculum

Currently, no uniform curriculum for NBPs exists. This finding was supported by Bailie (2012). Most NBP faculty create their curriculum based on a child-centered and constructivist approach to early childhood education (Knight, 2013). It is unclear if NBP leaders chose this approach based on their personal experience or teacher training, if applicable. Both of Bailie's (2012) and Knight's (2013) assertions were confirmed by the findings of this current study. TKG employed a Reggio Emilia, project-based approach to the curriculum while Ithaca Forest Preschool developed its own curriculum based on the Kamana Naturalist Training Program. The Waldorf School of Saratoga Springs' Forest Kindergarten (WSSSFK) incorporated the play-based Waldorf approach to curriculum, merging it with nature experiences.

NBP Classroom Settings

NBP students spend most of their school day outdoors in natural environments. The findings of the current study validated O'Brien's (2009) description of NBP settings as those in which preschoolers spent a majority of their school day. Additionally, this study verified the claims of Kenny (2013), Knight (2013), and Larimore, (2011) regarding the lack of commercial toys in NBP settings. TKG did supply children with open-ended toys, such as several plastic dump trucks for the construction area, further underlying the customized and non-uniform approach to NBPs in the U.S. While Ithaca Forest Preschool (IFP) used only natural materials, such as fallen logs as furniture in its preschool, both TKG and WSSSFK supplied picnic tables in additional to logs and tree stumps for sitting. Knight (2013) described community meals and meal preparation as a feature of most NBPs. This assertion was confirmed by the current study. At TKG, children ate both their snack and their lunches in a community setting. At IFP, children also ate lunch and snack together in addition to gathering herbs and clover to make tea for the group. At WSSSFK, children prepared community meals daily.

Age-appropriate materials and schedules were observed at all three sites. The amount of hands-on activities available to students were congruent with Piaget's (1952) best practices for children in the pre-operational stage of development. Additionally, children at all three sites used all of their senses to experience the natural environment and were given many opportunities to develop and expand language skills, a major accomplishment of the per-operational child. At one site, for example, I observed children naming several birds and insects without difficulty in addition to exhibiting typical language for their age.

Weather-Appropriate Clothing

Weather-appropriate clothing is essential for a successful NBP experience. This finding was also stressed by Kenny, (2013), Knight (2013), Larimore, (2011), and Sobel (2016). At each TKG and IFP, students dressed in layers to accommodate for the weather. I observed high-quality clothing, such as waterproof boots and rain slickers, enabling preschoolers to play outside comfortably, even in pouring rain. My own experience of being unprepared for the weather further solidified the importance placed on weather-appropriate clothing by NBP stakeholders. When arriving near IFP in Ithaca, NY in July, I was unprepared for the rainy and windy 50-degree weather. The NBP founder insisted I purchase a water-proof coat before visiting the preschool, to be able to enjoy the NBP experience.

NBP Daily Schedules

Free play, meal sharing, circle time, and storytelling are important parts of the NBP routine. Daily schedules observed at the three sites closely match those outlined by Kane and Kane (2011), Kenny (2013), Knight (2013), and Larimore (2011). Each of the study sites included the same elements in its daily schedule, including story, circle, and free play time. Additionally, each site set aside time for sharing meals and snacks. During free play time, opportunities for construction using loose parts were provided at all three sites and imaginative games were supported using the forests' landscape as well as some open-ended materials such as scarves at one of the sites.

NBP Teacher Qualifications

Experience working with children and love for nature are essential qualifications for NBP teachers. As recommended by Kenny (2013) and Knight (2013), a one to four teacher-student ratio was considered ideal by the NBP founders and directors interviewed for this study.

Additionally, this study supports Kenny's (2013) assertion that an innate love for nature is essential to being a successful NBP teacher. Furthermore, this study's findings align with Larimore's (2011) recommendation that NBP teachers have experience and knowledge of play-based approaches. Each of the sites studied implemented a play-based approach. TKG in particular incorporated the Reggio Emilia philosophy while WSSSFK prescribed to the Waldorf philosophy of schooling. IFP did not associate with a particular play-based approach but considered itself play-based regardless.

Regarding the educational requirements of NBP teachers, the sites observed in the current study differed from European standards as described by others (e.g., Hagemann et al., 2011). The teachers at all three sites did not study Early Childhood Education (ECE) before their involvement with their NBP. While one participant has since started taking classes in ECE, the other study participants' education focused on environmental studies. Additionally, participants at two of the three sites conducted background checks of potential employees as a prerequisite for hiring them, a recommendation Clement (2013) supports. The current study's findings also align with Clement (2013) regarding the importance of hiring faculty and staff with extensive experience working with children.

Characteristics of a NPB Leader

Carter and Curtis (2009) described directors as taking on many roles when operating a preschool. The current study's findings support the varied nature of preschool directors' tasks. Participants at all three sites performed multiple roles that included problem solving, working with parents, hiring staff, and maintaining the school grounds.

Stamopolous (2012), as well as Lesemann (2012), determined that leadership challenges for today's school administrator include pressure for children to excel academically. These

assertions were not confirmed by the current study. However, the lack of academic pressure felt in the NBPs included in this study may relate to the overall attitudes of faculty and parents who support the nature preschool concept. NPBs openly market themselves as play and nature exploration based, emphasizing the importance of age-appropriate outdoor activities as their main focus.

The current study's findings do not support the leadership challenge of addressing diversity, as outlined by Sanders and Downer (2012). The participants at all three sites included in my study exhibited compassion and respect for all individuals, encompassing those from different cultures and religious backgrounds. The general emphasis of participants at all three NBP sites on emphasizing and understanding others appeared to mediate any diversity challenges for NBP leaders.

Aubrey et al. (2013) identified a lack of early childhood education leadership theories as a challenge for preschool administrators. The current study's findings supported this claim. At one site, leadership training revolved around nature leadership and risk management, while, at another, the NBP director drew on prior higher education leadership experience to inform her approach to leading her NBP.

Potential Challenges for NBP Administrators and Teachers

The potential challenges for NBPs identified during my literature review for the current study did not appear to apply to TKG, IFP, and WSSSFK. Fuertes et al. (2014) described an increase in allergy and asthma in children exposed to natural settings for extended amounts of time. While asthma and allergies were found in several children participating at the sites I studied, the NBP stakeholders did not find that this hindered student participation or increased symptoms.

Furthermore, the current study found no concerns among NBP participants regarding the academic progress of students or formal education of NBP students in Kindergarten and beyond. At WSSSFK for example, the lead teacher described hearing about former preschool students' academic success from parents. This aligns with Fritz et al. (2014) findings that determined NBPs provided effective formal schooling preparation for preschoolers. All sites aligned with Bailie et al. (2009) assertions about the small number of NBPs in the US compared to European countries. Participants at each site described difficulties visiting and connecting with other NBPs to the geographically large distances to other NBPs.

In summary, the current study contributes to the existing literature by confirming some of the assertions made by other researchers while also providing findings incongruent with prior research. Particularly in the area of challenges NBP founders and directors experience, this study adds new information on perceived challenges by U.S. NBP stakeholders. While prior studies found school readiness to be a challenge for NBP founders (Fritz et al., 2014; Kiener, 2004) the NBP stakeholders in this study did not find this to be a concern for the current study's settings. However, a concern not previously observed in the literature was identified, namely the challenge of maintaining a nature preschool's setting. Specifically, allocating time and resources to keep wooded areas free of Poison Ivy was a concern of NBP founders and directors not previously identified in the literature.

Additionally, the challenge of incorporating professional development in NBP settings does not appear to have been discussed in the literature prior to this study. Along with professional development, another challenge identified by the current study is recruiting. The requirement of potential NBP employees to love nature and be knowledgeable of it in addition to being willing and able to work effectively with preschoolers appears to make recruiting

qualified staff a challenge. The current study also identifies NBP stakeholders' challenge of fulfilling multiple and diverse roles within their organizations, such as teacher, administrator, and grounds manager, a challenge not previously noted in the literature.

Recommendations and Implications

This study provides many practical implications for those interested in starting and operating an NBP in the US. Additionally, the current study resulted in theoretical implications that could be of interest to the preschool and elementary school educator and administrator. Until now, research surrounding NBPs has focused on their effectiveness rather than the challenges and successes NPB directors and founders encounter, as presented in this study. While the current study's findings cannot exclusively address all challenges and successes NBP administrators face, it is the first research of its kind and contributes new information to the field. Particularly, the current study's findings describe how NBP founders and directors have overcome challenges and achieved successes, enabling others interested in opening an NBP to learn from those who have already navigated the NBP path successfully.

Phase 1: Planning

Implication 1: Build nature expertise. Findings from this study highlight the need for founders to build nature expertise prior to starting an NBP. Since NBPs revolve around the outdoors and spending time outside, teaching children about nature, it is essential for those who consider starting an NBP to become highly educated and experienced in this area. Additionally, Positive and frequent outdoor experiences at an early age can be beneficial as a prerequisite to becoming a nature expert, as demonstrated by this study participants. However, nature expertise can be established at any time by working within one's State and completing nature certification training. Education in the area of nature interpretation allows potential NBP leaders to gain the

experience and knowledge needed to become nature experts. Organizations that assist with this endeavor include local Master Naturalist programs as well as the National Park Service. Furthermore, the National Association for Interpretation's website provides many resources to those interested in building nature interpretation skills, including interpretation certification, to increase nature expertise ("National Association for Interpretation," 2016). Other ways potential NBP founders may build their nature expertise is by working with local forestry or Master Gardener organizations to receive mentoring. Additionally, contacting one's local 4-H organization may yield classes and workshops to attend that can build nature expertise. Attending nature camps and emerging oneself in online courses such as the Kamana nature self-study program are additional ways to increase one's expertise in nature. Additionally, viewing videos of other NBPs in operation will aid the novice NBP stakeholder in learning how other NBPs operate in nature, what schedules they implement, and even how they approach extremely cold weather. All nature education should focus on the local flora and fauna, as knowledge of the area in which the NBP will be housed will increase success in teaching children about their surroundings and to choose an appropriate setting for the NBP.

Implication 2: Developing leadership skills. Another implication that relates to the planning phase of starting an NBP that emerged from the current study is the importance of building leadership characteristics to experience successes in the field of NBPs. In particular, excellent and clear communication skills are essential to articulating expectations and needs for an NBP clearly. Those considering opening an NBP should consider practicing both their written and oral communication skills prior to starting that endeavor. Additionally, potential NBP founders should reflect on their ability to cast a vision for others and to work towards that vision. Also, self-examination of one's levels of tenacity and commitment to the NBP concept should be part of

the planning process of starting an NBP, as both will aid in overcoming challenges when those occur. Attending courses at the National Outdoor Leadership School (NOLS) may also aid NBP founders in becoming authorities on the natural world in their location as well as more effective leaders. In particular, obtaining Wilderness First Responder training offered by NOLS is highly recommend. It can prepare the NBP leader to effectively address medical emergencies that could occur in the outdoor environment ("National Outdoor Leadership School," 2016). The National Recreation and Park Association may also assist the beginning NBP leader, as it provides a list of accredited nature leadership programs ("National Recreation and Park Association," 2016). Finally, fostering a spirit of collaboration is essential. Reviewing and implementing what others in the NBP field have found to work well provides important information to NBP founders. While there is an inherent joy of creating something new, gleaning from others' experiences can save resources and time.

Implication 3: Establishing the NBP's goals and mission. Creating clear goals and mission statements prior to opening an NBP is another implication of this study. Potential NBP founders should develop goals and a mission statement that aligns with their worldview and leads to their full commitment to said goals and mission for the NBP. An internet search for NBPs can be used to locate other NBPs' mission and goals, providing inspiration to NBP founders developing their own.

Implication 4: Conducting a market analysis. Researching the location, community characteristics, and features of other preschools in the same area as the NBP will help founders determine if indicators for success are present in the community in which they seek to start their school. Comparing tuition amounts among preschools in the NBP's area will help determine tuition amounts for the NBP (see sample in Appendix Y). Discovering whether the local

population values nature connectedness and would embrace an NBP, can be accomplished by looking for indicators such as active recycling programs, food co-ops, and an emphasis on organic and local foods in grocery stores and restaurants.

Implication 5: Choosing a location. NBP founders must choose their location based on specific characteristics most desirable for NBPs is another implication of this study. In particular, NBP founders should look for an area that provides a natural landscape, such as woods. There should be shady areas, a variety of flora, and if at all possible, a water feature such as a creek. The location should be easily reached, but somewhat sheltered from the outside world, providing an atmosphere in which nature sounds prevail over city noise. Ideally, the location would also contain primitive housing, such as a tent or wooden structure, for the class to use as a shelter if necessary and to provide storage. It is highly recommended that NBP founders seek to collaborate with existing nature programs and public parks to make locating the NBP setting both cost-effective and collaborative.

Implication 6: **Obtaining licensing and insurance.** Reviewing preschool and child care licensing standards in one's community and obtaining necessary licenses and insurance is another implication of this study. NBP founders should work with local departments of child welfare to determine what, if any standards need to be met. Additionally, obtaining insurance for the NBP is a requirement.

Implication 7: Choosing the curriculum. The curriculum NBP founders select should align with the goals and mission of the NBP and should be play-based. The curriculum should be child-centered and allow for active exploration of the surroundings. It is not necessary to purchase curriculum materials, but clearly identifying foundations of the curriculum, such as Jon Young's Eight Shields model, is essential.

Implication 8: Hiring outdoor-friendly faculty and staff. Employing individuals that love nature and are comfortable spending time outdoors in all weather is vital to successful NBPs. Additionally, teachers must enjoy spending time with children. While experience in the early childhood setting is not required, NBP founders should ensure that the candidates general worldview include respect for others and nature.

Phase 2: Marketing

Implication 1: Connecting with the community. Participating in and initiating community events, while communicating effectively about the NBP concept serves as another implication of this study. By communicating expertise of nature and child-related topics like dressing preschoolers effectively in winter weather via free community workshops, NBP stakeholders can increase community members' and parents' trust. Participation in community events such as parades and festivals, providing free face painting or the like, while talking to parents about NBPs also aids in gaining community support. Additionally, free screenings of movies, such as Arctic Outdoor Preschool can create backing from the community and increased knowledge of NBPs.

Furthermore, NBPs are encouraged to work with early intervention programs to recruit children with disabilities to NBP programs. Working with professionals, parents, and other stakeholders in the community fosters relationships and encourages the inclusion of children with special challenges.

Implication 2: Creating an online presence. A well-designed website and strategically maintained Facebook page are essential for anyone looking to start and grow an NBP to create. Keeping these media outlets attractive and current is essential to recruiting new students. Sharing information about the school, as well as sharing articles related to benefits of spending time in

nature, serve as useful student recruitment tools. It is recommended that NBP founders review other NBPs' websites to determine common elements included on each site. Creating a downloadable parent handbook or brochure, is one of the features often found on preschool websites that aid parents in selecting their child's preschool.

Phase 3: Implementation

Implication 1: Preparing the NBP setting. Ensuring the location is prepared for students in advance of the NBP's start date is highly recommended. Conducting a risk assessment is the first step of this process. Removing any poisonous plants from the area and securing any structures, bridges, or steps, is essential for a safe beginning of the NBP school year. Choosing and adding natural materials, such as logs for the children and teachers to use as seating makes the setting more comfortable. A fire pit and storage box to keep kindling dry should also be created. Developing areas that hold a specific purpose, such as a mud kitchen, a construction area, and a reading teepee, will aid in preparing the setting as well. Stocking the nature classroom with open-ended materials, such as pieces of wood, pots, pans, baskets, magnifying glasses, and utensils further prepare the setting. A First-Aid kit stored in a protected location within the natural setting is a must.

Implication 2: Creating yearly and daily schedules. NBP founders and directors should create yearly and daily schedules based on seasons as a recommended step in the NBP implementation process. While the schedule must be flexible to accommodate students' emerging interests and needs, establishing a general routine is essential. Meeting as a group at the beginning and end of the day are essential features of an NBP schedule, as are the inclusion of songs, stories, shared meals, and free play.

Implication 3: Communicating with parents. Establishing communication patterns with parents is essential to creating the rapport and collaboration necessary for successful NBP outcomes. Briefly chatting with parents at the beginning and end of each day to find out about potential challenges or joys in the child's life will aid the NBP director or teacher in meeting the children's' needs more effectively during the school day. Communicating expectations at the beginning of the year via a parent meeting of materials to bring to school, appropriate clothing children should wear, behavioral expectations, and formal parent-teacher conferences are also recommended to ensure all stakeholders begin the school year understanding their rights and responsibilities.

Phase 4: Ongoing Assessment and Adjustment

Implication 1: Daily evaluation of practice. NBP founders and directors are advised to be reflective practitioners. They are encouraged to continuously evaluate their school's setting, their and their staffs' performance, and the children's safety, interests, and progress in all areas of development. To assist with this continued evaluation, set times with co-teachers for daily reflection and planning are recommended.

Implication 2: Fostering continued mission focus. Continuous focus on the NBP's mission and goals is advised as it supports the tenacity and commitment needed for successfully operating an NBP. Founders and faculty should conduct and attend workshops on nature topics of their interest and receive professional development in early childhood education. Faculty and directors can avoid burnout by articulating their reasons for being part of an NBP using blogs, Facebook, conversations with parents, and community events.

Phase 5: Preparing for Growth

Implication 1: Evaluating the need for more space. As part of the reflective process, it is recommended that NBP founders and directors determine the need for a second classroom, an additional location, or more staff. A one to four ratio of teachers to students may be used to determine when additional teachers need to be hired. If the classroom's natural materials need to be replenished daily or the grounds are becoming devoid of flora due to use, a new location may need to be found. If there are more than 12 children sharing a nature classroom and additional children are on a waiting list, opening a second classroom, perhaps held in the afternoons, is recommended to maintain the child-focused atmosphere of NBPs.

Implication 2: Planning for professional development. Due to the complex skill set required of NBP staff, it is recommended that NBP founders and directors create a plan for ongoing teacher training. Such training should include an emphasis on both nature and early childhood education. The inclusion of students with disabilities in NBPs should be addressed. Local early intervention program staff may be invited to share both their expertise and practical experience working with students with disabilities. Furthermore, pediatricians, special education teachers, and parents of children with disabilities could share their experiences during professional development sessions.

NBP faculty and staff professional development times should be scheduled regularly throughout the school year and include a balance of early childhood education and nature education presentations and workshops. Teacher workdays can be added to the preschool calendar to ensure parents are aware of professional development times in advance. Additionally, NBP leaders should establish a plan for recruiting new NBP staff that includes a detailed list of qualifications as well as nature-related skills required for the position.

Phase 6: Professionalizing and advancing nature-based preschools in the US

Implication 1: Creating a national NBP organization with state, regional, and local chapters. In order to increase the prevalence of nature preschools in the US, NBP founders and directors should consider developing a national NBP organization dedicated to promoting quality standards and research-based practice and training for NBPs and their stakeholders. While organizations promoting child-nature connections, such as the Children and Nature Network exist, specific groups for NBPs do not. NBP stakeholders may connect with European NBP organizations, such as the Forest School Association in the UK (Forest School Association, 2016) or the Bundersverband der Natur- und Waldkindergärten in Deutschland (BVNW, 2016), Germany's national NBP association, to learn from those groups' experience developing national NBP organizations.

Implication 2: Attending NBP conferences. Participating in conferences underscores the legitimacy of NBPs and the commitment to advancing the profession through annual meetings. Additionally, NBP founders and directors should attend conferences to network with other professionals in the field and learn about the newest advances related to the development and operation of NBPs. Several such opportunities are available to NBP stakeholders. For example, the Natural Start Alliance (Natural Start, 2016) offers a yearly national conference which is held in varying locations around the US. The Irvine Nature Center (Nature Conference, 2016) in Maryland also offers a yearly NBP stakeholder conference. Furthermore, Antioch University (Conferences and Workshops, 2016) also offers a yearly conference for NBP practitioners.

Implication 3: Completing available NBP certification and lobbying for the creation of accredited NBP degree programs. NBP personnel is encouraged to obtain formal early

childhood nature education certification, via the Nature-Based Early Childhood Education Certificate offered by Antioch University in Keene, New Hampshire ("Nature-based," 2016), for example. Additionally, NBP administrators and faculty should seek to connect with universities to encourage and assist with the development of accredited NBP bachelor's and master's degree programs.

Limitations

As a qualitative study, inherent weaknesses exist, namely the possibility of bias when reporting findings (Rossman & Rallis, 2012). As the instrument of the study (Patton, 2002), I recognized my biases and explored them before collecting data, as well as during data analysis. Ensuring triangulation of data further enabled me to bracket any possible biases.

In order to be included in this study, each preschool was selected based on students spending three or more hours in natural environments during each school day. Another delimitation for inclusion in this study was that school was held outside in all but the most severe weather. All of these requirements were met based on each school's website information, documents, and observations. Additionally, I was able to confirm the delimiting criteria of each preschool I studied being play-based and child-centered. Furthermore, each of the NBPs I visited met the delimitation of having been in operation for at least three months and having seen an increase in enrollment during the previous year.

A limitation of my study is the limited geographical location of the NBPs I studied. All three schools are located in the Northeastern US. I selected to include three NBPs in this study to limit travel expenses, as NBPs are often far apart geographically, and to address time limitations, as I am employed full-time with a limited number of vacation days available to me. Another limitation of this study is the forest location of all three preschools. Some NBPs hold class on

beaches or in other natural environments and may experience different challenges and successes than those holding school in the forest. One of the participants did not provide a completed timeline, adding to the limitations of this study.

Additionally, some NBP founders were also the current directors, providing fewer perspectives per case. The Eastern US location of the NBPs included in this study may not have provided as many differing perspectives from NBP founders and directors as possible if I had selected schools from all across the US (Rossman & Rallis, 2012). Furthermore, while no data was collected regarding the NBP students' parents' socio-economic status (SES), all three of the NBPs were located in affluent areas, potentially limiting this study's recommendations to establishing and operating NBPs in lower SES communities.

Some limitations were related to the time of year my research was conducted. I was unable to observe the schools during the winter for example, as all of my research was conducted during the summer. Additionally, the summer programs provided by two of the schools were described as more relaxed than the school year programs. Lastly, one of the preschools I visited was not in session, limiting my observations to touring the grounds extensively with the director, videos, articles, and photos.

Recommendations for Future Research

While research documenting the positive effects of NBPs on preschoolers' development has been conducted since the early 1990s, I was unable to locate any studies addressing the challenges and successes NBP founders and directors in the U.S. encounter. All of my cases are found in the Northeastern US leading to a recommendation to study sites in other geographical areas of the US and to compare those findings with my study. Additionally, studying the

specific practices NBPs employ to create an atmosphere of respect that allows their students to succeed socially should be explored.

Perhaps due to my strong Christian beliefs, I noted the distinct absence of Christian faith references and integration in NBPs. This absence differs from the many church-based preschools operated in the US that include chapel services, Bible story readings, and other curriculum related to building the children's Christian faith. Therefore, a study investigating why spirituality related to worshipping the earth and nature is valued over Christianity in NBP settings is recommended.

Research comparing NBP teachers' and traditional preschool teachers' job satisfaction could lead to findings for increasing preschool teachers' job satisfaction overall. The teachers at the NBPs I studied appeared fulfilled and free of anger toward the children. A study investigating the factors resulting in NBP teacher satisfaction should be conducted. Furthermore, the anxiety and depression rates of NBP teachers could be explored and whether those rates relate to the inherent personality traits of NBP teachers or the NBP environment. The findings of such a study could produce recommendations transferable to the traditional classroom.

All three sites I visited held preschool in forests. However, NBPs use other natural settings, such as beaches and meadows as well. A study comparing the challenges and successes of NBPs in those settings to the ones in my study would contribute further to the literature on NBPs.

Summary

The current study explored challenges and successes experienced by NBP founders and operators in the US to describe what could be learned from their experiences. Successes

included growth in enrollment and number of physical settings, witnessing transformations in students, and building relationships. Challenges included having to balance multiple roles within the NBP, maintaining the NBPs' physical space, providing professional development, and funding. Achieving success and navigating challenges relate to the NBP founders' and directors' worldview, tenacity, experience, and commitment to the mission of the NBP. Finally, the lessons learned include the importance of NBP founders' and directors' nature expertise, communication skills, leadership abilities, commitment to the NBP's mission, and willingness to learn from others in the NBP field.

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APPENDICES

Appendix A: Sample Traditional Preschool Schedule

8:45 a.m. Arrival/Put snack and coats in cubbies

9:00 a.m. Free Play (Centers, sand table, reading corner)

9:45 a.m. Clean Up/Bathroom break

10:00 a.m. Snack

10:30 a.m. Circle Time (Calendar, Songs, Weather)

11:00 a.m. Playground

11:20 a.m. Crafts/Science Activities

11:45 a.m. Clean Up/Getting ready to go home

12:00 p.m. Pick up time

Appendix B: Sample NBP Schedule

8:30 a.m. Arrive at the school's meeting place (Yurt, barn, or other structure)

8:45 a.m. Walk to the natural class setting, free play upon arrival in the forest classroom

9:15 a.m. Morning Circle (Greet each other with song, talk about the day ahead) and snack

9:15 a.m. Nature Exploration (includes choice of cooking over an open-fire to make food or drink for classmates)

11:30 a.m. Story Circle and lunch (teachers read stories chosen by students, and eat lunch from home and food prepared by students and teachers)

12:00 p.m. Walk back to meeting place

12:15 p.m. Pick-up Time

Appendix C: Permission from Guilford Publications

From: Angela Whalen [mailto:Angela.Whalen@guilford.com] **On Behalf Of** GP Permissions
Sent: Wednesday, August 26, 2015 10:39 AM
To: Barnett, Alexandra Michaela (Center for Curriculum Development) <abarnett2@liberty.edu>
Subject: [SPAM] RE: Republication Permissions Request

Dear Alex,

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Best,
Angela

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Below is the result of your feedback form. It was submitted by
Guilford Website User (abarnett2@liberty.edu) on Sunday, August 23, 2015 at 14:44:17

comments: Dear Sir or Madam:
My name is Alexandra Barnett and I am a doctoral student at Liberty University, working on my dissertation. I am requesting permission to use Worksheets 1, 2, 3, 4, 5a, 5b, 6, and 7 from Stake's (2006) Multiple Case Study Analysis book. The worksheets will be modified and used to analyze data, identify themes, and generate assertions for my dissertation. Stake's (2006) Multiple-Case Study Analysis will be cited as the source and the dissertation will be published in the Liberty University Media Digital Commons. Thank you so much!

Appendix D: Worksheet 2

Worksheet 2. The Themes of the Multiple Case Study (Research Questions)

Theme 1: What can be learned from the challenges and successes experienced by founders and directors of NBPs in the United States?
Theme 2: What successes do preschool founders and directors' experience when establishing and operating NBPs in the United States?
Theme 3: What contributes to the successes preschool founders and directors experience when establishing and operating nature based preschools in the United States?
Theme 4: What challenges do preschool founders and directors' experience when establishing and operating NBPs in the United States?
Theme 5: In what ways do preschool founders and directors overcome challenges to establishing and operating NBPs?

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Appendix E Worksheet 3

Worksheet 3. Analyst's Notes Template while reading a case report

Case ID _____

<table>
<tr><td>Synopsis of case:</td><td rowspan="2">Case Findings:
I.

II.

III.

IV.</td></tr>
<tr><td>Uniqueness of case situation
for program/phenomenon:</td></tr>
<tr><td>Relevance of case for cross-case Themes:
Theme 1_____ Theme 2_____ Theme 3_____ Theme 4_____ Theme 5_____
Theme 6_____</td><td>Possible excerpts for cross-case report:
Page
Page
Page</td></tr>
<tr><td colspan="2">Factors (optional):</td></tr>
<tr><td colspan="2">Commentary:</td></tr>
</table>

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Appendix F Worksheet 4

Worksheet 4. Ratings of Expected Utility of Each Case for Each RQ Answer

	Case A	Case B	Case C
Answers to research questions (possible themes)			
Growth	True (H) Opening a second classroom.	True (H) Expansion from one to five days a week	True (H) Due to extreme interest of parents, no market analysis
Relationships	True (H) Working with sister, communicating with parents	True (H) Connecting with nature, others and self	True (M) Nature connection, working with parents
Experience	True (H) Participants spent 30-plus years in education	True (H) Nature enthusiasts since childhood, 20-plus years nature education experience	True (H) Started gardening as child, loves nature, 8-plus year teaching experience
Temperament	True (H) Calm, sanguine, optimistic	True (H) Positive, serene	True (H) Calm, self-assured
Like-Mindedness	True (H) Both teachers obtaining naturalist certification	True (H) All staff interested in primitive skills and ancestral knowledge	True (H) All participants are Waldorf Education proponents
Mission-Focused	True (H) Connecting children with nature, knowing food sources are top priorities	True (H) Nature connection is an essential program outcome	True (H) All materials and curriculum approaches are Waldorf-based
Collaboration	True (H) Working with the church, parents, and the food shuttle	True (H) Ithaca parade participation, sponsors, and parents	True (H) Renting the NBP setting from the state park
Leadership	True (H) Taking multiple roles, previous position as authority, leader by default	True (H) Mentoring others, leading others by casting a vision	True (H) Participant brought in by school to lead the NBP program
Worldview	True (H) Nature connection important and needed for healthy child development	True (H) Nature connection fundamental. Children are competent beings.	True (H) Play-based, outdoor education that follows the Waldorf approach is essential
Witnessing Transformations	True (H) Children considered shy and fearful became self-confident.	True (H) Watching children's connection with nature grow over time.	True (L) Spending time with students watching them learn.

Levels of Manifestation are indicated as High (H), Medium (M), or Low (L); Stake, R. E. (2006). *Multiple case study analysis*. New York: Guilford Press. Worksheets reprinted with permission of Guilford Press.

Appendix G: Worksheet 5b

Worksheet 5b. A Matrix for Theme-Based Assertions

Merged Answers to RQ 1, 2, 3, 4, and P	From Which Cases?	RQ1	RQ2	RQ3	RQ4	Primary(P)
Finding I Growth	H for Case A, B, and C	Yes	No	Yes	No	Yes
Finding II Relationships	H Case A and B only, M in Case C	Yes	No	No	Yes	Yes
Finding III Experience	H for Case A, B, and C	No	Yes	No	Yes	Yes
Finding IV Temperament	H for Case A, B, and C	No	Yes	No	Yes	Yes
Finding V Like-Mindedness	H for Case A, B, and C	No	Yes	No	Yes	Yes
Finding VI Mission-Focused	H for Case A, B, and C	No	Yes	No	Yes	Yes
Finding VII Collaboration	H for Case A, B, and C	No	Yes	No	Yes	Yes
Finding VIII Leadership	H for Case A, B, and C	No	Yes	No	Yes	Yes
Finding IX Worldview	H for Case A, B, and C	No	Yes	No	Yes	Yes
Finding X Witnessing Transformations	H for Case A and B only, L in Case C	Yes	No	No	No	Yes

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Appendix H: Worksheet 6

Worksheet 6. Multi-case Assertions for the Final Report

#	Assertion	Evidence in Which Cases?	Related to Which RQs?
1	Growth	All case provide H utility	Answers form RQ1
2	Experience	All case provide H utility	Answers from all RQs
3	Temperament	All case provide H utility	Answers from all RQs
4	Like-Mindedness	All case provide H utility	Answers from all RQs
5	Mission-Focus	All case provide H utility	Answers from all RQs
6	Collaboration	All case provide H utility	Answers from all RQs
7	Leadership	All case provide H utility	Answers from all RQs
8	Worldview	All case provide H utility	Answers from all RQs

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Appendix I: Worksheet 7

Worksheet 7. Template for Planning the Multicase Final Report

Main Topics	Pages	Case A	Case B	Case C	Theme 1	Theme 2	Theme 3	Future
The Study								
The Quintair								
Themes								
Assertion 1								
Assertion 2								
Assertion 3								
Assertion 4								
Assertion 5								
Summary								

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Appendix J: IRB Letter

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

June 5, 2015

Alexandra Barnett
IRB Approval 2234.060515: A Collective Case Study of Challenges and Successes Experienced by Founders and Directors of Nature-Based Preschools in the United States

Dear Alexandra,

We are pleased to inform you that your study has been approved by the Liberty IRB. This approval is extended to you for one year from the date provided above with your protocol number. If data collection proceeds past one year, or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,

[redacted]

Fernando Garzon, Psy.D.
Professor, IRB Chair
Counseling

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Appendix K: Timeline Template

Timeline for Establishing Your Nature-Based Preschool

Please complete the chart below by adding dates and milestones or events related to establishing your NBP. Please include information about the following in your timeline, as applicable: *Identifying community needs, visiting existing NBPs, gathering community and/or parental support, curriculum decision, philosophy established, location determined, staff hired, licensing, advertising, registration, and the first day of school*. Feel free to add as many milestones and as much detail per milestone/event as you would like by typing directly into the boxes below. To add boxes to this timeline chart, click on the last box of the chart and then click "Tab."

Date	**Milestone/Event**

Appendix L: Printed and Digital Documents

Type	Information Obtained	Origin
TKG Preschool and Camp Brochure	TKG's philosophy, mission, staff bio, daily schedule, yearly schedule, hours, tuition fees and photos of the NBP's setting and students.	TKG website (downloadable as .pdf)
TKG webpage	Pictures of the school setting and students. A detailed description of each themed area within the forest preschool setting.	TKG website
Email	Information about school's growth and recent developments	Email to researcher from TKG founder
Webpage	Mission, philosophy, and staff bios	TKG website
Webpage	Information on pricing, schedules, and curriculum	TKG website
Facebook	Current information about TKG, information about its philosophy	TKG Facebook Page
Primitive Pursuit's Ithaca Forest Preschool (PPIFP) Parent Handbook	Information on all aspects of the preschool, including its philosophy, schedules, fees, how students should dress in various types of weather, songs that are typically sung, parent involvement, and routines.	PPIFP website (downloadable as .pdf)
PPIFP Webpage	Information on PPIFP's growth, philosophy, schedule, tuition, and staff biographies	PPIFP website
Facebook Page	PPIFP's current events and philosophy	PPIFP Facebook Page
Webpage	PPIFP's need for pavilion renovation fundraising campaign	https://www.indiegogo.com/projects/ithaca-forest-preschool-pavilion-renovations#/
Webpage	Cornell University's preschool student recruiting for PPIFP and basic school information including tuition.	http://pawprint.cornell.edu/?q=articles/2013/09/cornell-cooperative-extension-opportunities
PPIFP Brochure	Information on the school's philosophy, current NBP offerings, and curriculum.	Cornell 4-H Extension Office in Ithaca, NY
Local newspaper article about PPIFP	Information on the school's philosophy, history, and an interview with Melissa Blake, lead teacher, in which she describes her impetus for starting PPIFP.	http://www.lansingstar.com/around-town-archive/10464-learning-and-playing-outdoors
Fundraising by PPIFP lead teacher Melissa Blake	Goal of raising $500 was exceeded by $105. Information on Ms. Blake's NBP philosophy, photos of the school's setting and students and the school's history	http://melissablake.peaksmaker.com/
Fundraising by	Goal of raising $1000 was not met ($675 were	http://primitivepursuits.

PPIFP founder Tim Drake	contributed) Information on Mr. Drake's NBP and general nature-related philosophy, and the school's history.	peaksmaker.com/about/?campaign=1654
Support the fight against Nature Deficit Disorder Fundraising Campaign	Information about the mission, philosophy, history, and vision of Primitive Pursuits.	http://primitivepursuits.peaksmaker.com/about/?campaign=1654
Advertisement for PPIFP Assistant Instructor position, August 2015	Information on the school's schedule, job requirements, and preferred experience and characteristics of candidates.	http://cdn.sitemandala.com/assets/101134/americorps-position-description-ithaca-forest-preschool-assistant-instructor.pdf
Newsletter of the Ithaca Monthly Meeting of the Religious Society of Friends (Quakers) March 2014	Information on public movie screening of "Artic Outdoor Preschool" facilitated by Melissa Blake.	http://ithacamonthlymeeting.org/wordpress/wp-content/uploads/IMM_news_2014_mar.pdf
Winter Dressing Workshop & Gear Swap November 2015	Information on PPIFP's community outreach workshop on dressing children appropriately for outdoor play in the winter.	http://ccetompkins.org/events/2015/11/07/winter-dressing-workshop-gear-swap
2015 People's Choice 'Signs of Sustainability' Awards	Signs of Sustainability 4th place award for nurturing love of forest and planet in children	https://sustainabletompkins.org/st-events/2015-peoples-choice-signs-of-sustainability-awards-presented/
WSSS Forest Kindergarten	Information about the Forest Kindergarten's history and philosophy.	http://www.waldorfsaratoga.org/programs/early-childhood/#Forest
New York Times article	Information about the philosophy, daily schedule and routines, setting, and photographs of the students and setting.	http://www.nytimes.com/2009/11/30/nyregion/30forest.html?_r=2&scp=1&sq=forest%20kindergarten&st=cse
Saratogian News article, March 2012	Interview with teacher and students of the WSSS. General information about the school. Photos of students, teachers, and the school's outdoor setting.	http://www.saratogian.com/article/ST/20120331/NEWS/303319941
Saratogian News	Interview with WSSS Forest Kindergarten head	http://www.saratogian.

video, March 2012	teacher about the philosophy and daily activities of the school. Video of the children taking part in the NPB's daily routine.	com/video/?va_id=3392708&pl_id=21461&ref=synd
Saratogian News article, March 2014	Information about the philosophy and daily activities of the school. Photographs of the setting and the NPB's students in the NBP setting.	http://www.saratogian.com/article/ST/20140320/NEWS/140329950
Daily Gazette news article, March 2009	Information on the formation of the WSSP Forest Kindergarten.	http://www.dailygazette.com/news/2009/mar/28/0328_gooutside/?print
Website	The WSSS website provided information on the Waldorf philosophy, as well as information about the school, admission requirements, and	http://www.waldorfsaratoga.org/

Appendix M: Timeline: TKG

Date	**Milestone/Event**
8/2013	After being laid off from job, decided to start my own Nature Based Preschool
9/2013	Attended workshop on starting a preschool
9/2013	Located/secured site for school
10/2013	Opened "TKG Preschool"
1/2014	Secured licensing and insurance
6/2014	Started "TKG" with summer camps
8/2014	Started fall preschool with 4 children enrolled
9/2014	Enrolled 6 more students
10/2014	Celebrated 1 year and enrolled 2 more students
5/2015	Celebrated our first graduating class with 12 students
6/2015	Started Summer camp programs with full rosters
8/2015	Fall Preschool to start with full roster and possibility of 2nd class room

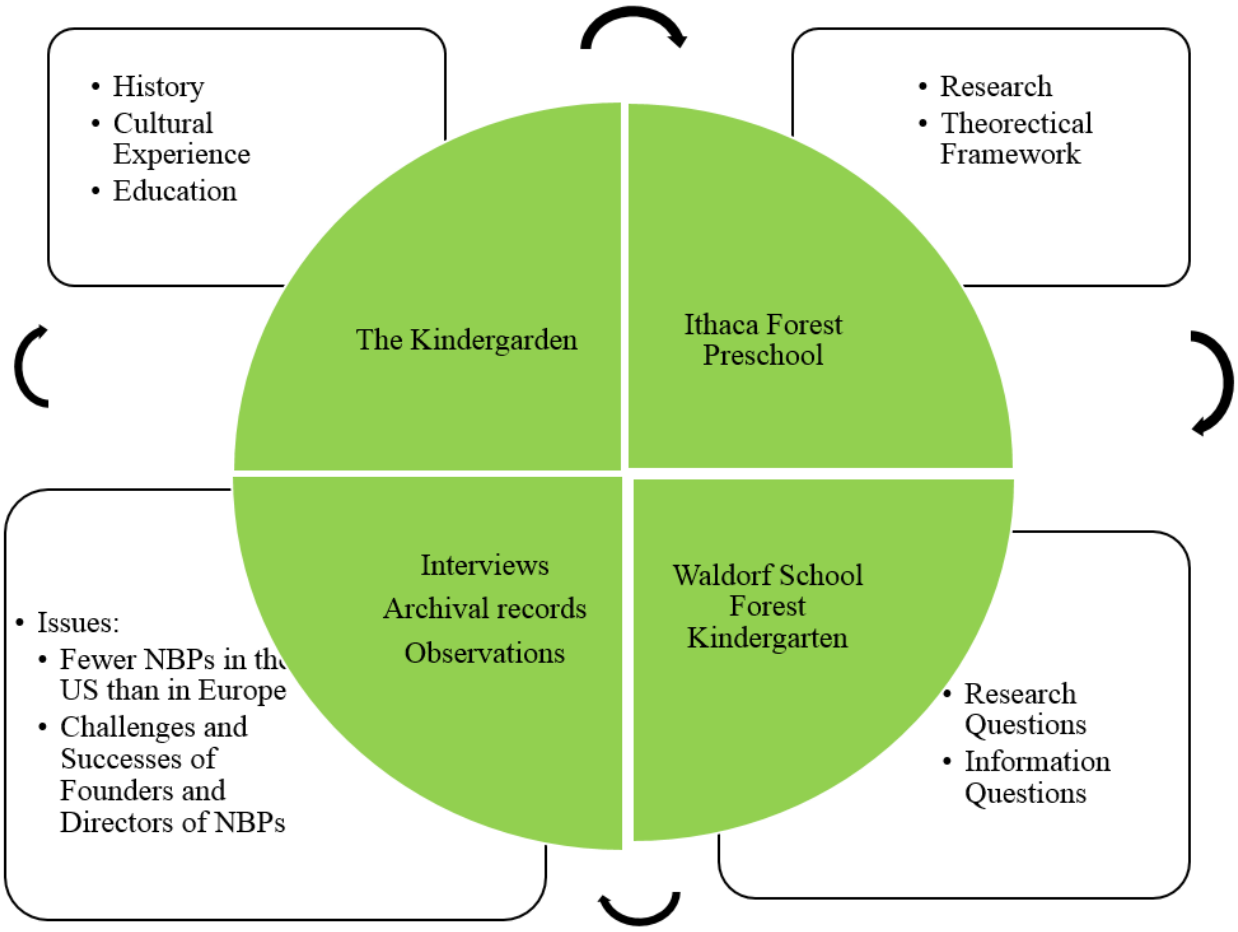
Appendix N: Timeline

Timeline: The Waldorf School of Saratoga Springs Forest Preschool

Date	**Milestone/Event**
September 2008	Needed an additional preschool/kindergarten space for the 2009-10 school year. Began envisioning a program that would have the children outside for more hours each day.
October 2008	Wrote proposal to the state park and met with them to see if they would be interested in having us form a Preschool/Kindergarten group using state land. Within a few weeks it was clear that the park had a house we could use for meals and indoor time if the weather was such that we could not be outdoors. It was attached to 300 acres and would give us much space to explore the forest.
November 2008	Created and implemented a parent survey to see what interest our community would have in such a program.
December 2008	Survey was done and information obtained led us to begin forming the forest program
June 2009	Agreement was signed with the state to use the property mentioned above. Faculty already employed by the school would teach in this space, additional staff were hired. Began to work on space and create the picture as to how the program would run. All this worked continued in July and August. Began advertising for the program.
September 2009	Class fully enrolled. Classes started September 9th 2009.

Appendix O: Worksheet 1

Worksheet 1 – Graphic Design of a Case Study



Stake, R. E. (2006). *Multiple case study analysis*. New York: Guilford Press. Worksheets reprinted with permission of Guilford Press.

Appendix P: Data Collection Timeline

Data Collection Date	Interviews
6/17/15	MK, TKG Outdoor Preschool, NC
7/15/15 and 7/16/15	Tim Drake, Founder and Director, Primitive Pursuits Ithaca Forest Preschool, Ithaca, NY
7/16/15	Melissa Blake, Lead Teacher and Preschool Program Coordinator, Primitive Pursuits Ithaca Forest Preschool, Ithaca, NY
7/18/15	Katherine Scharff, Lead Teacher and co-founder, Waldorf School of Saratoga Springs Forest Kindergarten, Saratoga Springs, NY
	Timelines
6/9/2015	Provided by MK, TKG Outdoor Preschool, NC
N/A (not provided by participant, requests for timeline sent on June 9, 2015, July 12, 2015, July 21, 2015, July 28, 2015, and September 7, 2015)	Provided by Tim Drake, Founder and Director, Primitive Pursuits Ithaca Forest Preschool, Ithaca, NY
8/30/2015	Provided by Katherine Scharff, Lead Teacher, Waldorf School of Saratoga Springs Forest Kindergarten, Saratoga Springs, NY
	Public documents and multi-media
Spring 2015 – December 2015	TKG Outdoor Preschool, NC, website and Facebook Page (June 2015)
Spring 2015 – December 2015	Primitive Pursuits Ithaca Forest Preschool, Ithaca, NY, website, Facebook Page, media coverage, and advertising
July 2015	Primitive Pursuits Ithaca Forest Preschool, Ithaca, NY, program brochure (print)
Spring 2015 – December 2015	Waldorf School of Saratoga Springs Forest Kindergarten, Saratoga Springs, NY, news reports (written and videos)
Spring 2015 – December 2015	Waldorf School of Saratoga Springs Forest Kindergarten, Saratoga Springs, NY, website
	Observation Notes
June 16, 17, and 18, 2015	TKG Outdoor Preschool, NC
July 15, 16, and 17, 2015	Primitive Pursuits Ithaca Forest Preschool, Ithaca, NY,
July 18, 2015	Waldorf School of Saratoga Springs Forest Kindergarten, Saratoga Springs, NY

Appendix Q: Consent Form

The Liberty University Institutional
Review Board has approved
this document for use from
June 5, 2015 to June 4, 2016
Protocol # 2234.060515

CONSENT FORM

A Collective Case Study of Challenges and Successes
Experienced by Founders and Directors of Nature-Based Preschools in the United States

Alexandra Barnett
Liberty University
School of Education

You are invited to be in a research study of challenges and successes experienced by founders and directors of nature-based preschools. You were selected as a possible participant because of your role as founder, operator, or faculty of a nature-based preschool. I ask that you read this form and ask any questions you may have before agreeing to be in the study.

Alexandra Barnett, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

Background Information:

The purpose of this study is to explore the challenges and successes experienced by founders and directors of nature-based preschools.

Procedures:

If you agree to be in this study, I would ask you to do the following things:
Meet with me at your location at a date and time convenient to you for an interview, lasting approximately two hours. The interview will be recorded via two audio-recording devices. Prior to the interview, you will be asked to create a timeline, using a provided template, to list milestones and dates related to your founding and/or operating a nature-based preschool. The time commitment for this activity will be one to two hours. Lastly, you will be asked to share any documents, media coverage, and web links you believe would contribute to me gaining a deeper understanding of your successes and challenges in establishing or operating a nature-based preschool.

Risks and Benefits of being in the Study:

The risks of participating in this study are minimal and do not exceed any risks encountered in everyday life.

There are no direct benefits to participation in this study.

The benefits to society are the promotion of nature-based preschools in the United States and possible establishment of recommendations on how to address the challenges of creating and operating a nature-based preschool. If desired, your identifying information can be included in the study, possibly leading to the advantage of receiving inquiries from others about your school.

Compensation:

You will receive a $50 Target gift card as a token of appreciation for participating in my study. The gift card will be disbursed at the beginning of our in-person meeting at your location for the purpose of obtaining the timeline and conducting the interview.

Confidentiality:

The records of this study will be kept private. Information that will make it possible to identify a subject will not be included in any report, unless specifically permitted in writing by the

participants. Research records will be stored securely and only the researcher will have access to the records.

All digital data will be stored on my password protected computer and passcode protected digital recording devices. Digital recordings will be transferred from my recording devices to my password-secured computer in the form of transcripts within 24 hours of their receipt and then deleted from the recording devices after three years. A transcriptionist may aid in the transcribing of the audio files. Barring unauthorized hacking of my computer or audio recording device, confidentiality should remain intact.

Voluntary Nature of the Study:
Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Withdrawal from the Study:
If you would like to withdraw from the study, you may do so at any time and without any negative repercussions. To withdraw, please email me at abarnett2@liberty.edu and state your name and that you would like to withdraw from the study immediately. All data collected from you will be deleted immediately if such an email is received.

Contacts and Questions:
The researcher conducting this study is Alexandra Barnett. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at abarnett2@liberty.edu, or 434-592-3289. Or, you may contact my advisor, Dr. Lucinda Spaulding at lsspaulding@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd, Suite 1837, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information to keep for your records.

Statement of Consent:

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS IRB APPROVAL INFORMATION WITH CURRENT DATES HAS BEEN ADDED TO THIS DOCUMENT.)

☐ The researcher has my permission to audio-record me as part of my participation in this study.

Signature: _____ Date: _____

Signature of Investigator: _____ Date: _____

Appendix R :Participation Confirmation 1 – TKG

Hello Alex!

It is great to hear from you. I remember working on my Master's Thesis and the process taking longer than expected as well. It was all very worth it though.

I have read the formal letter and I would be glad to chat with you in late April or May.

It is actually better that the process has been delayed. I have so much more to share with you.

Our school has grown! We even have a wait list. This first year has been a large learning process and it is going very well.

We are almost full for next year and looks like we will be able to open a second class.

The administration for the preschool and our upcoming summer camps has been keeping me very busy.

The parents are ecstatic and the kids are loving their school. I am feeling extremely blessed.

Let me know when you would like to set up time to meet.

I look forward to hearing from you,

MK

Director/Lead Teacher

TKG

Appendix S: Participation Confirmation 2 – Ithaca Forest Preschool

Alex,

Send along the timeline sheet you were wanting me to work on. We would love to have you visit some programs. They are happening 5 days a week so I think you can largely let me know what will work for you. Late April may be a bit less crazy for me but probably not ... I will want you to meet Melissa Blake who has been integral to the growth of our forest preschool.

Tim

Appendix T: Participant Confirmation 3 – The Waldorf School of Saratoga Springs

Dear Alexandra Barnett,

I received your request for some information about our Forest Kindergarten. I am happy to set a time to talk or answer your questions via email. Let me know what will work for you.

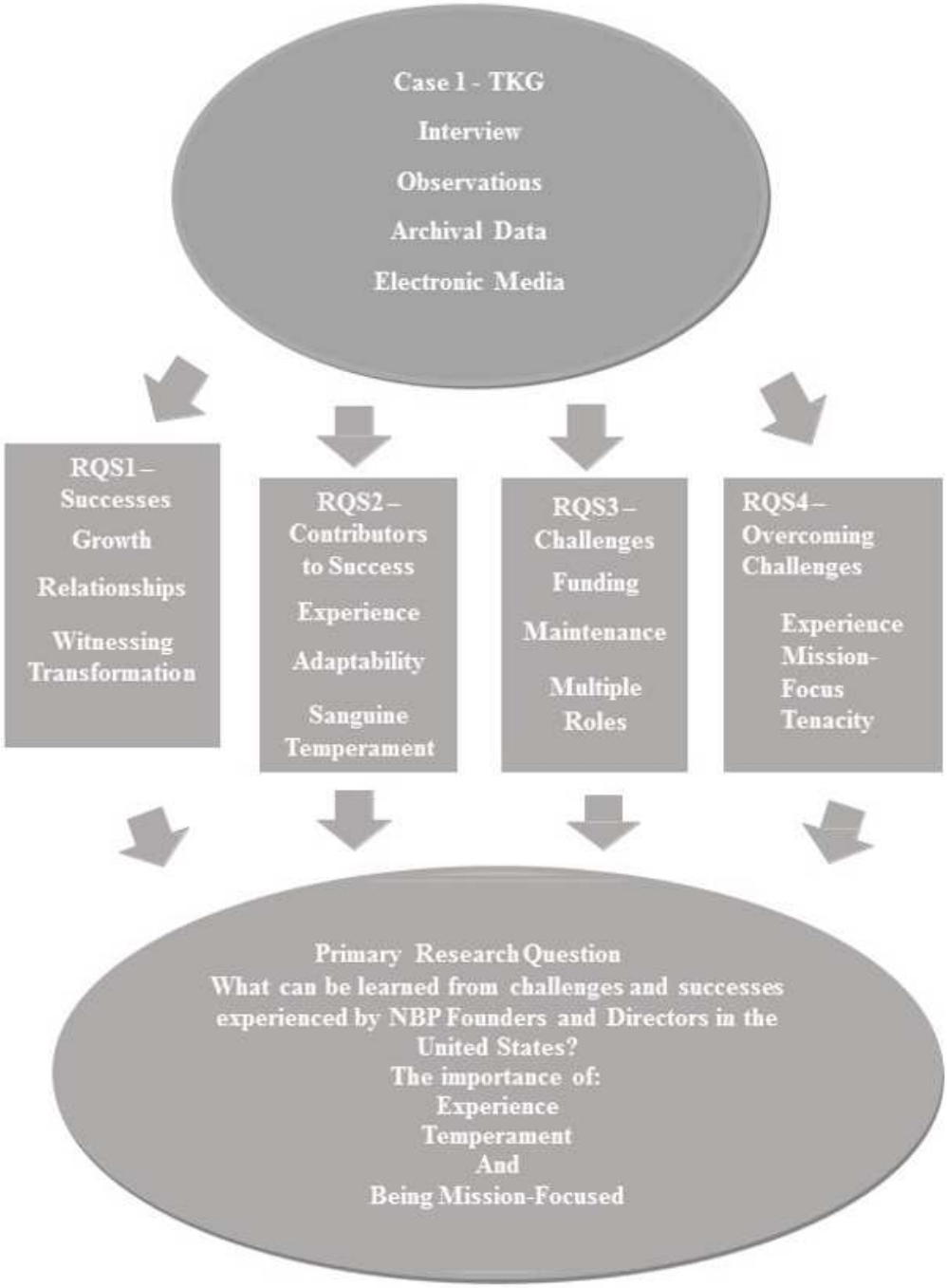
Thanks you, Katherine

Katherine Scharff

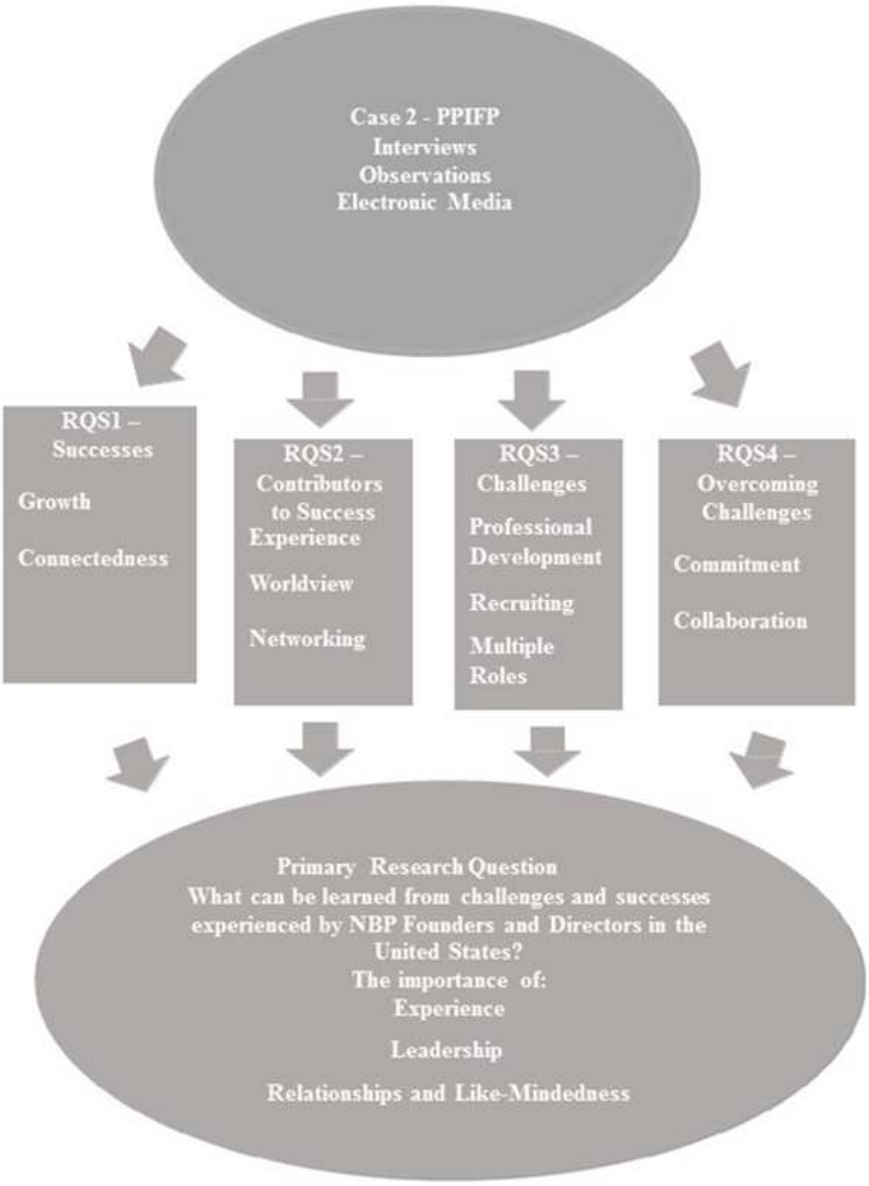
Waldorf School of Saratoga Springs

katherinescharff@waldorfsaratoga.org

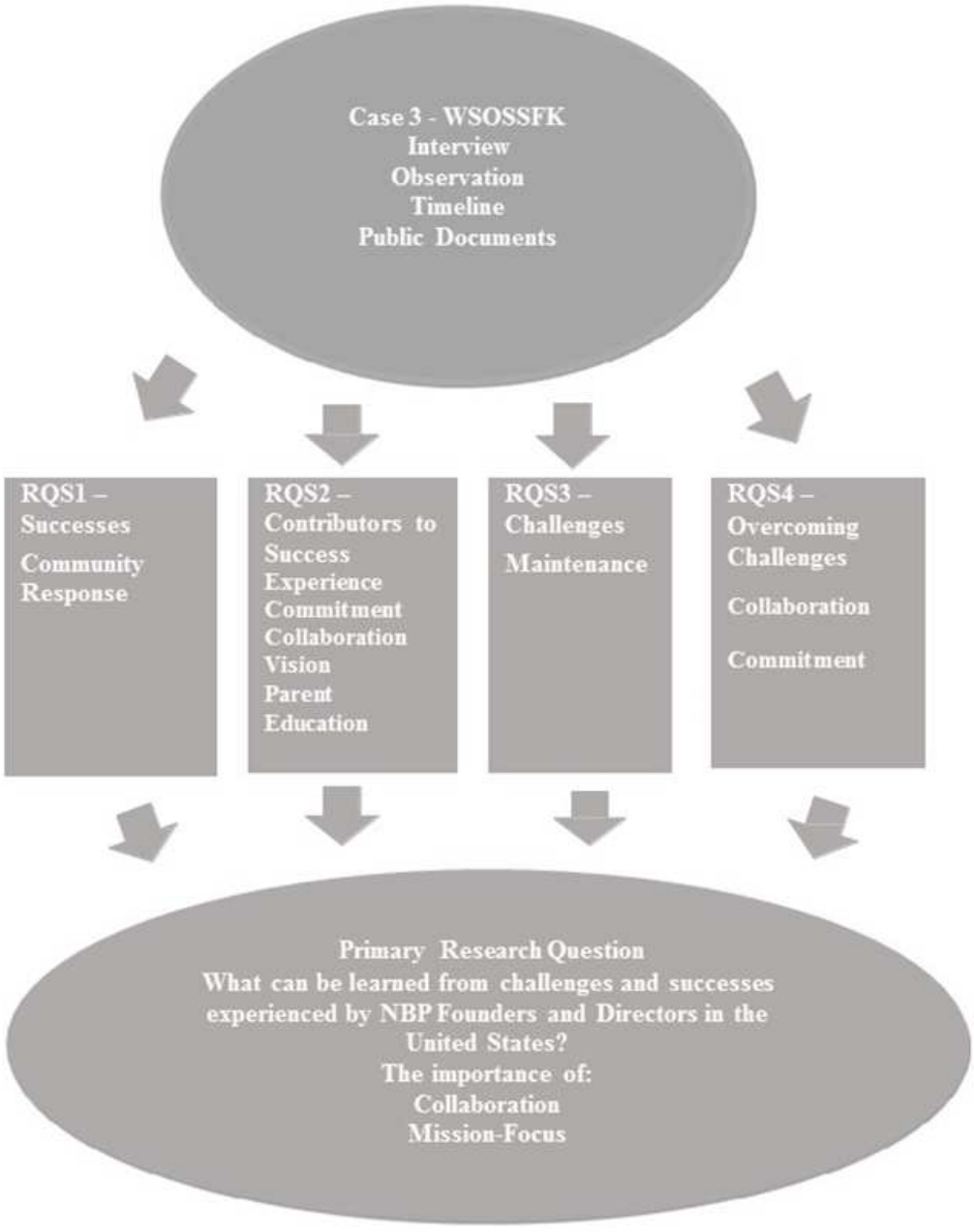
Appendix U: Case 1 – Visual Representation of Summary of Findings



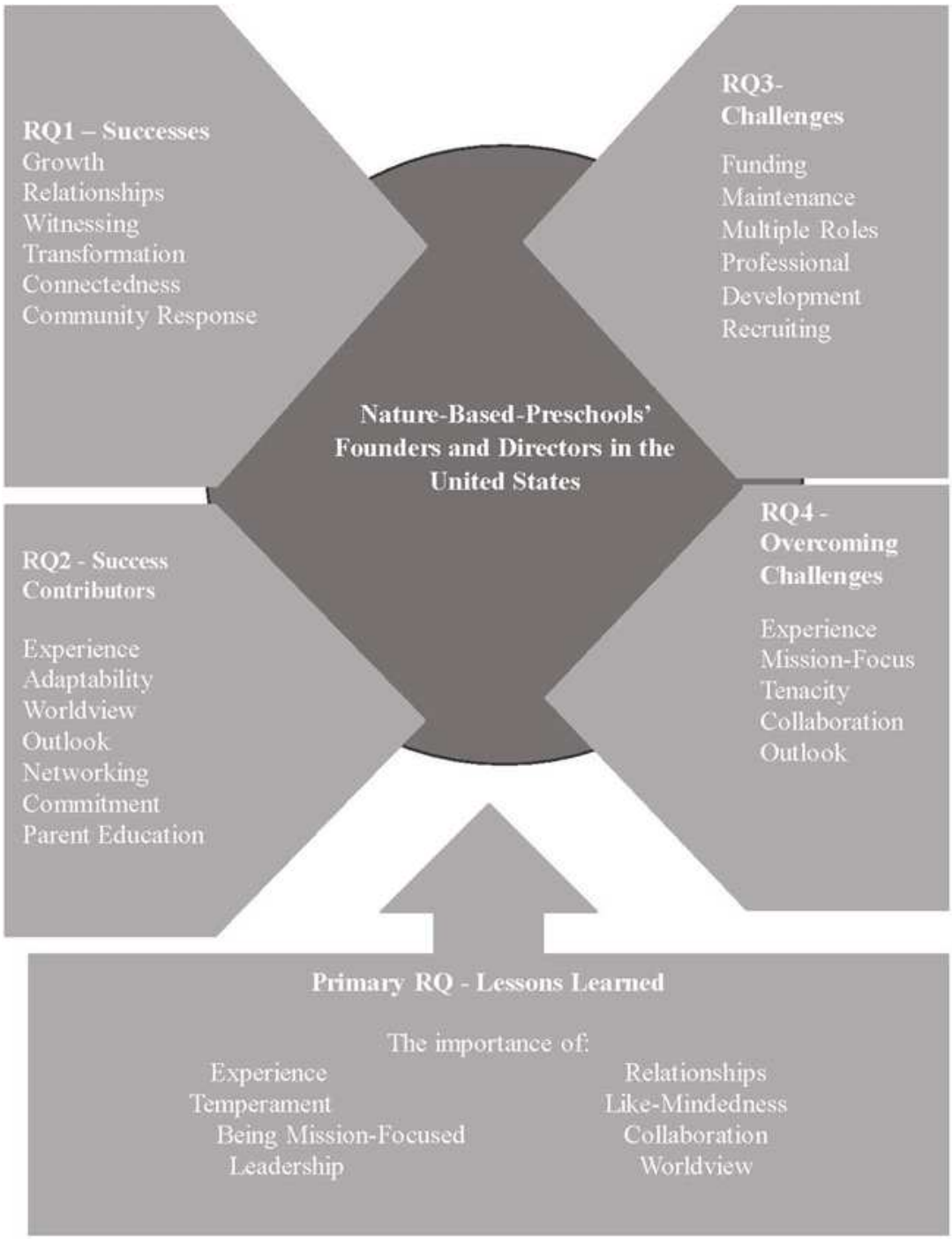
Appendix V: Case 2 Visual Representation of Summary of Findings



Appendix W: Case 3 Visual Representation of Summary of Findings



Appendix X: Summary of Research Question Findings from All Three Cases



Appendix Y: NBP and Local Preschool Tuition Comparison

Tuition Comparison between Study Participants' preschools and randomly selected preschools located within 25 miles of each site. Amount charged represents tuition for five half-days of preschool for ages 3-6.

TKG Preschool	Ithaca Forest Preschool	Waldorf School of Saratoga Springs Forest Kindergarten
Follow the Child Montessori School $877/month	Corner of the Sky Preschool $790/month	**Waldorf School of Saratoga Springs Rose (traditional Waldorf) Kindergarten $888/month**
The Raleigh School $510/month	Stepping Stone Preschool $785/month	Waldorf School of Saratoga Springs Rose (traditional Waldorf) Kindergarten $888/month
TKG $425/month	Namaste Montessori Primary Program $768/month	Saratoga Independent School $711/month
St. Raphael Preschool $333/month	**Ithaca Forest Preschool $505/$572 per month (self-determined sliding scale)**	Saint Clements School $454/month
Hudson Memorial Preschool $333/month	SPNS Preschool of Ithaca $320/month	