DOCTOR OF PHILOSOPHY IN EDUCATION IN EARLY CHILDHOOD DEVELOPMENT

TITLE: Experiences of Administrators and Teachers Espousing Child-Centred Learning in Three Utah County Charter Kindergartens

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I declare that this is my original work. It has not been presented at any university and all the sources are quoted and acknowledged by means of complete references. I further declare that I submitted the thesis to originality checking software and that it falls within the accepted requirements for originality.

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ABSTRACT

In the United States, national laws regarding education have been pushing for higher standards in terms of academic rigour and accountability. Standards-based education is now the law of the land. In response to these legal and political pressures, highly structured, didactic pedagogical approaches have become more common in kindergarten, the first year of state-funded education (comparable to Grade R in South Africa). Utah, specifically, has the largest class sizes and the lowest per-pupil funding of any state in the US, compounding the challenges in protecting child-centred pedagogical approaches. Because of these pressures, child-centred pedagogical practices have become threatened in kindergarten to make way for more direct-instruction, highly academic work with narrow focus on math and literacy achievement. The problem facing kindergarten stakeholders is how to incorportate child-centred practices in the face of these new pressures and expectations. This research seeks to elucidate what three Utah County Charter Schools are doing to include child-centred practices in their kindergartens by examining the experiences of administrators and teachers who establish or maintain these programmes. The objectives of the study are these: to explore how child-centred kindergartens are established, determine specific strategies used by administrators and teachers to support child-centred learning in kindergarten, and to identify resources necessary to maintain a child-centred kindergarten programme.

For this qualitative study, the public websites of all charter elementary schools in Utah County were consulted and all those that indicated they use child-centred approaches were selected as case study sites. From each of these three schools, one administrator and any experienced kindergarten teachers were invited to participate. One administrator and two teachers from Site A, two teachers from Site B, and the sole kindergarten teacher at Site C all participated. These six participants were all interviewed. A classroom at each site was observed. Documents regarding child-centred practices at each site were collected. Gathering data using these three methods bolsters the creditability of the findings. Framework analysis, chosen for its qualities of weighing all data equally and usefulness in evaluating the application of theory, was conducted on the data from the interviews, observations and documents.

Significant findings include substantial agreement among participants with the literature in philosophies and strategies espoused by other child-centred programmes. Interestingly, all three schools profess very distinct philosophies: one Montessori, one Waldorf and one with a general emphasis on discovery- and play-based learning. However, despite their differences they all have

successful child-centred kindergartens. One strategy common to them all is their schedule. They all have full-day programmes, over twice as much daily time as Utah law requires for kindergarten, and they all budget significant time for play. Other findings common between sites include extensive resource use in terms of toys, space and hands-on learning materials. A surprising finding is that there is a lack of training in child-centred approaches given to teachers at Site A and Site B, yet these kindergartens still have many child-centred elements. One possible explanation for this success despite minimal training is the unifying philosophy each school is founded on, codified in each school's charter.

Recommendations based on this research include both theoretical and practical recommendations. Theoretically, children would benefit from their school adopting a unifying philosophy across a school; this would help teachers to self-regulate and self-train according a shared set of balues. Practical recommendations include striving for small teacher: pupil ratios, devoting adequate resources to kindergarten, making child choice a part of every day, and providing children in kindergarten with a wealth and variety of experiences.

Key words: charter schools, child-centred, child choice, constructivism, developmentally appropriate, kindergarten, play-based, resources, teacher autonomy, teacher training

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ACRONYMS AND ABBREVIATIONS

ADHD	Attention Deficit Hyperactive Disorder
AMS	American Montessori Society
DAP	Developmentally appropriate practice
ECE	Early Childhood Education
IRB	Institutional Review Board
KEEP	Kindergarten Entry and Exit Protocol
MTSNV	Montessori Training of Southern Navada
NAEYC	National Association of Educators of Young Children
NCES	National Center for Education Statistics
QDA	Qualitative data analysis
QDAS	Qualitative data analysis software
R&R	Rest and Relaxation
STEAM	Science Technology Engineering Arts Math
STEM	Science, Technology, Engineering, Math
UNISA	University of South Africa
US	United States
USBE	Utah State Board of Education
USCSB	Utah State Charter School Board

CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION

About four million children in the United States enter kindergarten each year (Duncan 2015). In the US, kindergarten age is 5-6 years old. More than 2.5 million of these 5-6-year-olds do not have access to public preschool programmes before the kindergarten age (Duncan 2015). This leads many children to enter school a year or more behind their peers in academic readiness, especially in the areas of pre-literacy and language skills (Duncan 2015). In response to this issue, education reform laws have mandated specific learning standards administrators and educators are expected to uphold. This has led to an abandonment of child-centred pedagogies in favor of more stringent didactic approaches. Pathways forward that balance the many demands on kindergarten teachers with child-centred pedagogies are needed.

1.1.1 Background: Utah as a subset of US education

In Utah specifically, there is no state-funded preschool, and the federally-funded Head Start programme only serves 7% of four-year-olds (Duncan 2015). An additional 6% are enrolled in special education services, leaving 87% without access to public early childhood education until their formal entry into kindergarten (Duncan 2015).

Of course, families who can afford it send their children to private preschool before their entry to kindergarten. Nationwide, about 40% of 3-year-olds and about 68% of 4-year-olds attend some type of preschool programme, whether private or publicly funded (National Center for Education Statistics 2020). Although data specific to Utah regarding preschool attendance is scarce, the standardised testing of entering kindergarteners in Utah shows that 37% enter kindergarten with literacy skills below what the state would like them to have to succeed and may require intervention strategies (Utah State Board of Education 2019).

The patchwork accessibility of preschool education in the United States means that children enter kindergarten at disparate readiness and experience levels. Kindergarten must somehow accommodate the learning needs of all of them, as all 5-6-year-old children in the US have the right to public education beginning with kindergarten, with 9 states making entry at 5 compulsory (National Center for Education Statistics 2018). In Utah, public education is available to all children who are 5 by September 1 of the year, but it is not compulsory until age 6 (National Center for Education Statistics 2018).

Besides access (or non-access) to pre-kindergarten education, specifalized learning needs   bear upon children's readiness for school. About 10% of public-school children in the US are English language learners, the language used universally in this country's education system (National Center for Education Statistics 2020). In Utah, 9% of entering kindergarteners are English language learners (Utah State Board of Education 2019). Furthermore, 14.1% of students ages 3-21 nationwide receive special education service (National Center for Education Statistics 2020). In Utah kindergartens, 12% of students have disabilities (Utah State Board of Education 2019). The Individuals with Disabilities Act gives these children the right to a least restrictive (learning). environment, so many children in a typical kindergarten class may have special learning needs. During one school year of this researcher's kindergarten teaching experience, 9 of the 29 students in the class had documented special learning needs. Also, in Utah, 34% of incoming kindergarteners are economically disadvantaged (Utah State Board of Education 2019).

In Utah, the average class size in the primary grades (K-6) is 27.6, the highest in the country (National Center for Education Statistics 2012). There is no legal limit on how large a kindergarten class can be in Utah (Tanner 2018). So, Utah kindergarten teachers and administrators often have overcrowded classes to add to the challenges they face.

At the same time, both federal and state requirements for academic achievement in kindergarten have become more demanding, as measured by standardized testing. The Every Student Succeeds Act (2015) is the current US law governing all public K-12 education in the country. It allows each state to set its own academic standards and testing schedule, so long as certain requirements are met (US Department of Education 2015). Each standard is a concept or skill that schools are legally required to teach their students, and for which they are held accountable, often through funding stipulations. Utah created its Core Standards to answer this requirement. For kindergarten, there are 46 language and literacy standards alone, some of them requiring multiple parts (Utah Education Network n.d.). In kindergarten math, there are 30 standards. In kindergarten science, there are only 3 standards, but they each have multiple parts, as many as 13 parts for one standard (Utah Education Network n.d.). There are also required standards in fine arts, social studies, and physical education (Utah Education Network no date). Schools are only required to provide two hours of instruction per day for 180 days in kindergarten in Utah, totaling 720 hours for the school year (Utah State Board of Education 2016-2020). Schools are not incentivised to provide more than this because kindergarten is only funded at a rate of 55% of that of other grades (Office of Legislative Counsel 2016). There is a tremendous amount of

content to pack into those short hours, leaving many teachers to feel that there is not much flexibility in class time.

These challenges are daunting. The burden of meeting these challenges is one shouldered by both administrators and teachers alike, though their roles are different. Especially daunting is the task for administrators and educations who must handle all these challenges in a way that is healthy for a young child's development. Child-centred pedagogies and and constructivist approaches seem like the best foundation for strategies that meet both these challenges and the needs of young children. Therefore, these two philosophies form the theoretical framework of this study.

However, what these philosophies look like in any given locale may not be the same. Like the successful child-centered kindergartens found in the far flung areas of the world mentioned previously (forrest school, bush kinder, Reggio Emilia), it takes multiple stakeholders to find workable solutions. This study focuses on what administrator and teacher stakeholders can do in one locale: Utah County, US. Heretofor, administrators have rarely been included in such inquiry as teachers have the most direct responsibility for what happens in the classroom. But the role of administrators should be examined as a part of seeking a solution for meeting children's needs.

1.2 RATIONALE FOR THE STUDY

This research seeks to profile kindergarten programmes that are striving to be child-centred while taking on all the challenges of meeting the legal and practical requirements of teaching in Utah, United States. Legal requirements include teaching all the kindergarten standards required by the law. Practical requirements include managing to teach these standards, as well as meeting the needs of students with speciall learning needs, all with the limited time and resources given to schools.

Many child-centred philosophies and methodologies have worked successfully elsewhere, providing students with rich, whole-child learning experiences. Some of these successful kindergarten methodologies include: Reggio Emilia in Italy (Edwards, Gandini & Forman 1998), Forest School in Scandinavia and the UK (O'Brien 2009), Bush Kinder in Australia (Elliot & Chancellor 2014), and Finland's kindergarten programme (Ojala 2005). All have quality documented whole-child or developmentally appropriate kindergartens within the public-school system. Lee, Schaack, Neishi, Hernandez and Blank (2019) found that high academic achievement could be met without compromising children's social and emotional progress.

Kindergarten methodologies of high quality that can both nurture children's social, emotional, and academic needs, like Reggio Emilia, Forest School, Bush Kinder, and Finland's public schools, all are inspiring. But, in many ways, these methodologies and pedagogies are products of where they were initiated, and can only be successful insofar as the society and government that oversees them supports them.

There are over 13000 geographically defined American school districts across the nation (National Center for Education Statistics 2022). Geographic areas very significantly and affect the kinds of kindergarten methodologies that can be utilized; one can hardly have the outdoor nature school that is successful near the bush in Australia simply copied in Alaska where school year outdoor temperatures can plummet to -18 degrees Celsius. The Forest school movement that originated near the green forests of the UK cannot be exactly transported to the desert of Arizona where temperatures can be 40 degrees Celsius the month the school year starts. Rather, pedagogies must be realistic for the geographic context of the school. Also, since each state may have its own academic standards and budgets, the hours of instruction per day, academic standards, resources and demographics can vary widely. Thus, it is necessary that kindergarten programmes are concerned with nurturing the whole child must find methods that work in the context of their own locale, government and other unique circumstances.

The researcher has taught early elementary students in a charter school for more than four years, and was, in fact, the first kindergarten teacher hired at this school in 2016. She had to face many challenges and battles in attempting to create a child-centred programme from scratch. She has seen first-hand the haphazard nature of some programmes and the excellent, child-respecting nature of others. As a kindergarten teacher herself, she saw the stressors on kindergarten teachers – the pull to show quantifiable results through test scores, and the desire to help the children develop in emotional and social ways that often go unappreciated by other stakeholders. She was a kindergarten teacher the first year that Utah State began requiring standardised testing at the start and end of the academic year (called the KEEP test – Kindergarten Entry and Exit Protocol). She saw these tests bring some children to tears or tantrums, while others enjoyed the experience. She has experienced the difficulty herself in championing the young child and striving for a child-centred classroom and knows some of the joys and challenges. She has seen other teachers struggle to know what to do for young children. She hopes this research will aid others that wish to do better for their students.

After conducting this research, the researcher found that there are diverse ways to incorporate child-centred pedagogy in the classroom. No two teachers interviewed or observed applied this philosophy in the same way. With this in mind, it seems pedagogies based on child-centredness can thrive when administrators and teachers are aware of child-centred pedagogies, teachers are given the freedom from administrators to apply them, and teachers have the resources to apply them.

1.3 STATEMENT OF THE PROBLEM

As mentioned above, Utah has the highest average class size in the nation; it also has the lowest per-student spending in the nation, meaning the smallest budgets available to schools in the entire country (Hanson 2022). With these challenges and the specific context of Utah schools with the required standards, percentage of special needs students, and geographical realities, strategies that work specifically in Utah for espousing child-centred learning must be found. Therefore, this study aims to explore the experiences of administrators and teachers who already espouse child-centred learning in Utah County Charter School kindergartens.

1.3.1 Research Questions

The main research question for this study is formulated as follows:

What are the experiences of administrators and teachers espousing child-centred learning in selected kindergartens located in Utah County Charter Schools?

Sub-questions include:

- How do administrators and teachers establish child-centred learning in the classroom?
- What specific strategies do administrators and teachers use to support child-centred learning in the classroom?
- What resources are required for maintaining child-centred learning in the kindergarten classroom?

1.3.2 Aim and Objectives of the Study

The aim of this study is to explore the experiences of administrators and teachers when establishing child-centred learning in three Utah County Charter kindergartens. To achieve this, aim the following objectives are set:

- Explore ways that administrators and teachers establish child-centred learning in the kindergarten classroom.
- Determine strategies used by administrators and teachers to support child-centred learning in the kindergarten classroom.
- Identify resources that are required for maintaining child-centred learning in the kindergarten classroom.

1.4 PRELIMINARY LITERATURE REVIEW

The literature review for this study will consist of two chapters. The first chapter will delineate the theoretical base for this study which includes child-centred pedagogy and constructivism. The second chapter will present the current state of knowledge on child-centred learning in kindergartens looking at the following themes which are derived from the research questions:

- establishment of child-centred learning in the classroom
- strategies used by administrators and teachers to support child-centred learning in the classroom
- resources that are required for child-centred learning in the kindergarten classroom

1.4.1 Theoretical Framework

The theoretical base for this study is child-centred pedagogy, a pedagogy with roots in the constructivist philosophy.

Child-centred is a broad term that has gone through several interpretations and meanings in education (Chung & Walsh 2010). Currently, it tends to mean classroom culture and teaching strategies that are specifically designed to help children along in their natural development, acknowledging that they are agents in their own lives, and that their feelings and desires are just as valid as those of the adults in charge. Terms with many overlapping meanings and uses are play-based learning, some forms of personalised learning, and developmentally appropriate practice. This philosophy was the original germ of kindergarten, but over the years has been somewhat lost. However, there is a resurgence of interest in reestablishing the values of the original kindergarten movement.

The original kindergarten was child-centred and developmentally driven. Friedrich Frobel established his Play and Activity Institute in 1837, for the purpose of educating children younger

than 7 years old, the typical starting age for school at the time (Frobel Web 1998-2005). He renamed it kindergarten, or "children's garden" in 1840 (Frobel Web 1998-2005). That first kindergarten emphasised three essential domains of activity – creative play, singing and dancing, and watching and working in a garden to learn about nature (Frobel Web 1998-2005).

Child-centred pedagogy is also concerned with the balance of power in the classroom. Teacher-centred programmes place the locus of control nearly exclusively in the hands of the teacher. Child-centred classrooms balance that power with a high degree of child freedom. Tzuo (2007) maintains that the two are not mutually exclusive, but that the developmental and educational philosophies of Piaget, Dewey, Vygotsky and Montessori all support a balance between teacher-centric and pupil-centric power. This sort of balance of power is emerging as the most recently embraced iteration of child-centred pedagogy by such entities as the National Association of Educators of Young Children (NAEYC 2009).

The theoretical framework chapter (Chapter 2) of this study summarises the literature pertaining to child-centred pedagogy, as well as reviewing the constructivist philosophy which underpins it. The framework of these two movements will provide context and background for data collected from informants that work in kindergarten programmes that self-report as child-centred.

1.4.2 Literature Summary

This research adds to the other inquiries into the phenomenon of child-centred kindergarten programmes in the US. As education is largely a matter of local (versus national) control, programmes can vary significantly. What works in one locale may not work in another. However, other research that speaks to the research questions of this project has been done in other places and may inform and give a reference point to this research. Literature that speaks to each of the research sub-questions is summarised below, namely establishment of child-centred learning in the classroom, strategies used by administrators and teachers to support child-centred learning in the classroom, and resources that are required for child-centred learning in the kindergarten classroom. Furthermore, research into Utah kindergarten is included in this review for context.

Establishment of child-centred learning in the classroom

Child-centred learning, according to Andiema (2016), takes place when the flow of knowledge is not centralised from the teacher to the learner. Traditionally, teaching and learning have subscribed to the belief that teachers should impart knowledge to learners, comparative to child-

centred methods. Despite several research reports that confirm that teacher-centred approaches still dominate in the education scene, Early Childhood Education (ECE) supports the paradigm which encourages the focus of instruction that is child-centred, with the end goal of developing children who are autonomous and independent, by placing the responsibility for learning in the hands of the children. In Chapter 3 of this study, the establishment of child-centred learning in the classroom is elaborated with the aim of providing context for this study.

Strategies used by administrators and teachers to support child-centred learning in the classroom

It should be noted that in child-centred classrooms, the curriculum is no longer dictated by the next chapter in a scripted teacher's manual but is dictated by student interests (VanHousen 2013). In Chapter 3 of this study, some strategies for child-centred learning are studied and discussed in order to identify gaps in the literature.

Resources that are required for child-centred learning

Cavanaugh, Clemence and Teale (2016) posit that child-centredness may be achieved somewhat with modest time and material. Their study and other similar studies will be discussed in full in Chapter 3 of this study.

1.5 RESEARCH METHODOLOGY

This study is couched in the constructivist paradigm; its research approach is qualitative using multiple case study research design.

1.5.1 Research Paradigm

A research paradigm is a worldview or philosophy that colors one's interpretation of data and research (Kivunja and Kuyini 2017). All pursuit of knowledge is carried out, whether knowingly or unknowingly, in the context of assumptions about knowledge acquisition. Is there one reality or truth, regardless of individual perception? Is reality in the eye of the beholder, and if so, are there, in fact, many realities?

The belief that reality exists independently of humans gave rise to the positivist paradigm, that holds knowledge can be gained through controlled experimentation and removal of bias, to discover natural causal laws (Rehman & Alharthi 2016). In other words, if the human element can be totally removed from the research, then the researcher can get closer to the truth. Post-

positivism still holds that there is a reality "out there" to be understood, but that it may be impossible for humans to discover it perfectly due to our biases and social contexts (Rehman & Alharthi 2016).

Conversely, the allowance for multiple realities and perceptions of realities is the realm of the constructivist/interpretive paradigm. This paradigm holds that these various realities can only be understood by being involved with subjects and getting to understand their context (Rehman & Alharthi 2016). Rather than trying to remove the human element in a phenomenon, it is embraced and included as a part of the inquiry.

Constructivism is the paradigm of knowledge acquisition that maintains knowledge is gained by building it from one's experiences and interactions with the world. The first constructivist to use this label was Jean Piaget, who maintained that learning will not likely produce knowledge of the whole truth, but just what portion of that truth one's own experiences and reflection upon those experiences produces (Fosnot 2015). Constructivists/Interpretivists acknowledge that any data gathering that happens in social contexts will be "contaminated" by the researcher's own experiences and worldview (Rehman & Alharthi 2016). It then becomes the duty of the researcher not to control all human elements, but to acknowledge and document them so consumers of the data and conclusions have enough context to judge their veracity and applications for themselves.

Because this research was cheifly concerned with the lived experiences of administrators and teachers following a specific pedagogy, it was more concerned with the constructed understanding of participants than an objective measure. Therefore, this research was conducted under the constructivist/interpretivist paradigm. This inquiry was primarily concerned with the experiences of teachers and administrators and the reality and meaning the subjects make of their experience, rather than a phenomenon outside human bias. This research includes both classroom observations and interviews as well as researcher reflections, in order to document the perceptions of those involved and provide as much context, and as rich a description of reality, as possible.

1.5.2 Research Approach

This research is qualitative in approach. Qualitative approaches in research are an extension of the constructivist philosophy, which views people as makers of meaning and therefore experiencing their own reality, rather than one single shared reality (Schumacher 2010). For this reason, qualitative research lends itself best to understanding social phenomena, especially when

that phenomena are described by those who experience it (Schumacher 2010). Furthermore, qualitative research tends to focus on narrative rather than numbers. In qualitative approaches, data is typically gathered in the subject's setting (Creswell & Creswell 2017). Also integral in qualitative research is the researcher themself, who comes to the data collection with their own experiences and biases (Creswell & Creswell 2017). In qualitative research, however, these experiences are perceived as a vital ingredient in making meaning from the data, so long as they are plainly documented to allow others to review their conclusions with a critical eye (Creswell & Creswell 2017, Schumacher 2010).

This research is an exploration into what is going on in the sampled kindergartens, and thus it is a social phenomenon, one specifically experienced by the administrators and teachers who run the programme. This research focuses on the narrative these subjects chose to share, rather than test scores or other learning outcomes of their students. The data was collected on site, at the setting and in the context of the phenomenon, with the setting being part of the data. The researcher has been a kindergarten teacher herself, thus her experience helps in knowing what to watch for, what to ask and how to understand the subjects because she is familiar with that type of environment. For these reasons, a qualitative approach is best for data collection in this case.

1.5.3 Research Design

Qualitative designs are the best approach to the research question in this study. This research is exploratory in nature. It seeks to find out what the experiences of teachers and administrators have been at three kindergartens that self-identify as having child-centred curriculum and/or policies.

This multiple case study consists of three case studies, which are then compared for similarities and differences. The potential purposes of case studies are many. Case studies are exploratory in nature and useful for studying process; they may elucidate the need for further research in an area that has not been studied extensively; they may be used to develop a model based on a concept; and they may be used to improve practice or policy (Creswell & Creswell 2017, Schumacher 2010). In the instance of this research, the process of establishing and maintaining a child-centred kindergarten programme is the subject of the study as experienced by the teachers and administrators, and it is hoped that the data and findings will inform other programmes.

1.5.4 Research Methods

This section details the methodology chosen for this study, including the sampling strategy that was employed, data collection methods, and data interpretation strategies that were used in this study.

1.5.4.1 Sampling

Qualitative research is less concerned with generalising findings and more concerned with increasing understanding about a small or under-researched population (McCombes 2023). Therefore, sampling in qualitative research does not rely on randomisation, but, quite the opposite, namely, on careful, purposeful selection (Schumacher 2010). This research uses a concept/theory-based case sampling strategy. The concept/theory-based case type is a case where it is known that a specific strategy or concept is being put into practice (Schumacher 2010). It may also be defined as an exploratory case, since the concept under study (in this study, child-centred kindergarten) has no clear, single set of outcomes (Baxter & Jack 2008). Charter school kindergarten teachers and administrators were chosen to sample from because charter schools are run locally and are usually not part of a bigger district, so they are freer to make their own decisions, and may therefore be more likely to be empowered to put their philosophies into practice, thus yeilding stronger concept-based cases to study.

There are 17 charter schools in Utah County that offer kindergarten. Their websites were consulted, and from this larger subset of charter kindergartens, those deemed appropriate sites due to their guiding philosophies were selected. It was hoped that schools sharing a child-centred philosophy would offer answers to the research questions. The mission and vision statements and "about" pages were consulted on their websites. Those schools that self- reported as being child-centred were selected to sample from. Three schools described themselves as focusing on whole-child, child-friendly or child-directed curricula. To protect the anonymity of the participants, these schools are referred to only as Site A, Site B and Site C in this study.

From these three schools, the final research sample was taken. The researcher determined which potential participants to invite by consulting the administrator at each site. Each administrator was invited to participate. Then, the administrator was given a document delineating the qualifications a potential teacher subject should have, and the administrator was asked which kindergarten teachers at the school best fit those qualifications. Qualifications included: participants should have at least 2 years of kindergarten teaching experience, play an active role in curriculum

development, have direct responsibility for students, and have power to decide how their classroom environment is set up and managed. These qualifications excluded teacher aides from becoming participants. These teachers were then invited to participate.

Although one administrator and up to three teachers at each school were invited to participate, only the administrator from site A, two teachers from Site A, two teachers from Site B, and one teacher from Site C elected to participate.

1.5.4.2 Data collection techniques and instrumentation

Qualitative research features the researcher as the primary instrument (Yin 2016). The goal of qualitative data gathering is to procure as rich a description as possible, with nothing omitted, about the subject under study (Schumacher 2010). For this reason, data is collected from multiple perspectives. From these, rich data conclusions are drawn inductively (Schumacher 2010). Tools of qualitative data gathering that were used in this study include interviewing, document analysis, and observing (Yin 2016). These three tools were chosen to obtain multiple perspectives and therefore richer data.

1.5.4.3 Interviews

An interview was set up with each of the participants that comprised the sample. An interview guide was created beforehand that focused attention on the research questions. The interview schedules are found in Appendices G and H. Such interview guides keep the interview on track and may even help elicit more information from participants (Yin 2016). However, it is important that questions remain open-ended, the tone of the interview is conversational, and the interviewer should use probes and follow-up questions frequently enough to keep the participant comfortable, but to not lead the participant (Yin 2016) The goal is to understand the participant's view of reality (Yin 2016).

Although an interview guide was developed, qualitative interviewing is a flexible instrument. The most important characteristics of a qualitative interview are its probes, pauses and other verbal and non-verbal communication that enables the participant to feel safe in talking to the researcher (Schumacher 2010). Also important is question format. Dichotomous questions and presupposition questions should be avoided (Schumacher 2010). Additional hallmarks of good qualitative interviews were pursued by the researcher. These include speaking less than being

spoken to, being non-directive, staying neutral and maintaining rapport (Yin 2016). In this study, the researcher pursued an empathetic, conversational tone (Schumacher 2010).

Interviews were recorded on a voice recording device for future transcription. Modest field notes were also taken but remained unobtrusive to give the participant the researcher's listening attention.

1.5.4.4 Document Analysis

Collecting and examining documents is part of qualitative research because it may complement or inform other data collection strategies or may yield data otherwise not available (Yin 2016). The researcher requested of the administrators and teachers any pertinent documentation, such as literature typically given to kindergarten parents, classroom rules and lesson plans.

1.5.4.5 Observation

Observation is the "mainstay" of qualitative research (Schumacher 2010). It is one of the most fundamental methods of fieldwork, often going hand-in-hand with other data-collection strategies (Yin 2016). The main aim of observations in this study was to see the context in which the teacher practised, so the interview answers could be put into context. An observation instrument was developed (see Appendix F), and observations of a typical class period or day were conducted at the convenience of the teachers.

As administrators typically do not spend much time in the classroom, observations were only conducted with select teacher subjects. In the course of interviewing teachers, the researcher selected which teachers she would like to observe in the classroom setting. This decision was based on what subjects' responses were in the interviews and included teachers that seemed to be particularly knowledgeable about child-centred philosophy or have the most interesting experiences to share regarding establishing their kindergarten programmes, or perhaps appeared to demonstrate any significant departures from the norm of the other subjects. The observation phase was a way to confirm or critique how the teacher put her experiences and child-centred methods to work in the classroom. One teacher at each school, namely a total of 3 teachers, were selected for the observation stage of data gathering. These teachers were selected after the interview process, so as to provide a glimpse into how the teachers put their ideas shared in the interview into practice.

1.5.4.6 Data analysis and interpretation

Framework analysis techniques were selected as the appropriate method to codify and analyse the data gathered in this research study. Developed for researching policy application, framework analysis is mainly used to describe what is happening in a setting, seeking to answer such questions as: "What is the nature of people's experience?" and "How are objectives achieved?" and "What elements operate within a [social] system?" to name a few (Ritchie & Spencer 1994:174). This study focuses on what teachers experience as they work in a kindergarten setting in a school that self-reports as child-centred. It is a specific setting and a child-centred philosophy may be thought of as a policy of sorts, making framework analysis an appropriate approach.

There are five steps to data organisation and analysis in the framework approach. These are called: familiarisation, identifying a thematic framework, indexing, charting, mapping and interpretation (Ritchie & Spencer 1994). They may also be called: familiarisation, constructing the initial framework, indexing, charting, and abstraction and interpretation (Spencer, Ritchie, O'Conner & Ormston 2014). Each step is outlined briefly here with how it was used specifically in this study.

Familiarisation means immersion in the data, or reading, rereading and reviewing the data set (Ritchie & Spencer 1994). It is the first time the researcher may start to see themes or patterns (Spencer et al. 2014). It was expected that this study would produce field notes from observation, interview transcripts and any member-check driven addenda, and possibly a few documents such as class schedules, classroom stated rules or expectations and lesson plans. The familiarisation stage in this study involved reading through the data and uploading it to a qualitative software analysis platform. Dedoose.com was chosen as an appropriate software platform for the data collected in this study. At the familiarisation stage, the researcher chose this platform among several available because it seemed the most appropriate match to this particular data set.

The second step, identifying or constructing a framework, happens as a natural next step to familiarisation. During familiarisation, themes, key issues and ideas emerge, and these are noted (Ritchie & Spencer 1994). Then, in the construction of a framework, these themes are revisited and organised into a framework. Issues identified may be a priori – in direct response to the research questions; emergent – having arisen in the course of the study; or analytical – patterns found upon reviewing the data (Ritchie & Spencer 1994). Constructing a framework in this study

consisted of organising two layers of coding – "parent" codes that summarised several granular ideas and "child" codes, the granular ideas present in the data.

Indexing, the third step, is the process of applying the framework to the data (Ritchie & Spencer 1994). It is a sorting and labelling process. It is often likely that software is useful in this process; however, some intuition and human judgement must be involved (Ritchie & Spencer 1994). All the data must be annotated this way. Indexing allows patterns to be found in the data (Ritchie & Spencer 1994).

The fourth step is charting. Charting involves "lifting" the individually indexed pieces of data and making them into a whole picture (Ritchie & Spencer 1994:182). This may be done in a literal chart, where one chart is built for each theme, and headings of each column is a sub-theme, and each row is a unit of data analysis, like one interview or document (Spencer et al. 2014). It may also be set up by case, where one case is a row and the columns represent the themes. This is another step that may be aided by the use of software. The decisions about how to organise the charts, how many and what themes there will be can only be made after the data is gathered and reviewed.

The fifth step is mapping or abstraction and interpreting. This is the serious and systematic process of detecting the answers to the original research questions and any other discoveries the data lead to (Ritchie & Spencer 1994). There are several types of analysis that can be done at this step, depending on those most applicable to the aim of the qualitative research being done (Ritchie & Spencer 1994). Some analyses that may be applicable to this research include creating typologies, finding associations, defining concepts, developing strategies or mapping the range and nature of a phenomenon (Ritchie & Spencer 1994). Only the examination of the data gathered will determine which direction the findings will take.

1.6 CREDIBILITY AND TRUSTWORTHINESS

Trustworthiness in qualitative research can be achieved by focusing on four characteristics: credibility, transferability, dependability, and confirmability (Shenton 2004). Credibility of research findings is the degree to which the findings are believable and appropriate (Mills 2010). Transferability is the degree to which findings in the context of one study may apply to another context (Trochim 2020). The dependability of a study rests on how well the data collection and analysis methods used are reported in detail, so that a future researcher could use the same ones

(Shenton 2004). The confirmability of a study refers to whether the findings can be corroborated by other researchers (Trochim 2020).

1.6.1 Credibility

To establish credibility, the researcher must demonstrate that an accurate picture of a phenomenon is being presented (Shenton 2004). This can be accomplished through three "inquiry elements": rigorous data gathering methods including triangulation, the training and preparation of the researcher, and a belief in qualitative philosophy and methods (Patton 1999:1190). Triangulation can be accomplished through using multiple data streams. For this reason, data for this study is gathered through in-depth interviews from multiple participants at the same case study site, observations, and document analysis. The researcher has multiple years of experience working in kindergarten settings, so this preparation also adds to the credibility of the data gathering.

Additionally, conducting member checks ensures credibility (Shenton 2004). The researcher should ask each informant to review the transcript of their responses to make sure that what she intended to communicate is what was captured. Tactics designed to ensure honest responses from informants also bolster credibility (Shenton 2004). To encourage honest responses, informants should be assured that the researcher will not divulge any sensitive information they share with their superiors, and participants should be informed they can stop the interview at any time or refuse to answer.

1.6.2 Transferability

Inherent in the nature of qualitative research is an acknowledgement that there will always be some differences in each environment when humans and experiences are being studied. Therefore, qualitative findings cannot be generalised in the way that well-crafted quantitative results can be. However, with sufficient detail provided for the context of the research, consumers of the research can decide for themselves if the findings of a qualitative study might apply to another context with which they are familiar (Shenton 2004). This is referred to as transferability. It is intended that the classroom context, schedule, policies and procedures of each kindergarten classroom will be described with enough detail that readers of the research can determine how similar or dissimilar it is to the kindergarten context for which they have concern. Thus, the findings of this study may prove to have a measure of transferability appropriate for qualitative research.

1.6.3 Dependability

How dependable a study is hinges on whether it can be replicated. In order to establish dependability, the research design, data gathering operations, and reflective appraisal of methods used should be detailed (Shenton 2004). Dependability also hangs on the researcher's reporting of changing context within which the research takes place (Trochim 2020). Reflex journaling, field notes taken during or immediately after observation, and detailed recording of context throughout the study term will help establish dependability of the study findings.

1.6.4 Confirmability

The aforementioned triangulation built into the research methodology will help to bolster the confirmability of the study. Other methods of establishing confirmability include documenting checks of the data (as in the aforementioned member checks), seeking for negative instances- – those data that do not fit the pattern, and establishing an audit trail (Trochim 2020, Shenton 2004). The audit trail is similar to establishing dependability; it is laying out the step-by-step course of the research for readers of the study to follow (Shenton 2004). All these methods are employed in this research.

1.7 RESEARCH ETHICS/ETHICAL CONSIDERATIONS

Several permissions were obtained to move forward with this research. The University of South Africa has policies designed to protect research subjects, and so permission was sought for and received from the university to conduct research under its supervision.

The three charter schools where the research took place each have a Board of Directors, compliant with Utah law, which decided whether the researcher had permission to conduct this research on their campus. They have the authority to allow access to the classrooms and the staff. A letter written to each board to ask permission to conduct this research at their school. The research subjects are all adults; each prospective subject must give informed consent for their interview, and each consented. Each participant received a written document of their rights and signed a document giving their consent to be observed and interviewed.

Interactions with children were minimal, and data about specific children was not gathered. Classroom observations serve as context for the adult responses, and observations are reported as descriptions of the nature of the classroom, policies and procedures. Therefore, the researcher's involvement with students was no more than that which a parent volunteer in the

classroom would be. Data was not collected from or about the students. However, permissions from parents were collected.

This research poses very few risks. All participants are adults who were fully informed of the research intent. However, it was possible that some questions could cause anxiety or other negative emotions in responders. Adult subjects were free to end the interview whenever they would like; questions on the instrument were open-ended and allowed subjects to speak as freely as they were comfortable. The children in the classrooms could potentially feel bothered or anxious about the researcher being in the classroom. The researcher attempted to minimise any stress they may have felt by asking the teacher to introduce the researcher's presence in the way the teacher would usually introduce a parent volunteer or other visitor. When observation began, the researcher either sat in an unobtrusive spot and simply watched the classroom quietly, or, if the teacher wanted help in the classroom, the researcher helped her as requested. It was hoped that by acting the way other visitors would, that the researcher would not cause the children any undue stress and was just part of the normal day-to-day processes of the classroom. It was also hoped that by volunteering and helping the teacher as she requested, that the researcher's presence would not cause the teacher any stress either.

1.8 LIMITATIONS AND DELIMITATIONS OF THE STUDY

The limitations of the study are primarily those created by non-participation. The schools selected, the administrations of those schools, and the kindergarten teachers of those schools could have chosen not to participate. Indeed, fewer participants than were hoped for chose to participate. It was also possible that the teachers might not want the researcher in their classrooms to volunteer or observe, or that administrators might not want the research in their school. However, this was not a problem as the administrators were all willing to allow the researcher access to the teachers, and the participating teachers were all willing to be observed in their classrooms. It was also possible that informants would elect to give the researcher only very little information in the interviews. To help minimise this roadblock, the researcher studied interview methodology to prepare her for overcoming resistance like this if necessary, but it did not seem to end up being a problem.

There are important aspects of this subject that were not in the scope of the proposed research. This study was delimited by narrowing the research to only these three schools. Furthermore, it the aim was not to evaluate how well the programme under study achieved a child-centred

pedagogy, but relied only on each school's self-characterisation as such. It was further delimited as it did not compare these schools and their programmes with any others.

1.9 DEFINITIONS OF KEY CONCEPTS

1.9.1 Utah Charter Schools vs District Schools

A charter school is a public school, paid for with public funds and required to follow all federal and state laws (USBE n.d.). However, unlike district schools, they answer to a Board of Directors instead of a District Administration (Utah State Charter Board 2022a). A district generally has several elementary schools, middle schools, and high schools that it manages, and does not have to provide all legally required services at each school, but only at some schools in the district. For example, a district must provide services for deaf children, but it does not have to provide them at every school, just one at each grade division. The child in need of those services would be sent to the school that offers those services. The highest official in a district is called a Superintendent, and this is an elected position, voted in by the public (Prothero 2018). Together with other district officials, the Superintendent may move school administrators and teachers from one school to another as they see fit. The Alpine school district, where one of the schools proposed for this study is geographically located, has 59 elementary schools (typically Grades K-6, or ages 5-12). The Provo school district, where the other two schools are geographically located, has 13 elementary schools. A child must live in a district-affiliated school's neighbourhood in order to be allowed to attend or get special permission to attend another district-affiliated school by appeal. Most district schools do not require uniforms and if children live beyond a certain radius from the school, they are is provided with free transportation to and from school.

A charter school is usually unit unto itself rather than one school in a larger district of schools (Prothero 2018). Charter schools are self-governed by a board that is elected by the parents of the students that attend the school (Utah State Charter School Board 2022b). The board employs the school's administration who then hire the staff and faculty. Charter schools were approved by Utah State law to give parents more choice and control in their children's education (Utah State Chart School Board 2022c). To open a new charter school, concerned parties in the community can apply to the government with their plans and, after going through a lengthy process, may win approval to found a new school (Utah State Charter School Board 2022a). A charter school must provide all legally mandated services itself, so for example, each one must provide for services for the deaf if a deaf child is in attendance (Utah State Legislature 53G-S-403). Charter schools

are funded according to how many students attend (Prothero 2018). Therefore, they must attract enough students to meet their budget or risk closure. These factors – providing all services at one location and needing to appeal to parents as a school of choice – give charter schools a somewhat different feel and appeal than district-affiliated schools. Any child may attend any charter school regardless of where they live provided the parents are willing to provide transportation to and from school, are willing to comply with school policies (most charter schools require uniforms), and, in the case of very popular charter schools, win a spot through a lottery system (USCSB 2017a).

1.9.2 Kindergarten in Utah

In the United States, kindergarten is the first grade of primary or elementary school. It is universally for ages 5-6. It is comparable to Grade R in South Africa. Utah is one of 17 states that does not require kindergarten. Utah funds kindergarten at a rate that is half that of other grades, so kindergarten is typically only 2.5 hours a day. In 2022, only 30% of Utah kindergarteners had access to full-day (6 hour) kindergarten (Jacobs 2022).

1.9.3 Students

In this study "student" refers to a child attending kindergarten. Students mentioned by participants are 5-6 years of age and attending kindergarten in the participant's respective site (either A, B or C).

1.9.4 Resources

In this study, the term "resources" refers to the spaces, materials, financial support and staff available to the kindergarten classes at each school study site.

1.9.5 Child choice

"Child choice" refers to the student's freedom to make choices in their school day. It may include choosing activities from a small selection or a large selection, what space they would like to learn in or furniture they would like to use, or allowing students (rahter than solely teachers) to take turns to make decisions for the whole class. Each site desiginates what portion(s) of the school day include an element of child choice.

1.9.6 Teacher training

In Utah, schools are required to provide certain annual trainings for teachers in their employ. These include trainings regarding school safety drills, child abuse, human trafficking and suicide prevention, testing ethics, special education laws, and privacy laws. Besides these required trainings, schools have the option to provide additional training as they deem necessary. Most schools have one week annually, usually the week before the new school year commences, where they conduct most of their teacher training.

1.9.7 Teacher autonomy

In this study, "teacher autonomy" refers to the freedom a teacher has to choose curriculum and how, what, and when to teach in the course of the school day and school year. In many Utah schools, teacher autonomy is becoming increasingly threatened as schools adopt rigid, scripted curriculums in order to meet the specific academic achievement benchmarks that have been set by the state government.

1.10 CHAPTER OUTLINE

This document contains six chapters. The first chapter is an introduction of the research questions and underlying philosophy. The second chapter outlines the theoretical framework within which this study lies, discussing the history of kindergarten, and traces the path of major kindergarten philosophies over time since its inception. The third chapter is a review of literature pertaining to child-centred kindergarten. The fourth chapter outlines the methodology, including the selection of subjects and the manner of data collection. The fifth chapter presents findings, namely summaries of responses and patterns found within study sites. The final chapter discusses conclusions and recommendations for future research.

1.11 CHAPTER SUMMARY

Educators of young children are concerned. Funding is low, needs are high and demands are great. Although much research supports the importance of play, child agency, and carefully crafted curricula that respect children, programmes that support these endeavours are difficult to find in the US. The proposed research hopes to be another light cast on this issue. Young children have no voice in society at large. It is good and right that adults do everything they can to advance their cause, including bringing greater awareness of programmes that aim to improve their opportunities for healthy development.

The next chapter provides the theoretical framework for the study.

CHAPTER 2: THEORETICAL BASE FOR THE STUDY

2.1 INTRODUCTION

Chapter 1 identified the research problem and aims of this study. Utah kindergarten teachers face the daunting task of educating many children from disparate backgrounds with fewer financial and temporal resources than found in other States. This research asks what experiences kindergarten teachers and administrators in one locale have in establishing child-centred programmes in the face of these challenges.

This chapter focuses on the theoretical framework in which this research relies. Two theories are identified that together form the theoretical framework. These theories are child-centred pedagogical theory and constructivism. Both theories are frequently associated with ECE and with kindergarten specifically, the age with which this research is concerned.

Child-centred pedagogy describes the philosophy on which the selected schools for this study base their practices, according to their websites (which are not cited here to protect their anonymity). Therefore, it is vital to understand this viewpoint since it is one in which the subjects are presumably well-versed. Child-centred pedagogy has a long history which is briefly described below, as well as a spectrum of definitions, from which a selection is delineated below. Its relevance to this research is also examined.

Constructivism is a sister philosophy of child-centred pedagogy in education, both of them being opposed to behaviourism and didactic teaching methods (Sharkey and Gash 2020). Constructivism also provides the philosophical basis or "worldview" for some qualitative inquiry (Yin 2016:3). It is for both these reasons that constructivism is the other pillar of the theoretical framework of this study. Constructivism is discussed after child-centred pedagogy below, both as an educational philosophy and as an entomological philosophy that supports the methodology used in this research.

2.2 CHILD-CENTRED PEDAGOGY

Child-centred pedagogy has roots in the works of Rousseau, Pestalozzi and Froebel (Baker 1998, Klipfel & Cook 2020). It is difficult to pinpoint an exact date the theory of child-centred pedagogy was developed because it evolved from several educational philosophers over time (Fallace

2015). Indeed, it continued to evolve in the modern era (Chung & Walsh 2010). A brief summary of key contributions from Rousseau, Pestalozzi and Froebel follows.

Rousseau's treatise on education, *Emile,* outlines the basic philosophy and questions that would eventually lead to child-centred pedagogies (1762). Organised by developmental stages, this treatise both excoriates common childcare practices of the time and asserts Rousseau's ideas for doing better. Rousseau advocated for nurturing, loving tutor-pupil relationships, and saw the relationship as integral to learning (Rousseau 1762, Klipfel & Cook 2020). He also argued for educators to be well-educated themselves, and that this education should include studying and understanding children (Rousseau 1762). He further brought into the educator's conscience several central ideas that would eventually influence child-centred pedagogy: issues of power (adult vs. child), a belief that children have an inherent power to learn and grow, and the idea of developmental stages being linked to how and when a child should be taught certain things (Baker 1998). He also maintained several times and in several ways that educators should not do for children what they can do for themselves (Rousseau 1762).

The philosophies of Rousseau highly influenced Johann Heinrich Pestalozzi (1746-1827). Pestalozzi worked extensively with children and formed a philosophy of education that would travel beyond him and influence the educational systems of other countries (Hewes 1992). Principles of Pestalozzi's philosophy of education endured past him and became part of the foundation of child-centred pedagogy (Mickelburgh 2010). His most influential work was *How Gertrude Teaches Her Children* (1801). He advocated for a classroom culture that was both child- and teacher-initiated, allowing for much more freedom on the part of students than the Socratic method popular in his day (Hewes 1992). He also advocated for disciplining students with love rather than punishment (Sellars & Imig 2021, Bruhlemeier 2010). He focused on educating the whole child, giving them meaningful experiences from teachers who genuinely care about them (Bruhlemeier 2010). His philosophy was deeply humanistic and so he believed education must follow human nature, which he believed was individual, moral, and eternal, and needs others to help bring out (Bruhlemeier 2010). He taught that an educator may know that the subject matter is appropriate to the children's nature when the children are happy and engaged in the learning activity (Bruhlemeier 2010).

Though the groundwork was laid by others, Froebel is credited as the first to use the term child-centred in 1827 (Chung & Walsh 2010). His seminal work, *The Education of Man,* was first published in German in 1826. In 1840, Froebel gave his educational method for young children

the name "kindergarten" (Froebel 1889:vii). Froebel was a disciple of Pestalozzi but was heralded as unique for he "furnishes a deep philosophy for the teachers," not just a set of instructions or reforms (Froebel 1889: ix). Part of this philosophy was a belief that children have innate characteristics and will develop according to them and are not simply a "lump of clay" to be shaped by adults (Froebel 1889:8-9). It is the educator's job to bring the child into relationships and environments that will aid the natural development of the child's best self (Froebel 1889). He emphasises "self-activity" and "self-direction" for the children, and eschews "prescriptive, interfering education". He taught that doing too much for the child impedes the child's progress (Froebel 1889:11, 21). He believed that children should be treated as an "essential member of humanity" (Froebel 1889:16). He also emphasised the importance of community for the child's development (Froebel 1889).

The ideas of these three venerates of educational philosophy, Rousseau, Pestalozzi and Froebel, continue to resound today. It was these men that placed educational philosophy's focus on the child rather than the curriculum. Placing the child's interests, abilities and needs at the centre of education rather than the text, curriculum, or educator has been called the single most enduring idea of the modern educational era (Fallace 2015). By the 1880s, child-centred pedagogy had become a popular term (Chung & Walsh 2010).

2.2.1 Definitions of Child-centred Pedagogy

Chung and Walsh (2010) conducted the most thorough examination of the concept of child-centredness to date. They found little consensus as to the definition of what child-centred pedagogy means (Chung & Walsh 2010). However, and perhaps because it is such an enduring term, there are many different iterations and definitions of child-centred pedagogy. In fact, Chung and Walsh (2010) identified more than 40 definitions in use. They were able to categorise classes of definitions as follows:

1. Pedagogical strategies should be based on children's interests
2. Children should have the power to make decisions in their learning
3. Learning should be highly correlated with developmental stages
4. Pedagogical approaches should focus on the development of a child's individual potential (Chung & Walsh 2010).

Because so many broad classes of emphasis exist in the literature pertaining to child-centred theory, it is useful to narrow the influencing philosophies down in crafting a definition to be used

in this present research. Three influential theories were considered when distilling the definition of child-centred pedagogy to be used in this research. These theories are the work of John Dewey, the duo Kevin Klipfel and Dani Cook who interpret the philosophies of Carl Rogers, and the National Association for the Education of Young Children.

John Dewey was a respected and decades-spanning voice in favour of child-centred pedagogy and was one of the most influential American educational philosophers. He outlined his philosophy in detail in *Experience and Education* (1938). He defines his theory by contrasting it with the "traditional" education commonly used in his day. His philosophy is captured in the following comparisons:

> *To imposition from above is opposed **expression and cultivation of individuality***;

> *To external discipline is opposed **free activity***;

> *To learning from texts and teachers, **learning through experience***;

> *To acquisition of isolated skills and techniques by drill, is opposed **acquisition of them as means of attaining ends which make direct vital appeal;***

> *To preparation for a more or less remote future is opposed **making the most of the opportunities of present life;***

> *To static aims and materials is opposed **acquaintance with a changing world*** (1938 pp.19-20). (Bolded type added to indicate his ideas for child-centred practice.)

Dewey (1938:22, 45) emphasises that the "new education" he documents and promotes is one that is learner-centric, concerned with the freedom and inclinations of the learner. The duty of the teacher then is to adapt the material to be taught and environment to the needs and interest of the child. It is not planless or a free-for-all but requires extreme attention and adaptability on the part of the educator (Dewey 1938).

Klipfel and Cook (2020:2) label their position as a humanistic definition of learner-centred pedagogy. They state, "Learner-centred pedagogy... is a way of looking at the world and how we connect to other human beings that has deep implications for the way we practice as teachers... our view, simply stated, is that *who we are as people matters"* (Italics original). Klipfel and Cook, who were highly influenced by the philosophies of Carl Rogers, discuss three important facets of

child-centred pedagogy. First, that everyone can reach their true potential given the right circumstances, and that an integral part of those circumstances is our relationship with others (Klipfel & Cook 2020). In other words, the relationship between teacher or parent and child is central to a child's success in learning. Second, they also assert that learning takes place on a continuum of meaning – learning math facts might not have as much meaning to a given child as learning how rainbows exist, for example – and so the primary task of an educator is to facilitate more meaningful learning for the student (Klipfel & Cook 2020:6-7). The more meaningful the learning task, the better it will be learned. Third, as explicated by Klipfel and Cook (2020), Rogers' philosophies invite an educator to try to see from a student's perspective and make their pedagogical choices from this perspective.

This research is concerned with the kindergarten age; therefore, a third definition of child-centred pedagogy, one that speaks specifically to this age, should be considered. The National Association for the Education of Young Children (NAEYC) is an American organisation that codified the type of definition of child-centred pedagogy that emphasises the importance of matching education with child development, especially in the early years. First published as a position statement in 1987, and frequently updated on their website, developmentally appropriate practice is a standard to which a sizeable portion of the literature in the late twentieth century refers (Clements, et al. 2017, Goldstein 1997, Maxwell, McWilliam, Hemmeter, Ault & Schuster 2001), Charlesworth, Hart, Burts, Thomasson, Mosley & Fleege 1993, Van Horn & Ramey 2004, McMullen 2001, Zeng & Zeng 2005). This position statement is based on research and updated with some regularity reflecting recent research, so it remains a standard despite having gone through revisions. There is considerable evidence that the kinds of approaches suggested in the NAEYC position statement are healthier for children overall (Millar & Almon 2009, McMullen 2001, Zeng and Zeng 2005). The current iteration of the statement is expansive and multi-faceted. It calls for high quality educational experiences for all children, assigning responsibility to educators of acknowledging and accommodating children's individual differences, be they cultural, linguistic, or ability related (NAEYC 2020). It advocates for play-based, strength-based approaches, and is a framework of principles from which educators can make informed, intentional decisions. In fact, it is the notion of intentionality that the NAEYC claims is at the heart of developmentally appropriate practice.

Like Dewey, the definition of child-centred pedagogy as used in this research emphasises children's autonomy, experiential learning and individuality. Like Dewey (1938), Rogers, Klipfel and Cook (2020), and the NAEYC, it places the onus of preparing for the child's needs on the

teacher's shoulders. However, unlike the NAEYC's concept of developmentally appropriate practice, it is less concerned with developmental stages and more concerned with individual needs. Like the NAEYC statement, intentionality is key. As with the theories of Rogers, Klipfel and Cook, this intentionality should be guided by the child's perspective.

For this study, child-centred pedagogy is defined as the sum of methods, attitudes and policies used in the classroom that an educator or an administrator chooses based on the needs of children to experience for themselves, choose for themselves and become for themselves. These needs form the impetus for the choices the educator or administrator makes. It is an umbrella term for related concepts like play-based, learner-centred and child-friendly pedagogies.

2.2.2 Relevance of Child-Centredness to This Study

This study aims to document the experiences teachers and administrators have in establishing and maintaining child-centred kindergarten programmes in selected schools and documenting resources and strategies needed to do so.

Child-centred pedagogical theory is relevant to this study in two main ways. First, the schools selected for this research were chosen because they self-identify as child-centred. These schools self-define as child-centred on their website or other promotional materials. Since these schools use the term child-centred to define themselves, child-centred pedagogy is the ever-present backdrop of this study. The administrators and teachers that are the subjects of this study work at schools that attract students in part by proclaiming their philosophy to be child-friendly or child-centred rather than achievement-centred. It is hoped that the administrators and educators who are the subjects of this research have a solid understanding of child-centred pedagogy, though it is not in the scope of this research to ensure that they do.

The second way child-centred pedagogy is relevant to this research is as a philosophy that guides data collection. Child-centred theory helps form interview questions, gives the researcher a worldview through which to interpret classroom observation, and hopefully forms a shared space of understanding between the subjects and the researcher.

2.3 CONSTRUCTIVISM

At its most basic, constructivism is an assertion that people make meaning from their own experiences; they construct knowledge, thus the term "constructivism." Truth, then, is not something concrete to be found "out there," but is created in the mind based on a person's or

society's experiences. The origins of constructivism may date back to the time of Socrates (Amineh & Asl 2015), so it is understandable that several variants of the philosophy exist. Three interpretations of the concept are outlined below, namely, its place as a pedagogical theory, as a psychological learning theory, and as a philosophy of scientific inquiry.

Constructivism has assumed a significant role in modern pedagogical theory as teachers and students are concerned. McLeod (2019) identifies five basic principles of constructivism as a paradigm of teaching and learning. These are:

1. Knowledge is constructed, rather than innate or passively absorbed.
2. Learning is an active process.
3. All knowledge is socially constructed.
4. All knowledge is personal.
5. Learning exists in the mind.

The first two principles have strong implications for classroom learning. According to constructivist principles, students will learn better when experiences in the classroom are interactive and require doing or problem-solving rather than drilling (McLeod 2019). The third principle acknowledges that our own learning is inextricably intertwined with the other people around us, but the ramifications for the fourth principle include an acknowledgement that different people experiencing the same event may learn completely different things from one another (McLeod 2019). The last principle has perhaps the most far-reaching implications. It is a belief that reality as we understand it may or may not exist; our knowledge only exists in our mind (McLeod 2019). It also means that one can never truly know what another knows because we cannot share another's mind or summation of experience. This has implications for teachers because it explains that teachers cannot simply input information into a student's mind; they must carefully guide a student through experiences that the teacher hopes will allow the student to construct their own knowledge. This pedagogical approach dictates thoughtful teaching that is individualised as much as possible and acknowledges children's intelligence, agency and internal drive to make meaning.

Unlike McLeod, Fosnot (2015:preface) identifies constructivism as a psychological theory of learning, but claims it is not a theory of teaching. Teachers may base their practice on the theory, and it will create "radically" different classrooms, but it is not a pedagogical approach. Fosnot (2015) maintains that although it is often confused with "hands-on," discovery learning, or other pedagogical approaches, it is not.

Rather, according to Fosnot (2015), constructivism is biological; knowledge construction is a biological happening, an adaptation to reality rather than a copy of reality. There is no observer-independent world; instead, when we focus on something, we bring all our own experience and point of view to bear on it and that becomes the environment in which we observe the thing. It is a theory of knowing and how one comes to know. Fosnot (2015: preface) calls it a theory that describes knowledge as "emergent, developmental, nonobjective, viable constructed explanations" affected by the knower's cultural and social experiences. Knowledge does not exist outside a person's mind. Therefore, when as teachers we think we have set the environment to be right for the students to learn, we are forgetting that the environment as they perceive it may be quite different from how we perceive it. Each person in a shared experience builds his or her own construct as they experience it. There is no way to tell if two people share the same construct; it can only be observed that their constructs appear to function the same way (Fosnot 2015). A teacher's best strategy is to build a hypothetical model of what the student's perspective and conceptual world encompass. This has ramifications for a teacher's need to be familiar with their student's socioeconomic, culture and language background. Furthermore, language does not transport meaning from teacher to student. Rather, it is a tool teachers use to make certain constructions more or less likely in the mind of the student. Fosnot (2015:26) says of educators, "The task of the educator is not to dispense knowledge but to provide students with opportunities and incentives to build it up".

So, although McLeod (2019) presents constructivism as a teaching and learning theory, and Fosnot (2015) as only a learning theory, the ramifications of both are remarkably similar. They both lead to a classroom culture that respects the child's own meaning-making and seeks to enable it. But constructivism as a philosophy or theory is not limited in its scope to influencing classrooms, teachers and learners. It also plays a vital role in scientific inquiry. Lincoln and Guba have been publishing articles and books about the constructivist paradigm and its role in scientific inquiry since the 1980s. They are considered authorities in the field. Lincoln and Guba (2013) assert that constructivism is a philosophy with ontological, epistemological, methodological and axiological ramifications. They find constructivism an essential philosophy of the human sciences but urge readers to still regard the scientific method as the most important philosophy of the natural sciences. According to Lincoln and Guba (2013:40), the ontological presupposition of constructivism is relativism. In other words, the nature of reality cannot really be known in an absolute sense, but only as various people experience it. They assert that the epistemological presupposition of constructivism is "transactional subjectivism", meaning that the relationship

between knower and the knowable is subjective to both context and the person or people involved. They assert that appropriate methodologies when researching in a constructivist way must delve "into the minds and meaning-making, sense-making activities of the several knowers involved". This includes both subjects and researchers. They identify the interpretive/explanatory method of hermeneutics and the dialogue/argumentation method of dialectics as most appropriate. Finally, the axiological implications of constructivism are it is useless to pursue objectivity in the social sciences and the goal should rather be making the values of all stakeholders in the research transparent (Lincoln & Guba 2013).

Just as constructivism has two main meanings – that of an educational philosophy and that of a research philosophy – so it serves this research at two levels. At one level, collecting data from subjects through interviews and observation is heavily influenced by both the researcher's and subjects' own constructs. Constructivism as explained by Lincoln and Guba (2013) is a helpful theory in this context. It reminds the researcher to do as much as possible to understand the perspective of the subjects and to acknowledge her own biases, experiences and setting as the lens through which she interprets what is learned from interactions with the subjects. Constructivism as an epistemological, ontological and methodical philosophy helps form the framework of this research. It leads to the choice to use qualitative methods, for example and to value how subjects see their experiences themselves.

However, as the researcher is herself an educator, and the participants are all educators, constructivism as a philosophy of education and teacher-student interaction as outlined by McLeod (2019) is also a useful definition for this research. The subjects' understanding of constructivist principles may impact the data gathered. Many pedagogical approaches are based on constructivist principles, including child-centred theories as outlined above and others to which the selected schools subscribe. Therefore, whether subjects are aware of it or not, it is likely they use methodologies in their practice that are inspired or influenced by constructivism as an educational philosophy.

2.3.1 Origin of constructivism and its relatedness to child-centred pedagogy

Although the tenets undergirding constructivism may date back to the time of Socrates, the term "constructivism" originated with the work of Piaget and Bruner (Amineh & Asl 2015). Current thinking separates three distinct types of constructivism, all with their own origins. These types

are cognitive constructivism, social constructionism and radical constructivism. All three types can be related to the child-centred theories discussed earlier in this chapter.

Cognitive constructivism is the constructivist theory that emerged from the work of Jean Piaget in 1969 (Amineh & Asl 2015; Fosnot 2015). Cognitive constructivism is the theory that humans create knowledge from their experiences – both in the context of past experience and involving what is being experienced by the senses now (McLeod 2019; Mvududu & Thiel-Burgess 2012). Fosnot (2015) claims that this is an adaptive function (we are constantly adjusting our knowledge based on new experiences) and that Piaget borrowed this idea of adaptation from the field of biology. Because knowledge is therefore something that is constructed bit by bit, learning is inextricably tied to human development which occurs over time (Mvududu & Thiel-Burgess 2012, Piaget 1954; Semmar & Al-Thani 2015). The ideas of Piagetian learning theory that ties learning to development is one of the core ideas of child-centred pedagogy explored above; children do not think or know as adults do because of their developmental stages; thus, pedagogical approaches should match their developmental needs. This is how cognitive constructivism and child-centredness are related.

Social constructivist theory is attributed to Lev Vygotsky in 1962. It is different from cognitive constructivism because it attributes more meaning-making to social experience (Amineh & Asl 2015; Vygotsky 1962). Vygotsky believed that some development happens first at the social level, and then later at the individual level, while Piaget believed the opposite (Amineh & Asl 2015; McLeod 2019; Vygotsky 1962). Social constructivism then puts more emphasis on the greater cultural and social setting in which learning occurs than on the inner life of the child. Current theories of child-centredness, like that of the NAEYC position statement, emphasise the importance of respecting a child's cultural, racial and social realities when creating curriculum. The consideration by teachers of the social contexts of their students demonstrates the relatedness of child-centredness and this second type of constructivism.

Radical constructivism is a type of constructivism first articulated by Ernst Von Glasersfeld in 1995. Seeing his interpretation as inspired by Piaget, Von Glasersfeld shares the view that our knowledge is by definition only ours – that it is the sum of our experience (Von Glasersfeld 1995). He takes it a step further and proposes that the world we construct in our minds is the only world in which we live; everything is subject, nothing can be proven to exist outside ourselves (Von Glasersfeld 1995). He was also heavily influenced by George Berkeley and Giambattista Vico, philosophers who, centuries before, had written about whether items and ideas existed in a reality

outside the mind or purely within our own minds. Radical constructivism has several ramifications for educational practice. Glasersfeld suggests that teachers must accept that whatever a student answers or thinks at the time is what makes sense to the student at the time and needs to be taken seriously; that asking students how they got to a specific answer will help a teacher help the student; that the key to motivation for students is creating ways for students to have the pleasure of solving problems for themselves; that correct thinking is more important than correct answers; that teachers can only lead in the right direction; that students must learn for themselves; and that teachers cannot claim anything they are teaching to be "true" in an objective sense (Cardellini 2008). All these pedagogical strategies could be classified as child-centred because they respect the child and acknowledge the child as an agent in their own education who is responsible for their own learning.

As demonstrated above, constructivism and child-centred theories have similar roots and many common aims. As a philosophy of learning, teaching and education, constructivism fits comfortably with child-centred pedagogical theory as the framework for this research.

2.3.2 Constructivism Used in Other Research

Many inquiries into ECE have been undertaken through a constructivist lens. Some common areas of research that also use constructivism as a theoretical basis are outlined below. These include research focusing on constructivism's role in teacher preparation or training, research pertaining to play in the kindergarten classroom, and questions regarding the portability (or lack thereof) of western-derived constructivism into other cultures.

Constructivism has taken a place in the training of teachers but a lack of sufficient teacher training specific to constructivist philosophies and methodologies has been identified as problematic (Kara 2018, Rabahbah 2021). There seems to be an effort in the profession to remedy this situation, and so researchers have been able to document some of the ways constructivism is making its way into teacher training programmes. Constructivism has been used as an effective framework for teaching new skills to educators (Hartigan 2017; Neutzling, Pratt & Parker 2019). Curricula for teacher education based on constructivism puts the teachers and learners in the course on more equal footing, more like a partnership, and so it is purposefully chosen as a framework by some teacher trainers (Kosnik et al. 2018). New teachers given a constructivist mentor were more emotionally resilient and continued to believe in constructivist principles, unlike their fellow new

teachers who did not have the benefit of such a mentor (Voss & Kunter 2019). The consensus of the reviewed literature seems to be that teachers who have constructivist training find it valuable.

In applying constructivism to the kindergarten classroom, the subject of play is a common research topic. Play incorporates many aspects of constructivism, such as individual meaning-making, meaning-making with others (social constructivism), and learning as an active process. Villasin (2020) found that tenured teachers especially value free-choice play, and sometimes offer it despite administrative guidelines. Vaught (2021) argues for play to be embedded in the direct-instruction kindergarten of today that generally focuses more on academic pursuits due to parental and administrative pressures. Both researchers see play in kindergarten as part of a constructivist approach to learning at this early age.

Kindergarten programmes outside the western tradition have attempted to incorporate constructivist principles in their programmes, with varying levels of success. These attempts are another focus of current research through the constructivist lens. A sample of such research follows. Buabeng, Shiraz and Die (2021) describe a new kindergarten curriculum put into place in Ghana in 2019 which identifies social constructivism as one of its philosophical pillars. Yin, Yang and Li (2020) observed kindergarten teaching in Singapore which made similar reforms in 2003 and found little constructivist-inspired pedagogy happening. Sixty kindergarten teachers were similarly observed in Jordan and only low to moderate use of constructivist principles was observed (Rababah 2021). Nevertheless, researchers continue to argue for the inclusion of constructivist pedagogy. Rababah (2021) argues for Jordanian kindergarten teachers to have more training to raise the level of constructivism's use. Wei (2019) concludes that many aspects of Confucianism and constructivism are compatible, and constructivism can add value to Chinese preschool and kindergarten programmes. As constructivism as a philosophy of teaching and learning continues to gain traction, its incorporation in diverse educational settings will likely continue to be of strong interest to researchers.

Areas of inquiry that use constructivism as a theoretical framework include teacher education, play-based learning and constructivist pedagogy in diverse populations. Constructivism's specific role in the inquiry that is the topic of this document is explored below.

2.3.3 Constructivism's Relevance in This Study

One of the reasons constructivism is vital to this research is because the theories of constructivism and child-centredness are inter-related. They both acknowledge that children have their reality

and so do teachers, administrators and researchers. Both theories emphasise the experience of the child as the chief learning mechanism. Constructivism explains why putting the child at the centre of learning rather than the subject to be taught works. It is because the child must make the meaning. The child-centred classroom puts constructivist principles to work.

Another reason constructivism is vital to this research is owing to its place in epistemology and methodology. With its emphasis on both individualistic meaning-making and social constructions, constructivism forms the background philosophy of qualitative inquiry. Constructivism places the researcher and subject on more equal footing, as it removes the hierarchical relationship of knower and un-knower to replace it with two knowers trying to understand the same thing. The researcher asks informants to explain their perspective, experiences and their reality. Constructivism posits this is the only reality we can know – that of our experience or reported to us by others' experience (Lincoln & Guba 2013). Therefore, constructivism explains how knowledge can be passed from the subjects of this research to the researcher and then the reader of the researcher.

Constructivism informs the methodology that will be used in the gathering of data for this project. Informants are given the chance to make their contexts and experience known as far as they are comfortable or able to share by using semi-structured interviews. The researcher's own bias is acknowledged as she is a former kindergarten teacher thus bringing her own experiences to bear on data-gathering. Methodologies that attempt to communicate as honestly and completely as possible are the best ones by constructivist standards so that others may construct their own understanding as completely as possible.

2.4 THEORETICAL FRAMEWORK SUMMARY

Child-centred pedagogy and constructivist principles form the theoretical framework of this study. The following summarises key concepts of each of these theories and how they relate to this study.

As delineated above, child-centred approaches to pedagogy place the child at the centre of education. In this theory, teacher convenience, curriculum, test results and other concerns take a back seat to the needs of the individual child. The schools selected for this study self-identify as placing the child first. They use teachers, curricular tools, tests, structure, etc., to serve the child, rather than the other way around.

Child-centred approaches respect children's agency or autonomy. All of the schools selected for this study are "schools of choice," meaning a child's parents must make some effort to enrol the child, as they are not the default school the government assigns the child to, but one they must seek out on their own. Because these schools get funding according to enrollment, it is in the schools' best interest to keep parents and children satisfied with their educational experiences there. Student choice and additional, non-required learning opportunities are common themes in these schools' promotional materials. One of the schools selected even allows children to choose how to spend a sizeable portion of their day by choosing a change of classes (for instance, music, art, additional math) every few weeks.

Another hallmark of child-centred pedagogy is a nurturing teacher-student relationship (Rousseau 1762). In this model, respect runs both ways; teachers respect a child's unique opinions and needs, and students feel genuinely cared for and are positively attached to their teacher and work together, finding a balance between child-initiated and teacher-initiated activities (Veraksa, Sheridan, & Colliver 2023). One of the schools selected uses Montessori methods, which place the teacher in a role that is less in front of the classroom and more on the children's level. Another school studied uses small groups to teach literacy skills so the teacher can respond to children's needs and they can feel heard and helped. The constructivist principle that learning is social and relationships influence learning is similar to this child-centred principle. As mentioned by Klipfel and Cook (2020), when it comes to learning, teaching and knowing, "who we are as people matters".

The final concept of child-centred pedagogy that relates to this study is the value of experience over drill. This concept is highly related to the constructivist principle that learning is active and not passive. All the schools selected for this study favour hands-on, experiential learning rather than excessive desk work. They specifically work movement and activity into the school day. Desk work and repetition are arguably easier methods on the part of the teacher, but these schools purport to choose more doing over watching and listening.

Other constructivist principles pertinent to this study include specific ideas of knowing; each person constructs their own knowledge and meaning from their own experiences; therefore, the understanding and context of the knower is necessary for making meaning from data gathered in research (Kivunja & Kuyini 2017). These principle of constructivism, that context is vital and reality is in the eye of the beholder, influences the methodologies chosen for this study. Methodologies that allow for interaction between the participant and researcher are based on this tenet of

constructivism. It also means there are limits to what can be learned or construed from the data collected in this study, because one informer may not see everything about a subject from their own perspective and context. Qualitative methods were used, which acknowledge that data about living, thinking people is intrinsically individual and therefore inherently not generalisable in the same way quantitative findings often are (Myers 2000) However, as learning is a social phenomenon as well, humans can learn from each other and add to their own constructs by observing and reading about the experiences of others (Vygotsky 1962). Data was gathered using semi-structured interviews with open-ended questions, inviting the subjects to share freely and in a manner that is natural to them. This type of data gathering is constructivist in nature as it acknowledges that the subject and the researcher do not always understand things the same way and takes away some of the bias in the researcher's perspective by letting the interviewee go where they want to go in sharing their experiences. Another constructivism-inspired method used in this study is the reflection journal, kept by the researcher, which helps the researcher reflect on and record decision-making processes, biases and observations.

Taken together, child-centred pedagogical theory and constructivism form the theoretical framework of this research. The schools selected for study place emphasis on putting the child in the centre of their work. Each teacher, administrator and researcher bring their own summation of experience to this research. Through the lens of these experiences, as explained by constructivist principles, subjects and researchers can discuss and document the child-centred goals and work that the subjects carry out.

2.5 CONCLUSION

This chapter has set forth the theoretical framework of this study as a collaboration between child-centred philosophy and constructivism. This framework sets the stage for inquiry into the experiences of kindergarten teachers and administrators seeking to establish and maintain child-centred programmes in Utah, USA. The following chapter delves deeper into other research that has been done regarding kindergarten and child-centredness as well as other research pertaining to kindergarten in Utah.

CHAPTER 3: LITERATURE REVIEW

3.1 INTRODUCTION

Chapter 2 delineated the concepts of the theoretical framework upon which this research sits. Child-centredness is at the heart of this research. As such, it is at the heart of the literature reviewed in this chapter. This chapter first reviews the state of child-centredness abroad and in US kindergarten, then presents the review of the related literature pertinent to this study's research questions formulated in 1.3.1. To place this study in the context of other similar work and assist in identifying gaps in the literature of child-centredness in US kindergartens, the researcher used narrative literature review to analyse and summarise a body of literature. Danson and Arshad (2015:37-38) assert that narrative literature review is achieved by presenting a comprehensive background of the literature within a topic to highlight new research streams, identify gaps or recognise inconsistencies. Additionally, Demiris, Oliver and Washington (2019) describe narrative literature review as a process without a specified search strategy to identify a few studies that describe a problem of interest. For this study, narrative literature review was used to obtain a broad perspective on child-centredness in kindergarten and identify patterns and trends in the literature to identify gaps or inconsistencies.

Onwuegbuzie and Frels (2016) outline four types of narrative literature reviews: general, theoretical, methodological and historical. After going through each definition, the researcher found the general narrative literature review suitable for this study and she aligned it with Demiris, et al.'s (2019) steps for conducting a narrative literature review as presented in Figure 3.1.
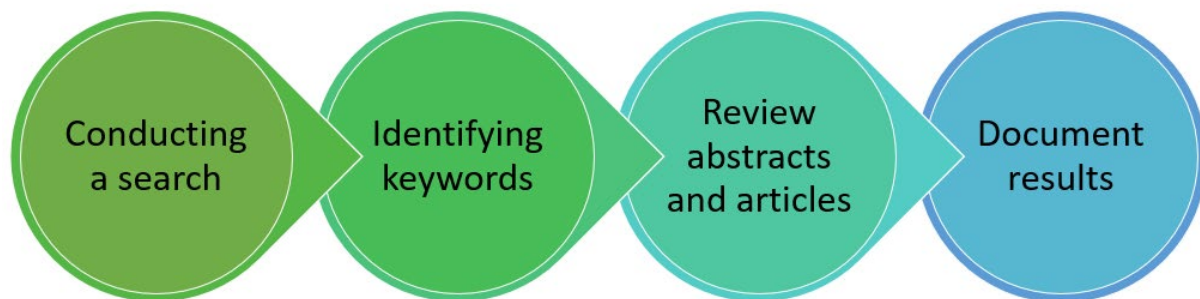
Figure 3.1: Steps for conducting a narrative literature review

Source: (adapted from Demiris et al., 2019)

As shown in Figure 3.1, the first step was conducting a search. The researcher searched for specific literature (guided by the themes developed from the research questions) indexed in a variety of databases. She also requested the university's personal librarian's assistance in searching other databases. After collecting numerous literature sources, the researcher identified keywords that aligned with the study's literature review themes to assist in sifting the relevant literature sources. After sorting the relevant sources, she reviewed abstracts and articles, ensuring that the sources were in line with this study's research questions. After the step of reviewing, the researcher summarised and synthesised the findings from the articles into the formulated themes as discussed in the next sections of this chapter.

3.2 THE STATE OF CHILD-CENTREDNESS IN KINDERGARTEN GLOBALLY

The worldwide literature on kindergarten places child-friendly practices at the forefront of discussion. Djoehaeni, Agustin, Gustiana and Kamarubiani (2020), in conducting a review of child-friendly practices in ECE, assert that the purpose of ECE is to foster competence in all the skills necessary for "dealing with life," like getting along with others, expressing feelings in a healthy manner, and learning to welcome new experiences. Academics is only one piece of the puzzle. The balance of academics versus other skills, and the value of various pedagogical approaches are big topics in the kindergarten field worldwide. The recent literature reviewed below provides snapshots of the concerns about kindergarten globally related to child-centredness.

Bubikova-Moan, Hjetland and Wollsheid (2019) reviewed 62 studies from 24 nations focused on play-based learning for children ages 0-6. They loosely organised these studies into three groups: English-speaking, European and Asian. They found a general trend among studies in their review of a lack of consensus among practitioners regarding the educator's role in play-based learning and the relationship between play and learning. Their survey also revealed that the main impediments to the application of play-based learning are curricular pressure, a divide between rhetoric and what actually happens in the classroom, teacher preparation or training, time and policy mandates. The teachers that participated in these 62 qualitative studies hold beliefs about the relationship between play and learning that span the spectrum from believing they are necessarily intertwined to believing they are incompatible. This review study demonstrates the lack of cohesive understanding among early childhood educators of what play-based learning can or should look like.

Avornyo and Baker (2021) conducted a study in Ghana whose purpose was to ascertain the play-related beliefs of the adult stakeholders in kindergartens, including parents and teachers. Participants from 40 early-years establishments, representing urban, rural, public and private schools, were invited to share their beliefs about play in kindergarten. Some 147 parents, 105 teachers and 40 head teachers completed their surveys, which represented 100% of teachers invited and 92% of parents. Avornyo and Baker (2021) found that teachers viewed play as part of the learning favourably, while parents viewed its inclusion less favourably. They also found that the more educated the respondent was, the more likely they were to rate play as a part of learning favourably.

Jensen, Kvalsvig, Taylor, Sibisi, Whitebread and McLellan (2021) studied Grade R educators in the Kwa-Zulu Natal province of South Africa, focusing on perceptions of learning in play. In South Africa, play-based pedagogies are mandated in Grade R (Jensen et al. 2021). Grade R is like the kindergarten year in the US in that it is for 5-year-olds and is non-compulsory. Ninety-six Grade R teachers, representing a wide variety of ages, backgrounds and experience participated in a survey of perceptions of play in their practice. From these, 8 were selected as a representative sample and participated in video-prompted interviews. Questionnaire results revealed two distinct profiles of perceptions of play in Grade R: one profile describes a belief that there is greater academic value in choice-time activities (child-led), and the other saw ring-time (adult-led) and choice-time activities as equally important academically. Both profiles saw both choice time and ring-time as play-like. Interview results revealed two themes of play perceptions: beliefs that play is joyful, vigorous and chosen, and that good play requires abundant space and adequate toys, and a knowledge of how to use those toys properly. Imaginative play was not thought of as important by some of these respondents. As for what the researchers found about learning perceptions, they found a strong belief that play was a way to assess learning or demonstrate proficiency. Play as a natural way for children to learn and process learning did not seem to be valued or understood by many of the respondents in this study. So, although all the participants seemed to use some playful practices in their classrooms, the researchers suggest that some of their beliefs should be challenged (Jensen et al. 2021).

Vogt, Hauser, Stebler, Rechsteine and Urech (2018) conducted an experimental study in Switzerland with randomised sampling to measure the effect of a play-based approach to teaching kindergarten math. They compared a "training programme," (a pre-packaged curriculum), a play-based approach and a control group. Teachers were randomly assigned to each group and given the same amount of time training to use the materials in their assigned pedagogical approach.

Twelve teachers used the training programme, 11 used the play-based approach, and 12 formed the control group. Their students were tested before the treatment began and the groups were found to be equivalent before treatment. Eight weeks after treatment the students were tested again. After 8 weeks all students improved, but the play-based group had the largest learning gains, and the control group had the smallest gains. Qualitative semi-structured interviews followed up the quantitative experiment with the teachers to gather teacher opinions. Those teachers assigned to the play-based group said they would use those lessons again. Those assigned to the training programme group said they would use some of those lessons again or use them only for struggling students. When the quantitative data was analysed according to the starting competencies of the students, grouping them as low-, medium- or high-competency to begin with, it was found that only the play-based approach achieved significant gains for all three student competency levels. The play-based system used games, including board games and card games. Teachers of the play-based group said it was easy to incorporate these games into their routine, and that the training they received was instrumental in using this approach successfully. Teachers of the training programme said some of their students became bored with the programme, and qualitative results show high competency students made the lowest gains in the programme group, even lower than in the control group. Looking at the data this way, the fun and flexibility of the play-based method was the best of the three approaches.

Fleer and Li (2021) report on a theoretical experiment carried out in the Chendu, China area kindergartens. They report that play-based learning is the requirement but that there are cultural conflicts between western ideas of child-centred learning and traditional Chinese cultural beliefs. They developed a new pedagogical approach balancing children's exploration through play and traditional Confucian values. They elected to conduct a case study using the method of educational experiment, helping one kindergarten programme transition to what Fleer and Li call these new institutional practices. They recruited two kindergarten teachers with two years of kindergarten students, one class of 5-6-year-olds and one of 4-5-year-olds. The children were from middle class families, and all Chinese. Data was gathered before and after treatment and included over 50 hours of digitally recorded data as well as teacher notes. The treatment included an initial 2-hour training and then ongoing consultations between the teachers and the researchers. Before treatment, the teachers would guide or direct the play but not be part of it. During treatment, the teacher recast her role as a play partner – part of the play but introducing problems in the play for the children to solve. Part of their classroom was changed to be a "playworld" environment. The lead teacher expressed a willingness to change her teaching

practices, and during the treatment went from a more authoritative figure to a part of the play community in the classroom. Fleer and Li (2021) found this could be done while still maintaining the Chinese values of putting the collective above the self. An administrator was also involved in this case study and saw the changes in the teacher's approach as positive – she saw it was a good thing that the teacher had adopted a more cooperative, guiding role with the children rather than a person in charge and managing the children.

Taken together, the studies reviewed above demonstrate the ongoing global concern in the field of giving children everywhere access to child-centred educational experiences. They also mention findings pertinent to this study. The findings of Bubikova-Moan et al. (2019) and Avornyo and Baker (2021) point to a lack of understanding of the importance of child-centred approaches and highlight the need for quality teacher preparation. Jensen et al. (2021) point out that state mandates for more play are not enough; there must be adequate space, materials, teacher training and commitment to the approach. The work of Vogt et al. (2018) and Fleer and Li (2021) demonstrate how the current programmes can be changed successfully to include more play, and that students will make measurable learning gains when these changes are made.

3.3 THE STATE OF CHILD-CENTREDNESS IN US KINDERGARTEN

While global research in kindergarten is often about creating or changing kindergarten to become more child-centred, research into US kindergarten often speaks about child-centredness being lost. Researchers have documented a loss of play and child-directed or child-centred content in kindergarten in the US. Pressure put on today's kindergarten teacher by federal, state and local standards and standardised tests means that quite a lot of didactic teaching happens in kindergarten in the US today (Brown & Barry 2021). The following studies illustrate how teachers have observed this change and some of what they think about it.

Brown, Ku and Barry (2020) recruited nine kindergarten teachers from West Virginia and 13 from Texas and asked them to view a video of a composite "day" in kindergarten their previous research had determined was "typical," and included scripted curriculum and few child-directed activities. These 22 teachers were then interviewed about their thoughts upon viewing this video. The teachers agreed this video captured kindergarten as they now experienced it, but that it had not always been like this. Responses fell largely into three themes. The first theme was that teachers noted how much kindergarten had changed across their own experience with it and that this change was a focus on kindergarten as academic preparation for the future. Their

experiences told of more assessments and less fun than there used to be. The second theme was about what these teachers wished they could change – they would want kindergarten to primarily instil a love of learning into their students, with a broader focus that would include social development and play. The third theme was that kindergarten teachers are being tasked with too much and a crisis in the profession is brewing. Strikingly, although these teachers were from very different states in the US, in fact, chosen by the researchers because of their differences, there was high level of agreement between the participant teachers on these three themes. Brown et al. (2020) did not report any teacher mentioning anything positive about the "changed" kindergarten as they termed it.

The "changed" kindergarten has also been researched elsewhere in the US. Fowler (2018) surveyed 189 kindergarten teachers from some of the wealthiest and poorest school districts in Massachusetts, USA. Fowler found that 74% of teachers surveyed from wealthy districts and 64% of teachers from poor districts reported a decrease in child-directed activities like free play, recess, lunch, snack time and rest. The poorer districts' teachers reported the most significant loss of time for child-directed activities. At the same time, teachers surveyed reported an increase in requirements to use scripted curricula from the administrations for which they work. This study supports Brown et al.'s (2020) assertion that kindergarten has changed – and perhaps not for the better.

Bauml (2016) reports that some teachers have found ways to balance their students' needs with their district's centrally controlled curricular expectations. The 15 teachers in Bauml's study taught various primary grades but include at least four kindergarten teachers mentioned in the report. Despite reporting that the expected scope and sequence were more academically rigorous than the previous year, these teachers used three main strategies to change the required curriculum to meet their students' needs. These strategies are adapting, augmenting and expanding. Adapting entails adjusting lessons to the correct pace for the students – like combining two lessons or dividing one lesson across more days. Augmenting means replacing, adding, substituting or altering the required lessons. The kindergarten teachers in the study reported employing these strategies to make the lessons more meaningful, memorable or "hands-on" for the students. Extending means making the lessons more challenging when they are too easy for the students. In these ways, these teachers strove to work within the structures placed on them to make their teaching better suited to their students. These examples demonstrate that though kindergarten has become more academically demanding, thoughtful teachers can still find ways

to bring meaning and joy into it. However, they do this by changing what they are required to do by their district supervisors.

The desire of kindergarten teachers and researchers in the US for a return to more child-centred practice is well-documented. Pianta and Goble (2017) call for kindergarten readiness evaluations to be more child-oriented, assessing not just academic readiness but whole development. Dennis (2016) conducted a study on Alabama teachers having to incorporate the Common Core standards and found the teachers see a need to include the original tenets of kindergarten back in, namely that the learner has the responsibility to learn, and learns through active, social processes. Miller (2019) recounts serving as a kindergarten teacher for 13 years in a single school in Pennsylvania. In that time, this researcher saw the kindergarten day go from 2.5 hours to 7, with an increase in academic expectations and testing. To still provide their students with free play and self-directed learning opportunities, the administration and teachers had to use their own resources to create spaces and obtain materials because there was no longer funding available for these things.

Child-centredness has been moved from the centre of kindergarten in the US to its periphery by rigorous academic standards and testing protocols. The researchers reviewed above all call for its return to the forefront of the kindergarten world.

3.4 ESTABLISHING CHILD-CENTRED KINDERGARTEN PROGRAMMES

As child-centred philosophies have become more popular, child-centred curriculum and pedagogical methods are being adopted across the globe, with varying success. Two recent studies, Sau, Phuong and Hoi (2020) and Greaves and Bahous (2021), highlight the possible challenges and successes in establishing child-centred kindergarten learning.

Sau, Phuong and Hoi (2020) conducted their research during Vietnam's attempt to build 47 new child-centred programmes. They collected questionnaires and conducted semi-structured in-depth interviews with 14 administrators and 115 teachers from five kindergartens in Vietnam. The questionnaire asked about the physical environment inside the kindergarten building, the physical environment outside the building (like playgrounds) and the psychosocial supports of their programmes. The in-depth interviews followed up on these topics. Sau et al. (2020) found that the schools surveyed had done the best in creating effective outdoor play areas. However, they found teachers under-utilised the indoor materials meant for creative play, favouring materials they were used to as typical classroom materials. They concluded that although the teachers

were provided with new materials meant to enhance child-centredness in their classrooms, their lack of training and experience meant they did not use these materials. Thus, several factors must work in conjunction for a child-centred kindergarten to be established.

The study conducted in Beirut, Lebanon by Greaves and Bahous (2021) shows a success story in establishing a new child-centred kindergarten programme. Greaves and Bahous (2021) explain that 54% of kindergarten programmes in Lebanon are private or semi-private. Their study took place at a large private kindergarten programme that had just recently transitioned from a teacher-directed to a child-centred curriculum. This change began with a two-week intensive training course followed by weekly 60-90 in-service training spread throughout the year. Importantly, these teachers phased in the new child-centred curriculum, designing child-centred lessons for one day a week, then gradually working up to daily child-centred lessons. The first round of focus group and individual interviews occurred about a month after the full curriculum was phased in. All 15 teachers at the kindergarten participated in the focus group and two consented to in-depth interviews. The first round of interviews uncovered teachers' dissatisfaction with the new child-centred curriculum and a desire to return to their old methods. Teachers mentioned such challenges as the planning time required, the lack of discipline and structure, the difficulty in knowing what the children had actually learned, the difficulty in differentiating lessons to the individual needs of the children, doubt that the children were learning what they needed for future schooling, and concerns that these methods were not suitable to their culture. However, with continued support and training for the next five months, as well as peer cooperation, teacher reflection journaling, and mentoring, Greaves and Bahous (2021) found a change in attitude six months later at the second focus group and interview period. Teachers reported feeling satisfied with the child-centred curriculum; they reported enjoying the freedom to do what the children were interested in, finding a balance between child autonomy and discipline, and reframing discipline problems as more developmental and less about power struggles. Greaves and Bahous (2021) concluded that changing to a child-centred programme, even when it is it in a context with a long tradition of teacher-directed pedagogy, is possible with enough support and training for the teachers.

There are challenges to establishing or transitioning to child-centred programmes, especially teacher training and conviction that it is the best pedagogy for young children. The recent research that focuses on these challenges largely comes from outside the US, like those above. But what about such new, transitioning or continuing programmes in the US? Recent studies about this

phenomenon appear to be lacking in the literature. This study hopes to help fill that gap and find how US schools establish or maintain child-centred kindergarten in today's contexts.

3.5 STRATEGIES USED TO SUPPORT CHILD-CENTRED LEARNING IN THE CLASSROOM

Administrators and teachers have distinct roles to play in the operations of a school in the US. Administrators typically are not involved with the classroom directly but make policy, organisation choices and budgets that classroom teachers must follow. Teachers do the day-to-day work of monitoring student progress and implementing the curriculum. Because of their disparate roles, it stands to reason they use different strategies to support child-centredness in their kindergarten programmes. Therefore, literature about child-centred kindergarten pertaining to administrators and to teachers will be examined separately.

3.5.1 Administrators' Strategies

Strategies administrators use to support the kindergarten teachers they manage can aid child-centredness or hinder it. The administrator's role in supporting child-centredness has not been the primary focus of any studies identified so far. However, data from a few studies, reviewed below, demonstrate that administrators can support child-centredness by understanding kindergarten teachers' unique position and supporting their autonomy in instructional decision-making.

Few studies were identified that speak to strategies administrators use to support child-centredness. Rather, studies that focus attention on administrators of kindergarten tend to highlight things administrators do that inhibit child-centredness. Minicozzi (2016) conducted several interviews and a focus group with four kindergarten teachers from New York who were forced to adopt a "pre-packaged" curriculum. She found that kindergarten teachers forced to balance these standards and their own ideas of developmentally appropriate practice (DAP) felt their administrations did not understand their challenges and their myriad responsibilities. Minicozzi (2016) asserts that administrations can support kindergarten by being educated in early childhood educational needs. This finding is echoed by the American Association of School Administrators (Graue 2019). Unfortunately, Lynch (2015) found some teachers even characterise their relationship with the administration as adversarial. Lynch (2015) conducted a netnography analysing kindergarten teachers posts on social media. She was trying to garner kindergarten teachers' perspectives on play in the classroom; however, she made some interesting discoveries about administrators' role in this area. Multiple teachers posted about

being disciplined by their administration for allowing play, dramatic areas and singing in class. Teachers whose administrators allowed play in the classroom as a part of learning reported feeling "lucky" (Lynch 2015). Thus, one administrator strategy suggested here for supporting child-centredness is for administrators to acquaint themselves with the unique needs of kindergarten.

Another study that included kindergarten administrators was conducted by Brown, Englehardt and Barry in West Virginia and Texas (2018). They conducted an exploratory video-cued ethnographic research study with a variety of educational stakeholders focused on kindergarten. Kindergarteners, families, teachers, administrators, policymakers, policy analysts, lobbyists and national advocates for education were all asked to comment. These stakeholders commonly commented on the academic nature of kindergarten being more stringent than it was before. Brown et al. (2018) found that some administrators recognise that kindergarten is different than it was before and do not think the changes are for the best, but the administrators they interviewed did not offer any solutions for the disparity they saw between what is best in kindergarten and what was happening in kindergarten. Some of the state-level or administration-level stakeholders commented that kindergarten must be more academic to prepare students for future tests and academic goals. So, although nearly all stakeholders involved in the study expressed an interest in changing kindergarten into a more child-friendly place, many doubt that it is possible. Although it is heartening to read the data from this study that indicate that most stakeholders, including administrators and policymakers, would like to see kindergarten change to include more joy in learning, it is disheartening that there seem to be few ideas among them on making that happen. Brown et al. (2018) demonstrate that even when administrators would like to work toward more child-centred policies and practices, they may lack the access to strategies to do so. The need for identifying more strategies for administrators is apparent.

One study demonstrates promise in identifying strategies. Buchanan and Frederick (2020) studied four laboratory kindergartens, including one in Utah, one in California, one in Pennsylvania and one in Louisiana. Only primary schools serving as laboratories for a university's teacher preparation programme and that embraced a STEAM (Science Technology Engineering Arts Math) curriculum were selected. The researchers used interviews and classroom observations to inquire into school culture, leadership capacity, expectations of student performance, rigour and alignment of curriculum, attention to student voice and engagement. The researchers found little reliance on packaged curriculum, high inclusion of the arts, creativity, student-led discussions and a focus on holistic child development. They also observed a strong sense of cooperation and

mutual respect between the administration and the teachers. The administrators at these four schools cultivated a culture of community and collaboration with the teachers, students and parents. They also gave the teachers a high level of autonomy. This study did not specify what exactly the administrators did to cultivate this culture of community and collaboration. However, the authors ascribe much of these schools' success to this culture. Documenting specific strategies administrators could use to foster such a culture would fill a gap in the literature. Even without this additional documentation, it is apparent from the study conducted by Buchanan and Frederick (2020) that granting teachers autonomy is likely a good strategy for encouraging child-centredness.

Although administrators' roles in supporting child-centred kindergarten have not been the primary focus of any literature identified to date, it has been touched on as a peripheral subject when analysing how teachers achieve or wish to achieve child-centred teaching. The consensus in this literature is that administrators can be supportive by learning of the unique needs of kindergarten classrooms and teachers and trusting their kindergarten teachers to make the decisions in their classroom. However, the lack of other documented strategies for administrators hoping to support child-centredness in kindergarten demonstrates the need for more research that helps fill this gap.

3.5.2 Teachers' Strategies

The teacher plays the biggest role in establishing a child-centred classroom (Taylor & Boyer 2020). Therefore, the strategies teachers use may be even more important than those the administrators may use to accomplish this. The four studies reviewed below demonstrate the kind of research that has been done regarding strategies teachers use to support child-centred learning in kindergarten.

Two recent studies illustrated the importance of training and experience as strategies for preparing teachers to create a child-centred kindergarten. Cavanaugh et al. (2016) experimented with two schools in the central US selected for their disparate socioeconomic factors to represent different student backgrounds. One kindergarten class in each school was divided into a control group and an experimental group. The control group used a normal teacher-led activity. The experimental group used 15 minutes of a child-led activity where children were encouraged to make their own games out of the literacy toys provided in the teacher-directed activity. The treatment was administered for 3 weeks, then all the students were tested using a standardised literacy test, as well as teacher evaluations. The students receiving the treatment scored better

on each test after receiving the treatment. This study demonstrates that introducing even a modest number of child-directed activities can have a measurable effect on student learning, teachers can be trained to include more child-led activities in a relatively short time period, and teachers can use the same materials they have been using in teacher-directed lessons in a new way to add child-centredness to their pedagogy. In other words, the key strategy that produced the better learning outcomes in this experiment was training teachers to change what they did with the time and materials they already had.

Another recent study demonstrates the importance of training as a vital strategy in a teacher's child-centred repertoire. Heery (2018) conducted a correlation study comparing what kindergarten teachers believe about DAP and what they do in their classrooms. His sample of 72 was taken from kindergarten teachers who work in the northeastern counties of Pennsylvania, US. He used the Teacher Beliefs and Practices Survey instrument, which he reports was used in 30 studies prior to his. Heery (2018) found that the more teachers believed in DAP, the more they used it in their kindergarten classroom. Heery also found that more experienced teachers used more DAP in their classroom. This study supports the idea that training and experience help teachers use child-centred pedagogies in their classrooms.

A recent study in Hong Kong demonstrates that teachers must be flexible and ready to frequently change their role to provide a child-centred education to their kindergarteners. Keung and Cheung (2019) conducted a mixed-methods study with 50 Hong Kong kindergartens. From 286 questionnaires and 29 follow-up interviews with principals, head teachers and teachers, they found what factors contribute to the effective implementation of play-based pedagogy which the researchers identified as a child-centred approach. Keung and Cheung (2019) asked these teachers about their roles regarding play-based pedagogy. The teachers said they had many changing roles, including organiser of the play, leader, facilitator, participant, observer and recorder. These teachers were required to report their observations of the play, assess what the children were learning, and adjust the curriculum accordingly. They also reported autonomy and being able to let the children's uniqueness drive the curriculum. The teachers in these schools were free to play with the students, change the play with the student's needs, and were trusted by their administrators. Several strategies that support child-centredness are apparent in this study: participating in the type of collaborative culture mentioned in Buchanan and Frederick (2020) that allows teachers and administrators to work toward the same goal, having a willingness to be flexible and fulfil many roles, and actively observing and reporting the children's progress, adapting the curriculum according to that progress.

Fesseha and Pyle (2016) identified some reasons kindergarten teachers do not use child-centred pedagogy, highlighting the need for more strategies to overcome these issues. They investigated the use of play-based learning, a child-centred approach, in Ontario, Canada kindergartens. In 2010 Ontario switched to all-day kindergarten and revamped its pedagogical requirements to keep academic achievement requirements the same and embrace play-based learning. Fesseha and Pyle (2016) conducted a web-based survey of 69 kindergarten teachers to determine how these teachers defined play-based learning and whether they implement it in their classroom. The results were not encouraging. They found that over half the respondents did not incorporate play-based learning, though it was mandated. The reasons they identified for this lack of conforming include having an inconsistent definition of what play-based learning means, feeling that time pressures prevent using play-based methods, feeling pressures to have students reach academic goals, and noise. This study demonstrates that even when the government requires child-centred pedagogy, the responsibility of finding the balance between requirements and DAP lies on the teacher, their understandings, beliefs and values. It also demonstrates a need for teachers to have access to more strategies to overcome these issues – perhaps more training regarding what child-centredness looks like, how to balance child-centred pedagogy with academic expectations, and how to create a physical environment conducive to child-centredness. This study by Fesseha and Pyle (2016) demonstrates that the field needs solutions to these problems. Research has demonstrated that teachers will teach in the way they are expected to by their school communities and local laws, even if it is not what is best for children (Brown & Lan, 2015, Brown et al. 2018). It appears that teacher training and clear community support are key requirements for teachers to succeed in supporting child-centredness in the classroom. It also appears that when teachers understand specific strategies they can use, like the teachers in Hong Kong studied by Keung and Cheung (2019), or those studied by Cavanaugh et al. (2016) do, they can successfully put them into practice. More research into teachers' strategies is needed to provide examples to other teachers. It is not enough to believe in child-centred practices, like the Canadian teachers studied by Fesseha and Pyle (2016), but an arsenal or strategies, of "how-to's" is needed. This study hopes to add to that arsenal.

In review, although administrators and teachers have different roles to play in the execution of a child-centred kindergarten programme, they both need strategies to help achieve a successful programme. One strategy that intersects both of their roles is training in child-centred pedagogies. Administrators must facilitate, and both administrators and teachers must participate in such training, so both understand the importance and logistics of using child-centred pedagogy. The

studies reviewed above demonstrate that administrators and teachers must work together to make child-centred kindergarten a reality. As reported by Fesseha and Pyle (2016), administrators who give the best-intentioned mandates are not the ones to make change happen in the classroom. Likewise, as demonstrated by Lynch (2015), teachers attempting child-centred curricula without the approval of their administrators will be thwarted. The two studies that demonstrated successful child-centred kindergarten programmes – Keung and Cheung (2019) and Buchanan and Frederick (2020) – describe school cultures of community and trust between administrators and teachers, with autonomy afforded the teachers and administrators that support their efforts. Thus, training, autonomy and nurturing a collaborative rather than adversarial attitude between administration and teachers seem to be key strategies to establish child-centred kindergarten.

3.6 RESOURCES NEEDFUL FOR ESTABLISHING OR MAINTAINING CHILD-CENTRED KINDERGARTEN

Resources helpful for establishing child-centred kindergarten programmes are mentioned in a few studies reviewed below. Although no studies that focus specifically on this question have been identified, such resources are mentioned in descriptions of classrooms other researchers define as child-centred.

Allee-Herndon, Robert, Hu, Clark and Stewart (2022) selected two teacher-directed classrooms in Title 1 schools in Central Florida, US and incorporated play-based literacy lessons into one of them, keeping the other as a control. The aim was to determine if this treatment had a measurable effect on academic outcomes. It did. However, those results are not what is pertinent about this study to the current literature review. Ancillary to their research questions were descriptions of what materials and environment were deemed essential to changing the experimental classroom into one that was play-based rather than keeping it teacher-directed. The authors describe transforming the classroom receiving treatment into one with play centres, various art supplies, a classroom library, dramatic play area, literacy-skill games, puzzles and gross motor play opportunities, colourful decor and flexible seating options. They also describe the play-based classroom as having opportunities for children to choose what they did and time for free play. The rationale for including all these elements in the child-centred classroom was not given, but it may be assumed these are elements the researchers determined supportive of a play-based curriculum.

Buchanan and Frederick (2020) researched four "model" or "laboratory" K-5 schools which were operated in conjunction with a university training programme. Their study was reviewed above in Section 3.3.1 However, additional data reported in this study is pertinent to a literature discussion about resources. Although defining the elements required for child-centredness was not a central question, some of their findings speak to this question. Buchanan and Frederick found these schools had minimal reliance on packaged curriculum, but more often created their own. These schools included music, art and foreign language instruction in their curriculum to a high degree. Classroom learning was project-based and problem-solving based. So, although Buchanan and Frederick do not specifically list resources necessary for child-centred success, it may be inferred from their descriptions of these successful child-centred programmes that helpful or necessary elements include teachers prepared to create project-based and rich curriculum, and the materials necessary to carry out such lessons.

Thu (2021) investigated roadblocks to adopting child-centred practices in kindergarten in the Yangon region of Myanmar. She explains that the government rolled out new expectations for their kindergarten programme, with funding for new buildings, renovations of old kindergarten spaces, and suitable furniture and learning materials to facilitate the new expectations. She selected six kindergartens to observe, three rural and three urban, using a 43-point observation guide. She defined environmental requirements for child-centred classrooms to include gross motor play equipment, space, age-appropriate materials and furniture, arrangement of materials to be used by children, and planning and arrangement of learning stations. She found that four out of the six classrooms lacked physical space, sufficient learning materials, sufficient teacher training and some parents resisted the changed curriculum and concluded that these factors prevented establishment of child-centred programmes in these schools. From this failure to convert to child-centred practices, it can be deduced that these elements may be required for the establishment of child-centred programmes: teacher training, community support, sufficient space and learning materials.

Two of the studies reviewed in Section 3.2 also mention resources useful in establishing the child-centred kindergarten programmes under study in their research. Greaves and Bahous (2021), in their study of a transitioning programme in Beirut, mention that the newly renovated school had wide, open and colourful spaces, a large playground, a garden and many open-ended activities within reach of the children. Sau et al. (2020) describe kindergartens that were rich in play materials, just not being used.

Although inquiry into necessary resources for child-centred kindergarten seems uncommon, the literature reviewed suggests that sufficient space, furniture, a wide variety of materials for learning and play, and teacher access to training resources are helpful. From the different descriptions of classrooms reviewed in this section and Section 3.4.2, (like Cavanaugh et al. (2016)), it seems there may not be a key element that is necessary, but many possibilities. Cavanaugh et al. (2016) note that the same materials were used in their experiment in both the teacher-directed lesson and the child-centred treatment; it was simply a matter of usage. Perhaps dramatic play areas or project-based learning are helpful but not necessary. However, as Thu (2021) discovered, there are bare minimum requirements, like sufficient space and materials, or a kindergarten will not be able to adopt child-centred pedagogies. There may be thresholds of resources, like access to curriculum materials, but not specific resources required. If so, any delineation of useful or necessary resources this study uncovers will be helpful to those looking to establish child-centred kindergarten with whatever resources they may have access to.

In sum, the literature supports the idea that teacher training and conducive materials and space help to establish child-centred kindergarten programmes. However, additional inquiry directed specifically to how this is done, and what resources it takes, would help make a more complete picture, especially in the US, as the one study located that takes place in the US speaks only indirectly to this issue.

3.7 CHAPTER SUMMARY

The literature reviewed in this chapter speaks to the current climate of US kindergarten, the failures and successes some have experienced in attempting to establish child-centred kindergarten, the strategies and roles administrators and teachers play in this establishment, and the resources that may be required to be successful. Notably, in light of the "changed" US kindergarten reviewed in Section 3.2, most recent literature identified here that investigates child-centred kindergarten has taken place outside the US. More research on child-centred kindergarten in the US would be helpful to find out how this pedagogy is faring in the current philosophical climate of the US education system. The next chapter presents the research approach adopted in this study.

CHAPTER 4: RESEARCH METHODOLOGY AND RESEARCH DESIGN

4.1 INTRODUCTION

The previous chapter reviewed the pertinent literature applying to child-centred kindergarten both abroad and in the US. This chapter focuses on the particulars of how this study is designed and how data is collected.

Research methodology and design choices are driven by the specific research question, which is:

What are the experiences of administrators and teachers espousing child-centred learning in selected kindergartens located in Utah County Charter Schools?

This chapter explains how the pursuit of this research question informs the methodology and design choices of the study. It outlines the exact design of the study and how sites and subjects were selected. It explains the types of data collected and the instruments used for data collection. This chapter concludes with an examination of quality criteria and ethical considerations applicable to this study.

4.2 RESEARCH METHODOLOGY

In research inquiry, the research question drives the choice of methodology. The research question behind this study asks about school administrators' and kindergarten teachers' experiences in a particular type of setting. A rich, real-world description of the participants' experiences is wanted for the most complete answer to the research questions possible. Empirical inquiry yielding data from multiple sources collected according to accepted fieldwork practices gives a more accurate picture of a phenomenon than questionnaires or casual observation (Given 2008). Because the research question asks about personal experiences, a social phenomenon, and wishes to generate knowledge about the experiences of administrators and teachers associated with child-centred kindergarten programmes (a phenomenon), it was determined that qualitative methods are the most appropriate for this research.

4.3 RESEARCH PARADIGM

A research paradigm is a shared set of philosophical beliefs or a world view that informs every step of the research process (Kivunja & Kuyini 2017). It is the philosophical standpoint from which

research phenomena are observed and analysed (Khatri 2020). It is the first organising factor of research. As Lincoln and Guba (1994:107) put it, "Questions of method are secondary to questions of paradigm."

The paradigm in which research is conducted has ramifications for that research. It is well established that paradigms consist of four philosophical aspects, namely ontology, epistemology, methodology, and axiology (Khatri 2020; Kivunja & Kuyini 2017; Lincoln & Guba 1994). Each of these components of a paradigm have ramifications for research conducted under the umbrella of that paradigm.

Khatri (2020) points out that part of a paradigm is beliefs about reality (ontology), and whether reality is objective or subjective, which has a direct effect on the types of research methods one would choose. A belief in objective reality lends itself to experimental design with hypotheses and control groups, for example. A belief in subjective reality lends itself to explaining cultural processes and complex human experiences (Khatri 2020). Ontology also asks, is there one reality or truth, regardless of individual perception? Or is reality in the eye of the beholder, and so there are, in fact, many realities?

The allowance of multiple realities and perceptions of realities is the realm of the constructivist/interpretive paradigm. This paradigm holds that these various realities can only be understood by being involved with subjects and getting to understand their context (Rehman & Alharthi 2016). Rather than trying to remove the human element in a phenomenon, it is embraced and included as a part of the inquiry.

Hand-in-hand with ontological questions are questions of epistemology, the philosophy of how knowledge is acquired and used in a rigorous way. Constructivism/interpretivism is the paradigm of knowledge acquisition that maintains that knowledge is gained by building it from one's experiences and interactions with the world. The first constructivist was Jean Piaget, who maintained that learning will not likely produce knowledge of the whole truth, but just what portion of that truth one's own experiences and reflection upon those experiences produces (Fosnot 2015:22). Constructivists/interpretivists acknowledge that any data gathering that happens in social contexts will be "contaminated" by the researcher's own experiences and worldview (Rehman & Alharthi 2016). It then becomes the duty of the researcher to not control all human elements, but to acknowledge and document them so consumers of the data and conclusions have enough context to judge their veracity and applications for themselves.

As mentioned above, the methodology for this study follows the constructivist/interpretivist paradigm. Because this inquiry is primarily concerned with the experiences of teachers and administrators, it is concerned with the reality and meaning the subjects make of their experience, rather than a phenomenon outside human bias. Since the study is empirical, and data gathered in person by the researcher, her first-hand interpretations are an integral part of the reality this study seeks to document.

The research approach, design and methods are outlined in Sections 4.4, 4.5 and 4.6 below. Axiology, philosophical questions of value, speaks to the ethics of a research study, which are discussed in Section 4.9 (Kivunja & Kuyini 2017).

Qualitative approaches in research are an extension of the constructivist philosophy (Schumacher 2010:6). This approach is described in detail in the next section.

4.4 RESEARCH APPROACH

Research approach is the term for the plan and procedure undertaken for scientific inquiry, including both the "broad assumptions" and all the details of data gathering and analysis (Creswell and Creswell 2017:3). Leavy (2017) likens research approaches to the structures architects work with, like homes or office buildings they may build; the research approach gives direction and structure and an end goal to the research. For the purpose of this study, a research approach encompasses both the philosophical underpinnings and the subsequent methods that follow from a given philosophy. The most common approaches are described below, and then the qualitative approach is defended as the most suitable for this study.

There are specific research approaches that are used in designing research. The three commonly used general approaches are quantitative, qualitative and mixed methods. Each of these has several variations. The quantitative approach relies on deductive reasoning, proving or disproving and gathering data that can be reported statistically; this approach is appropriate for explaining or evaluating (Leavy 2017). The quantitative approach is used for testing theories, using variables and elements of experimental design (Creswell & Creswell 2017:4).

The qualitative approach is appropriate for exploring, describing or explaining (Leavy 2017). It is an approach that relies more on inductive reasoning, focuses on building in-depth understanding of a social phenomenon, and identifying the meaning people give things or experiences (Leavy 2017). There are many varieties of the qualitative approach. Creswell and Ploth (2016), in

reviewing qualitative approaches in the literature, identified more than 40 different versions of the qualitative approach to inquiry.

Mixed methods is an approach that collects both qualitative and quantitative data (Creswell & Creswell 2017). It is used for describing, explaining or evaluating; it is often specifically used to promote social change (Leavy 2017). Researchers may use mixed methods when they believe it promotes a more thorough understanding of a phenomenon than either qualitative or quantitative methods alone (Creswell and Creswell 2017:4).

The research questions driving this study ask about the experiences of kindergarten teachers and administrators and the resources they need but have no specific hypotheses. The research question and sub-questions are more exploratory in scope and seek to document the meaning participants make of their experiences; therefore, a qualitative approach was deemed appropriate. The aims, advantages and limitations of the qualitative approach are discussed below, followed by philosophical characteristics of qualitative methods. Then the case for the use of the qualitative approach in this particular research is made.

The aim of qualitative research is to understand social reality as seen by those living it (McLeod 2019). Yin (2016) lists five distinguishing characteristics of qualitative research. In brief, these include studying the meaning of people's lives and real-world roles, representing their perspectives, attending to real-world contextual conditions, contributing insights that may help explain social behaviour, and acknowledging that many sources of evidence may be relevant.

The advantages of the qualitative approach lie in the diversity and richness of the data this approach works with. The qualitative approach came about as a reaction to the strictures of quantitative, experimental design (Hammersley 2013). Qualitative approaches are more flexible than quantitative ones and are suitable for gathering data that is rich in nuance and detail that may not be accounted for in quantitative methods (Yin 2016). Qualitative research lends itself best to understanding social phenomena, especially when phenomena are described by those who experience them (Schumacher 2010). Furthermore, qualitative research tends to focus on narrative rather than numbers. In qualitative approaches, data is typically gathered in the subject's setting (Creswell & Creswell 2017). Also integral in qualitative research is the researcher themself, who comes to the data collection with their own experiences and biases (Creswell & Creswell 2017). In qualitative research, however, these experiences are perceived as a vital ingredient in

making meaning from the data, so long as they are plainly documented to allow others to review their conclusions with a critical eye (Creswell & Creswell 20:2, Schumacher 2010).

However, even with all its possibilities, qualitative inquiry has some drawbacks. Because of the in-depth nature of this type of research, large-scale inquiry including many participants is difficult and uncommon (McLeod 2019). Furthermore, the researcher's inextricable involvement in data collection means that it cannot be replicated (McLeod 2019). Both the small sample sizes usually involved, and the personal involvement of the researcher limit the generalisability of any results. Finally, analysis of qualitative data is not straightforward but requires a lengthy process that requires analytical thinking and energy from the researcher (Yin 2016).

The qualitative approach is most appropriate for this study because it is the best fit for collecting pertinent data that helps to answer the research question. This study is an exploration into what is going on in the sampled kindergarten programmes, and thus it is a social phenomenon, one specifically experienced by the administrators and teachers who run the programme. The research question aligns with several of the distinguishing characteristics of qualitative inquiry mentioned above by Yin (2016). First, it is concerned with the meaning administrators and teachers make in their real-life role. Further, these administrators and teachers are operating in a specific context: a charter school in Utah County that champions child-centred philosophies and/or practices. Furthermore, the administrators, teachers, and researcher observations all yield data from different perspectives that are valuable to explaining how these programmes operate. These characteristics clearly fall under the purview of the qualitative paradigm as outlined by Yin (2016).

4.5 RESEARCH DESIGN

Research design is a logical blueprint which links research questions to gathering data to analysing that data (Yin 2016). In qualitative research, design tends to be flexible. Indeed, Yin (2016) claims it is a risk to do too much design before data gathering begins, because it may impose external criteria or categories prematurely rather than allowing them to emerge in the course of the research. However, having a design in place before research begins can add to its credibility and provide structure for the study (Yin 2016).

4.5.1 The Range of Research Designs

Creswell and Ploth (2016) identified the five most used qualitative designs: case study, ethnography, phenomenology, grounded theory and narrative research. Each of these popular research designs is reviewed below, and the design best suited for this study is indicated.

Case study design is useful for thoroughly describing complex programmes (Lapan, Riemer & Quartaroli 2011). A case is a defined portion of a phenomenon- – limited in time and scope, but deeply studied, providing "thick descriptions" of the phenomenon (Lapan et al. 2011:267). Case studies are useful for understanding systems that are more complex than simply one person's experience, like how a system works, or a policy (Stake 2006). Case studies use multiple sources of data, usually qualitative types, to build the "case" or rich description of an instance and setting of a particular phenomenon (Schoch 2020).

Ethnography is a research design that relies on immersion in a population and extensive observation of that population in order to explore why a group, culture, or society acts the way it does (Cohen, Manion & Morrison 2018). Ethnography may be used in a variety of contexts, but it is often used to research under-reported or at-risk populations (Hammond & Wellington 2013). The primary research strategy of ethnographers is participant observation. Researchers may be full participants, or the main participant as is the case in autoethnography, or they may be on the sidelines looking into the population being studied, or anywhere between those two extremes (Hammond & Wellington 2013). Current ethnographic ethics now often involve participants as co-researchers to minimise taking advantage of vulnerable populations. Because ethnography is so reliant on observation as its primary data gathering strategy, the "observer effect," the fact that they are being observed might change participant behaviour, may have the largest effect on this type of research (Hammond & Wellington 2013: 64).

Cohen, Manion and Morrison (2018) describe phenomenology as a research design whose aim is to describe, explain or interpret a phenomenon as the participants who experienced it would. Unlike some other types of qualitative research, phenomenology is not concerned with theory, categorisation or abstraction. Rather, phenomenology differs from other qualitative research in its dedication to reporting both the individual participant's construction of reality as well as the socially constructed reality of the participants at large. In-depth, open-ended interviews are the primary data gathering strategy, emphasising a desire to capture the complexity and depth of individually ascribed meanings of those who experienced the phenomenon. Phenomenology is best suited to

small-scale research. The focus on the detail and individual experiences may be a limiting factor, as findings are not easily generalisable.

Hammond and Wellington (2013) explain that the goal of grounded theory research is theory building rather than operating from a pre-existing framework or theory. Grounded theory prioritises induction over deduction in building theory from the data. The research itself both generates and tests hypotheses. Sampling in this strategy is purposive, field notes and other data are analysed using the constant comparative method, codes are used to organise and classify data, and theories produced with it are "substantive" but admittedly limited to only the instance of the phenomenon studied (Hammond & Wellington 2013:83). Grounded theory has been used in many fields, including education, healthcare, management and social work. Hammond and Wellington (2013) point out that any research that uses the process of coding owes a debt to grounded theory even if it does not strictly follow the somewhat rigid process of the grounded theory process; in this way, grounded theory has influenced many qualitative research designs.

Narrative research is the gathering of stories and their reporting or "restorying" to illuminate an event, lived experience, or social meaning (Squire, Andrews & Tamboukou 2008, Creswell & Ploth 2016). Narrative research has no obvious starting or finishing points, strict rules, or guidelines (Squire et al. 2008). It may be considered an emerging qualitative design (Creswell & Ploth 2016). Squire et al. (2008) explain that stories collected may be about experiences, events, personal or social change stories may be short or long, about real or imagined phenomena. Event-centric narratives and experience-centric narratives are both concerned with what the narratives mean to the tellers. Social narrative, be it dialogic or social code, is more concerned with the functioning of stories rather than their internal meaning. Therefore, audience is an important concept in narrative research – who the stories are being told to and for is as important as who they are being told by. Narrative inquiry is useful when the research aims focus on the experiences of one individual or a small group of individuals with a shared experience (Creswell & Ploth 2016). Narrative research is useful for biographical inquiry, historical inquiry and psychology, among others (Squire et al. 2008).

4.5.2 Multiple Case Study Design

The research questions driving this study ask about experiences of teachers and administrators working at specific sites, but all working under similar policies or philosophies, namely that of child-centredness. Because participants' experiences are inextricably linked with specific settings

under study, case study design was chosen as the best fitting design. Since the research question for this study involves the experiences of participants at three different school sites, the version of case study design that fits the research questions best is multiple case study design.

Multiple case studies, like the research design chosen for this study, are made up of two or more single case studies, which are then cross analysed (Stake 2006). Since a multiple case study is made up of single cases, this section first outlines the steps to designing a case, then specify the design choices made regarding the study reported in this document. Then it will explain what multiple case study looks like and how it is different from a single case study and finally will show why this is the appropriate design to answer the research question of this study.

4.5.2.1 Description of multiple case study design

A multiple case is made of two or more single cases. The cases in a multiple case have something in common; they are all examples of a similar or same phenomenon (Stake 2006). In analysis of a multiple case study, once the single cases are analysed, and the themes and patterns found within each one, then the next step is to find what is similar and different between the multiple cases (Stake 2006). Researchers can decide, through their study design, whether more attention is given to the individual cases, or the multiple cases seen as a whole (Stake 2006). Multiple cases may lead to a more robust outcome than a single case, making it preferable to answer some research questions (Baškarada 2014). This study asks what child-centredness looks like in kindergarten in the era of standards-driven education; multiple perspectives will yield a better answer. Therefore, this study includes three cases, the three schools with child-centred kindergartens in a particular locale. Two of these three cases have within themselves what Stake (2006:4) terms "mini-cases" since two kindergartens are made up of multiple classroom environments.

4.5.2.2 Steps in case study design

Lapan, Riemer and Quartaroli (2011) explain that case study design involves first defining the case by setting boundaries on it. These boundaries are dictated by the research questions. In this study, this means locating kindergarten programmes that are child-centred in approach and operate in Utah County Charter Schools. This study is also bound by the research question which dictates that only the administrators and teachers will be interviewed, not aides, parents or other stakeholders. The case should also be bound by time. The data gathering period for this study is

the 2022-2023 school year. The kindergartens selected and the process used for selecting them are outlined in Section 4.6.1.

The next step in any case study design is determining what data collection methods will be used (Lapan et al. 2011). Multiple case studies, like single case studies, rely on direct observation and finding out the observations of others to build a picture of what is happening in the case so that others might "see" it also (Stake 2006). Yin (2006) describes four categories of qualitative data gathering methods: interviewing, observing, collecting/examining, and feeling. Each of these methods is flexible and can be carried out in numerous ways. All of these methods will be employed in this study. They are explicated further in Section 4.6.

The last step in single case study design is analysing and synthesising the data. It is vital that, when gathering data in a multiple case study, the researcher focuses on each single case as though it were the only case (Stake 2006). Therefore, in multiple case studies, each individual case should be analysed to its final step before cross-analysis (Stake 2006), described in the next paragraph. Data collection and analysis ideally happen simultaneously (Lapan et al.2011). Yin (2016:147) explains that "data collection is constantly accompanied by analysis." A researcher is to learn constantly from the data, so the next bout of data gathering is informed by the previous one. However, there are formal, systematic steps of data analysis that generally follow the data collection phase of research. These formal steps of data analysis are described in Section 4.7.

4.6 RESEARCH METHODS

The previous section outlined the rationale for choosing case study design as the research design of this study. This section and the following Sections (4.6, 4.7, and 4.8) outline the methodology to be used in sampling and data gathering. The methods of data gathering that seem most likely to get to the heart of what unique experiences are happening in these kindergartens include interviewing, observations and document analysis, all methods common to qualitative research.

4.6.1 Selection of Participants

This section describes the population from which the sample was taken, the sampling strategy that was employed, and an accounting of the final number of subjects.

4.6.1.1 Population

A population is the complete group of people who share specific characteristics (Banerjee and Chaudhury 2010). For this study, the population is kindergarten teachers and administrators in Utah County, Utah, USA. Both teachers and administrators of kindergarten are stakeholders whose choices determine what happens daily in the kindergarten classroom. The balance of power between administrators and teachers in decision making can vary greatly in US schools, as experienced by the researcher in 27 years of teaching. Therefore, it was decided that the more complete population to sample from would include both administrators and teachers. There are a total of 125 public schools with a kindergarten in Utah County (Utah State Board of Education 2021). It is unknown how many administrators and kindergarten teachers are associated with these schools.

However, since it is rarely possible to study an entire population, a sample is often studied instead of the entire population. The method used in selecting this sample determines how generalisable the findings of the research are.

4.6.1.2 Sample and site selection

Qualitative research is less concerned with generalising findings and more concerned with increasing understanding about a small or under-researched population (McCombes 2023). Therefore, sampling in qualitative research does not rely on randomisation, but, quite the opposite, on careful, purposeful selection (Schumacher 2010). There are several sampling strategies that may be employed in qualitative research, the appropriateness of each one depending on the phenomenon being studied. It was determined that the most appropriate sampling strategy for this study was the purposeful sampling strategy of case-type strategy, specifically concept/theory-based case. The concept/theory-based case type is a case where it is known that a specific strategy or concept is being put into practice (Schumacher 2010). It may also be defined as an exploratory case, since the concept under study, namely child-centred kindergarten, has no clear, single set of outcomes (Baxter & Jack 2008). Stake (2006:8) has another name for this type of case; it is an "instrumental case study," which is one that can be used to see how a theory is working out.

For this research, the phenomenon being studied is child-centred kindergartens in Utah County, Utah, USA, as experienced by the teachers and administrators who govern them. The first level of selecting a sample for this research was to choose only charter school kindergarten teachers

and administrators. After some preliminary research, it appeared that public charter schools are more likely to have child-centred kindergartens as opposed to district-affiliated kindergartens that focus mainly on the state standards. Charter schools are public schools initiated by community members rather than the state (USCSB 2017a). They are freer to make decisions on a local level and may therefore be more likely to be empowered to put their philosophies into practice (USCSB 2017b). Furthermore, each charter school has a charter document outlining its philosophies, which are a matter of public record, and must actively recruit students as no students are automatically appointed to it by the state. This means that each charter school has easily accessible information outlining its philosophies. State-initiated public schools, also called district schools, do not need to attract students, as the state assigns each child to their district school. Therefore, they do not make their philosophies or pedagogical techniques as readily available to the public and may not publish them at all. To attend a charter school, a student must apply to the charter school, while a student does not have to apply to their assigned district school but is guaranteed a spot.

There are 17 charter schools in Utah County that offered kindergarten in 2022. The next step for determining an appropriate sample was to find which of these charter schools espouse child-centred philosophies. Their websites were consulted, paying special attention to pages labelled "vision", "philosophy", "approach", and "parent information", and from this larger subset of charter kindergartens, those deemed appropriate sites for answering the research questions were selected. Those schools that self-reported as being child-centred were selected to sample from. Three schools described themselves as focusing on whole-child, child-friendly or child-directed curricula. To protect the anonymity of the participants, these schools were labelled A, B and C.

From these three schools, the final research sample was taken. It was originally hoped that participants would include both an administrator and qualified teachers from each school. However, the administrator from Site A was the only administrator willing to consent to participate in the study. The other two administrators were willing, however, to verify the qualifications of the teachers in their school. These qualifications included implementing a child-centred approach in their classroom and having the qualifications to teach a child-centred approach. The potential teacher subjects should also have at least two years of kindergarten teaching experience, play an active role in curriculum development, have direct responsibility for students, and have power to decide how their classroom environment is set up and managed. All kindergarten teachers at the school meeting these qualifications were invited to participate in this study. From Site A, two kindergarten teachers qualified, and both consented to participate. From Site B, three

kindergarten teachers qualified, but only two consented to participate. From Site C, there was only one kindergarten teacher in the school, and she both qualified and consented to participate. This yielded a total of six participants—one administrator and five teachers.

4.7 SITE BACKGROUNDS

As discussed in the previous section, sites were chosen during the sampling process. The three charter schools chosen as sites each claimed to follow child-centred practices in their promotional materials and public documents. A summary of the backgrounds of each site follows. To keep the identity of participants in this study private, the individual websites, though reviewed to compile background summaries of each school, are not cited in this document.

4.7.1 Site A

Site A is a K-6 public charter school in a new and growing suburban development ("fringe rural") with an enrollment of approximately 576 students (National Center for Education Statistics 2021). It first opened for the 2016 school year. Site A's website states, "education should fit the child, not the other way around." Their website decries standardised testing, and the school maintains a no-homework policy. The parent handbook claims their model teaches time management and self-regulation and encourages exploration and personal growth. The "vision" portion of their website outlines their pedagogical philosophy, which includes providing an experience-rich environment, meaningful play, student autonomy, a developmentally appropriate whole-child approach, individualised instruction through technology and reading as the primary academic goal. Their programme includes project-based learning, music, art, dance, theatre, and other electives the students can choose on a rotating basis.

4.7.2 Site B

Site B is a K-6 public charter school in a suburban neighbourhood that directly abuts the urban centre of the midsize city it is in. It opened in 2017 and has 459 students (NCES 2021). Site B espouses a whole-child approach, including art, music, movement, nature and service. Their motto is "Educating the head, heart and hands". Their website states they teach a Waldorf-inspired, developmentally appropriate full sensory integrated curriculum. Their stated pedagogical approach is developmentally driven, incorporating multi-sensory pedagogy, guided discovery and play-based methods. Their website claims they integrate the state standards with music, visual

art, science, movement, dance, technology, yoga, math, drama, nature, literacy and project-based learning.

4.7.3 Site C

Site C identifies as "a K-12 Montessori school with a difference". The most established of the three sites in this study, it has been open for about 20 years and is situated next to a suburban neighbourhood in a midsize city (NCES 2021). There are 438 students across the 13 grades, so their kindergarten programme is the smallest of the schools in this study. Site C's website states their school blends Montessori methods and peace education. The website maintains that their school is student-centred, and values social, emotional and academic development equally. They define the Montessorian philosophy they embrace as "education with an emphasis on independence, freedom within limits, discovery, and developmentally appropriate activities…a profound respect for all aspects of a child's cognitive, academic, psychological, physical and social development." They claim to build classes around how children naturally learn. Their classes combine two to three age groups.

4.8 DATA COLLECTION

Like other aspects of research design, the choice of data collection methods flows from the research questions (Ritchie & Lewis 2003). Data may be either naturally occurring or generated. Naturally occurring data exist before or independent of the study, like documents or an ongoing situation that can be observed. Generated data are data the researcher does something to produce – like interviews or focus groups conducted by the researcher. The researcher must consider what type of data collection will yield data that best answers the research question, considering the context of the participants and phenomena, the accuracy or completeness participants can provide, the practicality of accessing data, and what value is placed on participants' own interpretations of their experience (Ritchie & Lewis 2003). Because the research questions for this study specifically ask about administrators' and teacher's lived experiences with child-centred kindergarten, it was determined that in-depth interviews were an appropriate primary data collection method. Additionally, document analysis and observation, both natural data collection methods, would help to give context, completeness and another perspective to the data.

4.8.1 Interviews

Interviews are a key type of generated data in qualitative research (Ritchie & Lewis 2003). This is likely because interviews give the most straightforward data regarding a rich phenomenon (Barrett & Twycross 2018). An interview is a conversation carried out with an informant for the purposes of the researcher (Given 2008). Unlike everyday conversations, it is often one way, and allows the researcher to gain knowledge from the participant being interviewed (Given 2008).

There are diverse types of research interviews. Interviews can be formal, with an appointed time and place where the researcher sits down with a participant and conducts an interview, or informal, as might happen naturally while observing a participant (Given 2008). Interviews can vary in their level of structure; they can be scripted with specific questions in a survey style or freer with a few prompts that allow the respondent to go where they like with the subject (Given 2008). Experienced researchers may come up with their own unique format, allowing for more variety in interview types than can easily be documented (Yin 2006:140). Quantitative research more often employs surveys or interviews with closed-ended questions that provide data that is quantifiable and standardised (McLeod 2014). Unstructured interviews are at the other end of the spectrum without any set questions but invite interviewees to talk about what they wish to on the subject (McLeod 2014). Focus groups are another type of group interview where the researcher acts as moderator and the participants respond to open-ended questions (McLeod 2014). Semi-structured interviews, sometimes called in-depth interviews, are the most used in qualitative research because they are guided by the researcher but allow room for the respondent to spontaneously describe their experiences and opinions (Given 2008).

The semi-structured interview format was chosen for this research because it is the best fit to collect data appropriate to answer the research questions. The research question focuses on administrator and teacher experience, whatever that may be. A semi-structured interview style allows the researcher to guide or focus the respondents' answers on the topic being studied, while still allowing the flexibility for participants to add their own insights and personality (Barrett & Twycross 2018). Because it is unknown what type of experiences respondents may have, it is important that questions be open-ended to allow for any type of response, positive, negative, neutral, surprising, etc. Semi-structured interviews also have the flexibility to ask follow-up questions when something unexpected comes up in the interview (Yin 2006). However, because the research questions focus on child-centredness and no other theme, some structure to the interview helped keep it on topic.

Interviews may be conducted through survey, face-to-face, over the internet, or over the telephone (Given 2008). This research took place during the Covid-19 pandemic. So, although face-to-face interviews were preferable, one had to be conducted online. Because interviews were followed up with classroom observations, the most desirable location for interviews to take place was in the school or classroom, so these two data collection methods would share the same contextual setting. The researcher was willing to accommodate another place for the interviews to allow respondents to feel comfortable enough to be forthcoming. However, all the participants, except the one whose interview was held via a video conference, were held at the respective kindergarten sites.

Besides meeting a participant in a setting that is comfortable for them, there are many other strategies for collecting high quality data from interviews. Yin (2016) warns that it is important that questions remain open-ended, the tone of the interview is conversational, and the interviewer should use probes and follow-up questions frequently enough to keep the participant comfortable, but to not lead the participant. The most important characteristics of a qualitative interview are its probes, pauses and other verbal and non-verbal communication that enable the participant to feel safe in talking to the researcher (Schumacher 2010). Also important is the question format. Dichotomous questions and presupposition questions should be avoided (Schumacher 2010). Additional hallmarks of good qualitative interviews include speaking less than being spoken to, being non-directive, staying neutral and maintaining rapport (Yin 2016).

This study sought to interview one administrator and three teachers from each school, for a total of 12 respondents. However, only six participants were recruited for the study. This is in part because only one administrator consented to participate, and at one site there was only one kindergarten teacher at the school. A further accounting is found in Section 5.4. It was expected that interviews with each participant would last approximately an hour. Respondents are referred to in reference to the sites they work at, but with labels that protect their anonymity, so the administrator from Site A was given the title "Admin A" and the teachers from Site A was referred to as "Teacher A1" or "Teacher A2". Descriptions of each site do not include identifying details. However, it was anticipated that the greatest ethical issue in collecting data for this study would be in protecting participants from any repercussions if they shared opinions or experiences that were not condoned by their employers. Therefore, any negative experiences or opinions shared with the researcher needed to be handled with the utmost care in reporting them, so these thoughts and feelings remain anonymous. A more thorough discussion of ethical concerns is included in Section 4.10.

An interview guide was developed based on the research questions (see Appendix G and H). An interview guide, or protocol as Yin (2016) calls it, provides a mental framework for the researcher to help make sure the interview gathers data pertinent to the research questions. It is not a survey or questionnaire with highly structured questions (Yin 2016). Durdella (2019) advises linking research questions to interview questions in the guide so it will be easier to link data to the original research questions at the end of data collection. A guide was created since an interview guide helps keep the interview on track and can even help elicit more information from an informant than an open interview (Yin 2016). A guide also helps to regulate the researcher's interaction with participants, so that each participant is approached via the same structure (Durdella 2019). Lapan et al. (2011) suggest testing an instrument's validity by running a pilot test. This can mean having a colleague read it over and offer insights. The interview guide in Appendix H was reviewed by a veteran teacher who had taught kindergarten for 5 years. She stated of the interview questions for teacher participants, *"These are appropriate and questions/answers that will be helpful and interesting"* (Personal correspondence with Amanda Dein, teacher in the Alpine School District, 15 August 2022).

The last step in interview collection is presenting participants with a transcript of their interview and asking them to review it to ensure it correctly represents what they wished to say. This is called a member check and helps ensure both accuracy and rigour (Shenton 2004). After transcription, each participant was given a copy of the interview transcript in which they were a participant and were asked to review it and suggest any edits. No edits were recommended.

4.8.2 Observation

Another data collection method in this study was field observation. Observation allows natural data gathering in an unobtrusive way (Durdella 2019). Observation is the "mainstay" of qualitative research (Schumacher 2010 350). It is one of the most fundamental methods of fieldwork, often going together with other data collecting strategies (Yin 2016). Observation as a data gathering tool increases the validity of a study by allowing the researcher to see the phenomenon in action, to directly observe the use of terms or practices informants have spoken or written about, and to check whether their reports match observed reality (Kawulich 2005).

There are many types of observation methods for data collecting. In quantitative research, controlled observation is part of the scientific method. In qualitative research, observation methods tend to lie across two intersecting scales. One of these scales is direct versus indirect.

Direct observation is conducted by the researcher as the first-hand observer of the setting or phenomenon (Ciesielska, Boström & Öhlander 2018). Indirect observation is conducted by the researcher getting reports of what others have observed (Ciesielska et al. 2018). The other scale is participant vs. unobtrusive observation. Participant observation requires establishing rapport within a community and learning to act like a part of the community to not disturb the natural happenings in that community while the researcher is observing it (Kawulich 2005). Unobtrusive observation is observing from the sidelines – not participating or interacting in any way but hoping to remain unnoticed and ignored by those being observed (Kellehear 2020). Unobtrusive observation is thought to limit the possibility of any harm done to participants, but it may yield observational data that are limited by what the researcher notices as an outsider (Kellehear 2020). Partially participating observation falls in between participant and unobtrusive observation. It seeks to limit the researcher's impact on the site or phenomenon being observed while still being involved to a lesser extent than full participant observation (Ciesielska et al. 2018). Whatever type of observation is employed as a data collection method, it must be guided by the research questions and carried out systematically.

Data gathered from observation are called field notes. Field notes are written during or directly after an observation period, and record what the researcher sees and hears during these observations (Schumacher 2010). Durdella (2019) distinguishes two types of field notes necessary to good data gathering: descriptive and reflective. Descriptive field notes are those that describe routines, settings, events, etc. encountered during an observation period. Reflective field notes are those personal feelings, interpretations, and thoughts of the researcher as, or after, they observe the phenomena. Both these types of field notes form another textual data set subject to analysis.

Just as an interview guide helps collect pertinent data and keeps consistent structure throughout all participants studied, an observation guide or plan helps provide structure and bounds for the observation portion of data gathering (Lapan et al. 2011). Also like an interview guide, an observation plan should be related to the research questions (Durdella 2019). A plan should indicate how long observations will be, where they will be, and should delineate what interactions are of particular interest (Lapan et al. 2011). The observation plan for this study is found in Appendix F.

Direct, partially participating observation was chosen as the observation method for this study. Direct observation was chosen because observing the teacher in her classroom directly places

the interview portions of data collected into context, checks against what is observed in a typical day in these kindergartens, and yields new insights not gleaned from interviews alone. Indirect observation might not accomplish these goals as easily, since there are not likely to be additional adult informants besides the teachers and administrator already interviewed who could observe the classrooms and report on them.

Partially participating observation was chosen because of the researcher's experience teaching kindergarten herself. In her experience, it is common for parents to volunteer in kindergarten classrooms, and the students are accustomed to this. It was hoped that acting in the classroom as volunteers typically do would help the teacher and students feel the most comfortable and have the least negative impact on the environment of the classroom setting. If the teachers and students felt it was a typical day, the data gathered was likely more valid than skewed or somehow influenced by the researcher's presence.

The observation portion of data gathering for this study was carried out in each classroom site after initial interviews were done with each teacher. Administrators were not observed as they do not have direct classroom responsibilities. Observations were informed by the interviews, and were designed to put teacher responses in context, as well as add any further answers to the research questions. Observation periods also give opportunities for informal interviews to occur. Informal interviews are those clarifying questions that may arise spontaneously during observation and serve to help the researcher understand what they are hearing or seeing during observation (Cohen & Crabtree 2008). Informal interview responses were included in the field notes as well as both descriptive and reflective field notes.

4.8.3 Document Analysis

This section defines document analysis, explains why it is a useful tool for collecting data and explains how it was used in this study.

Document analysis is a research method involving the analysis of a wide variety of materials that include text (Morgan 2022). Document analysis is a useful tool in qualitative research because documents pre-exist the researcher's involvement at the site, so they are not influenced by the researcher, unlike other types of qualitative data like that collected in interviews (Yin 2016). The other two data types in this study – interviews and observations – by nature may have bias or involvement of the researcher. Thus, document analysis is a useful source of data triangulation. It may be regarded as truly authentic.

Document collection and analysis are particularly helpful in case studies (Bowen 2009). Documents can provide a context within which the participant is situated and can give information about the case that the researcher may not find by observation and interviews which are bounded by time. Bowen (2009) notes that documents can help the researcher identify additional questions that need to be asked, provide supplementary data, verify data from other data collection methods, and track changes or development in a phenomenon. Yin (2016) points out the practical use of documents – they can help the researcher understand schedules, spellings, organisations and specific language or terms used at the study site.

In this study, as with the interviews and observations conducted in this study, a guide was developed to help the researcher select appropriate documents in the field. This guide is found in Appendix E. All interviewees were asked for documents. Administrators were asked for informational documents usually given to parents regarding the kindergarten programme if there are any. They were also asked if there were any documents related to training kindergarten teachers in child-centred philosophies or techniques. They were asked if the kindergarten had unique needs or budget items that were different from the rest of the school and if there were any documents available about those. If any other documents were mentioned during the interview, participants were also asked for those.

Teacher participants were asked for lesson planning documents, including schedules and supply lists. They were asked for the lesson plans for the day(s) the researcher observed them in their classroom. They were also asked for "typical" lesson plan documents from the past. Finally, they were asked for a past lesson plan they were very satisfied with in terms of child-centredness, an example of their "best work" as a kindergarten educator. If any references to other documents came up in interviews that were related to the research questions, those were asked for as well.

After documents are collected, analysis can begin. The first step in analysing documents is skimming or first reading (Bowen 2009; Rapley 2018). Morgan (2022) describes reflexive document analysis as being the only type of qualitative document analysis. In reflexive document analysis, the coding process evolves as the researcher reads and compares the documents (Morgan 2022). Altheide and Schneider (2013) expand this idea of document analysis as an emergent methodology because each decision or discovery in document selection and reading leads to another. Documents should be coded like other data collected (Morgan 2022). A more careful reading follows the initial reading phase of analysis. In this stage, patterns may begin to appear. Rapley (2018) advises looking for what is in the document and what is missing from the

document. He advocates "sceptically engaging" with the documents, which involves questioning the assumptions on which the document was predicated (Rapley 2018). The interpreting phase of document analysis is the final phase when the researcher-analyst uses their own experience in the field and familiarity with the documents to determine and report what meaning can be found in them (Bowen 2009). The documents gathered in this study will be subject to all of these analysis processes as well as entered into a QDA software to find patterns across the three types of collected data – interviews, observations and documents.

4.9 DATA ANALYSIS

After data collection begins the task of analysing the data. Qualitative analysis is the classification, interpretation and meaning-making of qualitative data, which is usually in textual form (Flick 2014). Though there are several strategies of qualitative data analysis, it usually involves both a rough analysis and a detailed analysis of the data (Flick 2014). This section delineates a few common data analysis strategies and explains which strategy is best for this study.

Some common data analysis strategies are content analysis, grounded theory, narrative analysis and framework analysis. Some other strategies, like cultural studies and netnography are not covered here as they are strategies particular to certain types of data. Each of the generalised strategies mentioned above is described briefly in what follows and the one most suitable for this study described with the rationale for selecting it.

4.9.1 Content Analysis

Content analysis is a highly structured strategy of qualitative data analysis. It can even be used to analyse qualitative data in a quantitative, statistical way (Sun 2020). It involves six steps. Sun (2020) describes them in the following way. First, each question asked in an interview or other data gathering method is given one column in a spreadsheet. Then, the analyst reads through the text data one response at a time and matches responses to their corresponding questions in each column. Third, the analyst highlights recurring or common themes in the responses, using different highlighting colours as necessary to delineate different themes. Fourth, from these themes are identified categories of responses. Fifth, these categories are labelled with keywords derived from the text responses. The last step is to give these categories codes. These codes can be numerical if the data is to be analysed with statistical software. Or, these codes can indicate frequency of response, for example, code C1 means the most common category of response, C2 the second most common. Sun (2020) recommends a second person then go

through the organised data to check if they agree with the coding. This method is highly correlated to the questions asked in an interview or by the observer when they are observing. Because the questions are the primary organiser, it may not be the best method when doing exploratory research that is more flexible and may not stick to predetermined questions but lead more by the participants. It is a good method when research questions are highly focused or specific rather than those that invite long responses or tangential thoughts. Because the research questions that drive this study invite the sharing of experiences that may be lengthy, this analysis strategy may not be the best fit.

4.9.2 Grounded Theory Analysis

In the grounded theory strategy, data collection and data analysis happen simultaneously (Thornberg & Charmaz 2014). It was originally developed by sociologists Glaser and Strauss, but has been developed into many different versions with different emphases. The basic tenets of grounded theory are these: the researcher/analyst is involved in data collection and analysis at the same time; codes and categories are constructed from the data rather than from hypotheses; the constant comparative method is used, which means making comparisons of the data and codes at all analytical stages, revising codes as needed; the goal is theory development; theoretical sampling is used, which means some sampling happens after theory has been developed; and category development is prioritised over specific empirical topics (Charmaz 2006, Thornberg & Charmaz 2014). Grounded theory analysis may be carried out with several types of data (Thornberg & Charmaz 2014). Grounded theory is more useful for theory construction than for describing or evaluating the application of theory. Indeed, Charmaz (2006) states it was designed to help qualitative research evolve from only a descriptive discipline to a theory-creating one. However, this makes it less than ideal when the research questions are about description or exploring a phenomenon that has resulted from a theory, like the topic of this study which focuses on the experiences of administrators and teachers with child-centredness in kindergarten. Thus, it may not be the best choice for this study.

4.9.3 Narrative Analysis

Narrative analysis is a broad research strategy with many subtypes (Burck 2005). Narrative analysis is concerned with the stories told by participants, their context and the meaning it makes of their experiences; narrative analysis holds that meaning is made by the stories (May 2012). It was developed in the 1980s by sociologists who used narratives as a tool to analyse people's

experiences with social issues (Esin et al. 2014). There are several types of narrative analysis strategies, including dialogical, thematic, constructivist and cognitive, all with their specialised foci. Narrative analysis is extremely concerned with issues of power and is influenced by Foucault (Esin et al. 2014). Narrative analysis takes the role of the audience for the narrative into account, sometimes to a high degree. It is also concerned with layers of meaning within narratives, the minutia of words in the narratives, the contradictory meanings in narratives, and how participants use narrative to make sense of the world. It is frequently used together with other analysis strategies. With its emphasis on shared construction of the meaning of an experience, some elements could be useful in this study that is concerned with the experiences of teachers and administrators in a specific context. However, its concern with power and the minutiae of dialogical analysis may not serve the aim of this study which is to help other kindergarten stakeholders apply child-centred principles in the age of standardised education.

4.9.4 Framework Analysis

Framework analysis is particularly helpful for researching policy application. Its main use is to describe what is happening in a specific setting (Ritchie & Spencer 1994). Srivastava and Thomson (2009) list several strengths of framework analysis, for example: it is heavily based on the raw data and allows easy access to it; it treats all similar data types equally so conclusions do not favour some data over others; it is flexible and can be revised throughout the process of analysis; and it is useful for both within-case and cross-case analysis. Framework analysis is the best data analysis strategy to fit the needs of this study. Framework analysis will be explained in detail in Chapter 5.

4.10 MEASURES FOR TRUSTWORTHINESS

For research to be valid and trustworthy, it must be rigorous and follow the quality criteria of its paradigm. In qualitative research, trustworthiness can be achieved by focusing on four characteristics: credibility, transferability, dependability, and confirmability (Shenton 2004). These four criteria should be included in the design of the study from the outset to ensure rigorous results in the study. Each of these quality criteria is defined below and their inclusion in the design of this study is explained.

4.10.1 Credibility

The credibility of research findings is the degree to which the findings are believable and appropriate (Mills 2010). Ways to establish credibility include using multiple data streams that provide validity to the study through triangulation, prolonged engagement, conducting member checks and peer debriefing. Amankwaa (2016), in synthesising the work of Lincoln and Guba (1985), claims that conducting member checks is one of the most crucial ways of establishing credibility. Shenton (2004) agrees. Lapan et al. (2011) claim triangulation is the primary way to bolster a study's trustworthiness.

This study ensures credibility through including member checks, triangulation and prolonged engagement strategies.

Member checks were conducted with each participant. Each participant that was interviewed was shown a transcript of the interview and asked to make any changes the participant felt were necessary to capture what she meant to communicate. This "second chance" given to respondents helps make sure their voices are understood.

Also, data was collected from the administrator, teachers, classroom observations and documents. These multiple data streams serve as triangulation, helping to ensure that the picture painted from the data is as accurate as possible.

Though member checks and triangulation serve as the backbone strategies for ensuring credibility in this study, prolonged engagement is another strategy that bolstered the credibility of this study. Interviews and classroom observations gave the researcher a substantial period of time in each data collection site, thus increasing the chance the data would be credible.

4.10.2 Transferability

Transferability is the degree to which findings in the context of one study may apply to another context (Trochim 2020). Inherent in qualitative research is an acknowledgement that there will always be some differences in each environment when humans and experiences are being studied. Therefore, qualitative findings cannot be generalised in the way that well-crafted quantitative results can be. However, with sufficient detail provided for the context of the research, consumers of the research can decide for themselves if the findings of a qualitative study might apply to another context with which they are familiar (Shenton 2004). This is referred to as transferability. Transferability can be bolstered by providing thick descriptions including details

about setting, climate, attitudes of participants and their relationships to other participants or others in the setting, non-verbal communication of participants and the feelings of the researcher (Amankwaa 2016). This study bolsters its transferability by describing (in Chapter 5) the classroom context, schedules, policies and procedures of each kindergarten classroom with enough detail that readers of the research can determine how similar or dissimilar it is to the kindergarten context for which they have a concern. Thick descriptions of participant reactions, experiences and attitudes are included. The researcher's decisions and feelings were recorded. All this information can help consumers of the research decide for themselves how applicable the findings of this research are for other similar classrooms and child-centred issues. Thus, the findings of this study may have a measure of transferability appropriate for qualitative research.

4.10.3 Dependability

The dependability of a study rests on how well the data collection and analysis methods used are reported in detail so that a future researcher could use the same ones (Shenton 2004). How dependable a study is hinges on whether it can be replicated. To establish dependability, the research design, data gathering operations, and reflective appraisal of methods used should be detailed (Shenton 2004). Dependability also hangs on the researcher's reporting of changing context within which the research takes place (Trochim 2020). Amankwaa (2016) recommends using an auditor, an outsider who understands the ideas in the research in question, to evaluate whether the conclusions are supported by the data. In this study, the recording of research design and data gathering operations began in this chapter, including the appendices that document how data was gathered. Reflex journaling and field notes detailed the context of the research and choices made along the way. An auditor, a colleague who taught kindergarten for five years but now works outside kindergarten at a school that is not one of the sites, and so is familiar with that world but not included as a participant, was employed to review data and findings. These measures helped ensure the dependability of this study.

4.10.4 Confirmability

The confirmability of a study refers to whether the findings can be corroborated by other researchers (Trochim 2020). It has to do with neutrality and limiting the biases of the researcher, such that another researcher would come to the same conclusions given the same data. (Kivunja & Kuyini 2017). Triangulation built into the research methodology helps to bolster the confirmability of a study (Amankwaa 2016). Other methods of establishing confirmability include

documenting checks of the data, seeking for negative instances – those data that do not fit the pattern, and establishing an audit trail (Trochim 2020, Shenton 2004). The audit trail is like establishing dependability; it is laying out the step-by-step course of the research for readers of the study to follow (Shenton 2004). In this study, confirmability is established through several elements of research methodology. First, collecting data from participants through interviews, through observation of participants and through document analysis were used to triangulate the findings to ensure more accuracy. Second, having participants member-check transcripts established confirmability because another researcher could get the same data from the same source, as the participant is the source and not the researcher's interpretations or bias. Third, the researcher did not cut out any data that did not "fit the pattern" although it may have been negative instance. Lastly, confirmability in this study was established through the thorough reporting of decisions made in the course of conducting the research to document an audit trail. The pilot testing conducted on the interview guide is one example of this audit trail.

4.10.5 Trustworthiness summary

These four measures of qualitative trustworthyness: credibility, transferability, dependability, and confirmability combine to determine the trustworthiness of a study. By collecting data from three sources (interview, observation, and documents), keeping notes, timelines, and reflections, pilot testing the interview questions, and describing findings in detail so others can evaluate them, this study sought to be trustworthy.

4.11 ETHICAL CONSIDERATIONS

Ethical considerations are those practices and principles that guide research in protecting participants and enhancing the validity and integrity of research (Bhandari 2021). Ethics in research are vital not only for preventing harm to participants but for ensuring trust between scientific inquiry and society (Bhandari 2021). Ethics must be considered at various stages of any study. Some ethical considerations are procedural while others are issues of access to participants by way of gatekeepers (Guilleman & Gillam 2004). Some are issues of informed consent, protection of participants like protecting anonymity and confidentiality, remuneration, and unexpected issues that present themselves during the research (Bhandari 2021; Guilleman & Gillam 2004). Each of these types of ethical considerations is discussed below, as well as the way they interact with this study specifically.

4.11.1 Procedural Ethics

Procedural ethics refers to the process of getting ethical clearance from governing institutions to conduct the research (Guilleman & Gillam 2004). The processes in place by governments and schools to approve research exist to protect potential subjects or participants in the research from harm. These processes give the researcher a basic "checklist" of fundamental ethical concerns to consider and try to mitigate before data gathering begins (Guilleman & Gillam 2004:268). This "checklist" often includes such items as "the potential risks to participants, the balancing of the benefits of the research against those risks, the steps needed to ensure confidentiality of data, and the inclusion of consent forms and plain language statements in the material provided to participants" (Guilleman & Gillam 2004:268). A researcher must convince an Institutional Review Board (IRB) that the proposed research has a minimal risk of harm to participants and processes are in place to protect participants before the IRB will give permission for data gathering to commence (Bhandari 2021).

Permission from the College of Education Ethics Review Board (the IRB at UNISA) was granted to conduct this study. The ethics certification can be found in Appendix K. After securing such approval, the next ethical hurdles to face in any study are those of gatekeeping and access to participants. Gatekeepers are those individuals or institutions that can give a researcher access to study participants (Andoh-Arthur 2019). Of utmost ethical importance is protecting participants. It is therefore vital that participants enrol willingly and not due to pressure or conscription from gatekeepers (Miller & Bell 2012). When participants are "volunteered" by gatekeepers instead of being the initiator of their participation themselves, there is a risk of exploitation (Guilleman & Gillam 2004). This is an especially important ethical issue in this study because there are two layers of gatekeepers encountered in this study. The first layer of gatekeepers in this study was the governing school board of each school in the study. All three sites under study in this research have a school board. These boards gave permission for the researcher to conduct the research at the school and gave access to the administrator and teacher participants. The second layer of gatekeepers in this study are the administrators that govern the teacher participants in this study. It was important that the researcher, though hoping and requesting these permissions and recommendations, do nothing to pressure the school boards or administrators to conscript participants. It was a concern that either each site's school board or the administrators could insist participants consent to be studied. However, because the results were to be reported with school and participant identity kept confidential, it was deemed unlikely there would be much reason for these gatekeepers to pressure participants to be included in the study. The schools and

administrators would not have much to gain or lose by participation as the results should not affect their school's reputation.

Though the researcher cannot guarantee that school boards and administrators did not pressure participants, the researcher did not notice any signs that this happened. The administrator at Site A gave access to the emails of perspective participants to the researcher, and the researcher reached out to them. At Sites B and C, the administrator simply forwarded the researcher's contact information to the perspective participants, and Teacher B1 and C1 reached out to the researcher. After Teacher B1 interviewed, the researcher emailed the remaining kindergarten teachers at Site B from emails publicly available on the school's website, and Teacher B2 responded as a willing participant. The researcher tried to ensure the participants were well-informed before they gave consent and understood their rights throughout the study interval. She did this by answering several questions via email, phone and text, as well as giving each participant copies of consent documents found in Appendix B. Guilleman and Gillam (2004) advise making language in informed consent documents plain and easy to understand. A clear, signed consent form is just the beginning of informed consent (Ryan 2016). Having participants read the transcription of their interviews, as was done in this study to ensure credibility, is one way to help ensure they still consent (Miller & Bell 2012).

Participants must know the researcher can be trusted, and their anonymity and confidentiality protected (Ryan 2016). Participants must be protected from any repercussions that could potentially arise by a gatekeeper or employer learning about their responses. To help protect participants, potential participants were invited to choose the venue and timetable for the interview. Allowing the interview to be outside of school might help participants feel their answers would remain confidential and that the researcher could be trusted. One participant chose to be interviewed over Zoom from home. All others chose to be interviewed at the schools where they worked. Also, only the researcher and the interviewee were given access to the full transcription of the interview. Identifying details were removed from the data before it was reviewed by others or reported to help protect participants.

The final ethical area to be discussed here is "unexpected" issues that come up during research (Yin 2016). Guilleman and Gillam (2004:262) term these issues "ethically important moments". These issues may include unexpected, difficult, or unpredictable things that happen during data gathering (Guilleman & Gillam 2004; Yin 2016). Some things just cannot be anticipated. However, Yin (2016) advises that one way to prepare for these issues is to set clear rules from the outset,

deciding what data will be excluded or included in the eventual analysis. The rule adopted for this study was that any experiences shared by the teachers and administrators having to do with child-centredness, even if participants showed a poor understanding or implementation of child-centredness, would be included. Any data that did not seem to have any bearing on child-centredness could be ignored and excluded from the analysis.

Furthermore, a reflexive journal kept throughout the data gathering and analysis stages can help navigate through any ethical issues or dilemmas encountered. Reflexive journals are tools for ethical research (Guilleman & Gillam 2004; Miller & Bell 2012). A reflexive journal gives the researcher a way to record and discuss any decision-making that comes up during the research to aid in navigating the best path through these issues, and to explain why and how decisions were made (Guilleman & Gillam 2004).

4.12 CONCLUSION

This chapter explained the methodological and analytical processes chosen for this study. It detailed the sampling strategies used and introduced the data collection sites. It addressed the quality criteria and ethical considerations pertaining to this study's design. The following chapter reports on the data collected from these sites using the process that has been outlined in this chapter.

CHAPTER 5: DATA ANALYSIS AND INTERPRETATION

5.1 INTRODUCTION

Chapter 4 delineated and verified the research methodology, design and data collection methods used in this study as well as its purpose, goals, objectives and research questions. This chapter presents the data analysis and findings guided by the research design described in Chapter 4 and the theoretical framework underpinning this study that was explained in Chapter 2. It was mentioned in Sections 1.5 and 4.5 that this study's design is a multiple case study design. Thus, the following section describes the specifics of each particular case followed by explanation and application of framework analysis to each case.

5.2 DESCRIPTION OF THE CASES

A case is an entity, bounded by time, with functionality and context (Stake 2006,: 2). In this study, the kindergartens at three different schools, operating in the fall of 2022, are the three cases. The entities are the kindergartens, and fall of 2022 is the time they are bounded in. Stake (2006) maintains that the first objective of a case study is to understand the case. In this study, it is through participants belonging to each case that this understanding comes. Participants were those workers at each case site willing to be interviewed and possibly observed. Through the participants and the researcher's own observations, the functionality and context of each case are explained.

As Stake (2006) explains, in a multiple case study, all the cases must have an issue or phenomenon in common. As described in Section 4.4.2, the kindergartens selected for this study all self-identified as child-centred. This shared philosophy made these three cases similar enough to make meaningful comparisons between them. Though their approaches to achieve child-centredness may be different, they have similar goals and thus, together, form what Stake (2006:vi) calls a "quintain" or a set of cases that can be used to answer a single research question.

5.3 CASE SITES

Each of the three selected sites were located within Utah County, Utah, a geographic area containing 25 cities, the most populous of which is Provo, UT, with a population of 114 084, according to the US Census Bureau (2021). The second most populous is Orem, with a population of 97 861. Both cities are in the top 10 most populous cities of the state of Utah. Two of the schools

selected for participation in this study were in Provo, and one in Vineyard, a town bordering Orem. According to the administration at the Vineyard-located school, many of their students come from Orem since Vineyard borders Orem. The map below shows the relative positions of the three schools participating in this study.
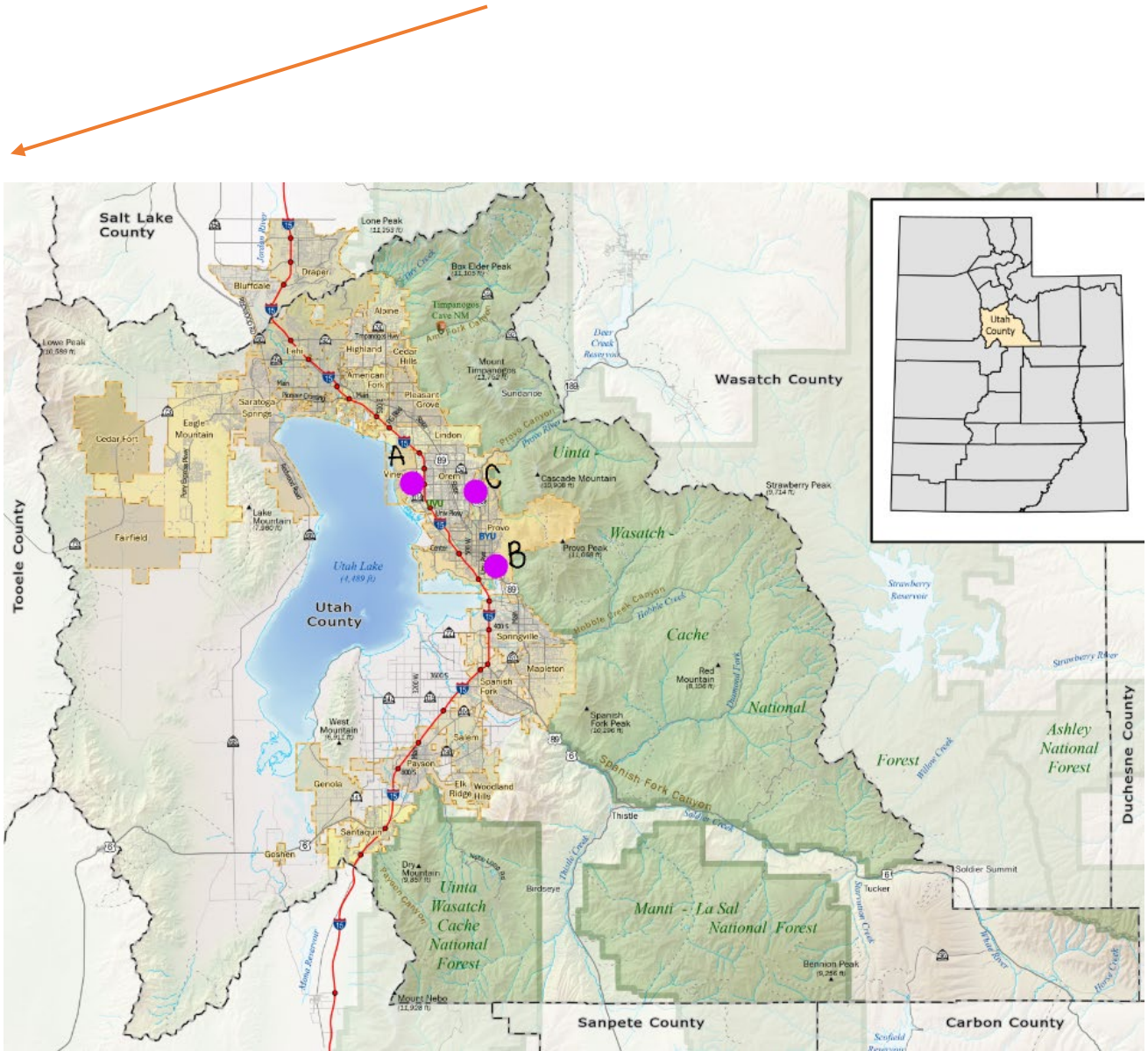

Figure 5.1 Map of Utah County, showing the three participating schools

The three purple dots in Figure 5.1 indicate the three school sites, A, B and C. They are centrally located in the most populous urban/suburban area of the county. The distance between Site A

and Site B is 17 km (10.7 miles), and the distance between Site B and Site C is 10.5 km (6.5 miles). A map of the state of Utah is shown in the upper right corner for reference.

5.3.1 Site A

Site A is a K-6 (meaning it has all elementary/primary school grades up to age 11-12) charter school with a large kindergarten. It opened 7 years ago. There were two all-day kindergarten classes, one half-day kindergarten class, and two split all-day K/1 classes. Site A had a unique administration organisation with six administrators, all with responsibilities for separate aspects of the school. For example, one administrator oversaw the management and training of the teachers, another the finances. One of them was the director of administration, who founded the school and has the most direct responsibility for the kindergarten. She was a participant in this study. There were 34 teachers at this school and 53 teacher aides. Of the four kindergarten teachers, two were first-time kindergarten teachers, and two were teaching for their second year. The two that had taught the previous year were invited to be participants in this study and consented.

In the interest of transparency, it is important to note that the researcher had worked at this school site off and on for 7 years. Indeed, her experience with this school acquainted her with the issues of child-centredness in kindergarten. However, it had been four years since she last worked as a kindergarten teacher there. In that time, the kindergarten at the school evolved and changed significantly; two rooms were added to the kindergarten area of the building, different curricula were added and the staff had all changed, so she still had to approach it without much prior knowledge of the existing routines and organisation of the kindergarten.

Each of the kindergarten classes at Site A was made up of 5-6-year-olds, except the two split K/1 classes. Each class had a specific schedule that was determined by the administration. There were seven rooms, not counting the cafeteria or the playground, through which the students rotated daily (except the one ½ day kindergarten class which did not visit all rooms daily). Each rotation was 40 minutes, with a 5-minute switching time afterward. The classrooms were a homeroom where the day typically began, a music room, an art room, a STEM (Science, Technology, Engineering, Math) room, a wellness/drama room, a large literacy room which was divided into a computer lab and small-group worktables (each half of this room was its own rotation) and a room and hall space used for free play or choice-time activities. Each of the five kindergarten classes (including the K/1 classes) had an assigned schedule where they rotated

through these spaces as well as outdoor recess and lunch in the school cafeteria. The first-grade classes also used these spaces and had their own rotations but could have other rotations as well.

Each of these rooms besides the homeroom had assistant teachers that carried out the curriculum according to their subject. Most of these teachers were not licensed but were legally teacher aides. However, some of them did plan the lessons they teach. The core subjects like math, reading, and writing were planned by the licensed teachers of record and shared among them in the literacy room. This allowed the licensed teachers to plan lessons that were appropriate for different ability levels. For example, there could be three different math lessons planned for three different groups, a slower-moving group, an average-moving group and a faster-moving group. It would be difficult for one teacher to plan all these as well as different levels of reading or writing lessons, so the teachers divided the prep work and then had several lessons to choose from to accommodate each student's learning needs in the small-group setting.

The class period that was observed at Site A was homeroom time. The participant teacher suggested this would be the best time to observe because she had the most autonomy over this time period. The lessons during the homeroom period were not shared but each teacher could design her own use of this time.

5.3.2 Site B

Site B was the newest of the three sites, being only five years old. Site B was a K-6 charter school like Site A. It had two administrators, the executive director and the assistant director, who had chief responsibility for special education. The executive director was invited to participate in this study but declined. There were 27 teachers in total at Site B, as well as four aides in kindergarten. Four of these 27 teachers were kindergarten teachers. Two of the kindergarten teachers consented to participate in this study.

Each kindergarten teacher had autonomy over the schedule and pacing of the day. Start time, end time, lunchtime, and specialties (art, yoga, physical education, music, computer lab time) were determined by administration, but other scheduling was determined by the teacher. Recess was coordinated with the other kindergarten teachers as all the kindergarten classrooms shared a playground. Free play time in the classroom, math, literacy, social science, science, project-based learning, and breaktime/snack time was up to the teacher to schedule. The teachers at this school were all trained in and expected to use elements of Waldorf philosophy. This included

allowing the teachers a high degree of autonomy and providing hands-on learning experiences for the students who attended. It also included having a nature table in each classroom with found objects from nature or objects of interest from nature like shells, animal skulls, pinecones and the like. A garden area outside that was separate from the playground was available to the kindergarten teachers to use with their classes as they see fit.

Because each teacher had such a high degree of autonomy, each class reportedly did things differently. Although the kindergarten team met regularly and shared ideas, each teacher was free to use whatever ideas and curriculum and materials they wished. For example, one of the kindergarten classes went on a field trip every Friday. The other three classes did not. Thus, although Waldorf philosophy permeated the school, each teacher applied the philosophy uniquely.

5.3.3 Site C

Site C was a K-12 charter school (meaning it has students from kindergarten through the last year of public schooling, which ends at Grade 12 for 17–18-year-olds) with a small kindergarten. Because it had all the public-school grades, administration was divided into primary school, middle school and high school. There were four administrators: one was the executive director, one the middle school director, one the high school director, and one the business administrator. According to the sole kindergarten teacher, the executive director had stewardship over the kindergarten. There were 16 teachers and assistants in the elementary (K-5) portion of the school, and 44 faculty members in the middle school/high school portion of the site. Site C had only one kindergarten classroom, with one licensed teacher and two unlicensed assistants that worked under her direction. This licensed teacher agreed to participate in this study, but the administrator declined.

In this one kindergarten classroom, some students attended all day, some only for the morning half and some for the afternoon half of the day. Site C's kindergarten had mostly 5-year-olds, as is the common age in other kindergartens in the US, but some 3- and 4-year-olds if they were children of the staff at the school.

Site C used a somewhat adapted Montessori curriculum, and the teacher and assistants had extensive training in Montessori methods. The curriculum may be termed an adapted Montessori curriculum because, although the methods and materials are mostly Montessori, the teacher

reported also pulling in other curricula and materials when it suited a need. These needs included either satisfying state requirements, or because the older-grade teachers had requested it.

Site C had one very open, large space. The teacher explained in the interview that this space was originally two classrooms but was renovated to be one large classroom. There were distinct spaces delineated by furniture like shelves and tables, a large rug for "line time" and a storage area for student "cubbies" where personal belongings were kept. All the furniture was child-sized. There was no adult-sized furniture in the room at all. When the researcher observed the class, she was given a low stool to sit on. This is what the adults in the room sit on if they sit. As the teacher said in the interview, "*I tell my students: this is not my classroom, this is your classroom*" (Teacher C1).

In this one large space, there were three groups of kindergarten students, the all-day students, the morning-only students and the afternoon-only students. The schedule used to accommodate these groups was somewhat complex. It required three adults, the head teacher and her two assistants. Each had her own duties at various times of the day in order to make the routine work. The all-day students were divided in half for "line time" (which is like "circle-time" or "rug-time" in other kindergartens and consists of more direct instruction). Half of the all-day students attended "line time" with the head teacher in the morning with the morning-only students while half spent time on tablets using a specific learning software, supervised by an assistant teacher. Then the two halves switched when the afternoon-only students had "line time". "Line time" was only 20 minutes or so. The largest single portion of the day (one hour and 40 minutes in both the morning and the afternoon) was spent in independent work time. This independent work time was an essential element of a Montessori-style classroom. During this time, students may choose what to work on and where. There was a counting area, a practical life area, a measurement area and others. Students were shown exactly how to use each item/toy/activity found in independent work time during "line time" or individually as needed. Other time periods included recess, cleaning up, small group writing instruction, and optional additional time in another classroom working specifically on literacy and math skills for the morning-only and afternoon-only students. The all-day students had time with specialty teachers once a day between the morning- and afternoon-only classes' leaving and arriving times. These specialty classes included physical education, library time, coding and outdoor immersion.

5.4 DESCRIPTION OF PARTICIPANTS

There was a total of six participants. Three participants were from Site A, including an administrator and two teachers. The teachers included at Site A were the kindergarten teachers who had taught kindergarten prior to this school year. In adherence with exclusion criteria set out in Section 4.6.1, most notably that participants needed to have two years of kindergarten experience, the other kindergarten teachers at Site A were not invited to participate because they were inexperienced, with the study's school year being their first year as kindergarten teachers. The two participants from Site B were kindergarten teachers there. The administrator at Site B declined to participate. Though other potential participants invited at Site B had the requisite experience, no others agreed to participate. The final participant was from Site C and was the sole kindergarten teacher at that site, it being the smallest school included in the study, so there were no other teachers to invite as potential participants. The administrator at Site C also declined to participate. Pseudonym labels were assigned to each participant in the order in which their governing boards approved participation, since data collection overlapped chronologically. One participant was an administrator (designated Admin). The other five were kindergarten teachers with their own class or classes that they headed (designated Teacher). Each of these teachers had at least one aide, none of whom were included as participants. All the participants were Caucasian women.

Table 5.1: *Biographical data of participants*

School and its participant	Age	Experience in kindergarten	Educational background
Site A: Admin A	51	none	PhD, Instructional Psychology and Technology
Site A: Teacher A1	36	1.5 years	Bachelor's degree, Communications
Site A: Teacher A2	26	1.5 years	Bachelor's degree, Health Promotion
Site B: Teacher B1	35	3.5	Bachelor's degree, ECE
Site B: Teacher B2	49	3 years	Master's degree, Music Performance

School and its participant	Age	Experience in kindergarten	Educational background
Site C: Teacher C1	46	6.5	Bachelor's degree, Elementary Education

5.6 FRAMEWORK ANALYSIS

Framework analysis aims "to identify, describe, and interpret key patterns within and across cases" (Goldsmith 2021:2061). The data gathered at each site was analysed separately using framework analysis to create three individual cases. This process is described in this section. Cross-case analysis is described and reported in Chapter 6.

There are five steps to data organisation and analysis in the framework approach. These are called: familiarisation, identifying a thematic framework, indexing, charting, and mapping and interpretation (Ritchie & Spencer 1994). They may also be called: familiarisation, constructing the initial framework, indexing, charting, and abstraction and interpretation (Spencer et al. 2014). It is important to note that although these steps form a guide, in practice, there is movement up and down these steps in the process of analysis (Ritchie & Lewis 2003). These steps are not discrete stages without overlap but a hierarchy moving from the concrete raw data toward higher levels of abstraction (Ritchie & Lewis 2003). Each step is outlined below with how it was used in this study.

Each of the five steps was carried out in completion for each case individually, as per the advice of Stake (2006). The findings of these individual case analyses are reported in Section 5.7. Then, the cases were compared to yield a cross-case analysis addressing the research questions. The results of these analyses are reported in Chapter 6.

5.6.1 Step 1: Familiarisation

Familiarisation means immersion in the data, or reading, rereading and reviewing the data set (Ritchie & Spencer 1994). Once all the data was in text form, this first step of framework analysis began in this study. It is the first time the researcher may start to see themes or patterns (Spencer et al. 2014). Smith and Firth (2011) suggest this stage should include printing out paper copies of transcribed data and reading it repeatedly, making notes in the margins. Baškarada (2014)

advises making memos during the first stage of reading through the data; these memos may become the codes used in later stages of analysis. Ritchie and Lewis (2003) warn against leaving this stage too early; though data may be copious, it is important to stay with the raw data long enough to understand it and not rush forward to more abstract stages. The familiarisation stage thus involves reading through the data often multiple times.

To prepare for this first stage of analysis, interviews were transcribed with the help of a web-based transcription programme called otter.ai. Then the researcher listened again to the recording while reading the transcription and fixed any mistakes made by the transcription software. This was done as soon as possible after each interview so the researcher's memory of the interview would be fresh in her mind in case there were places in the interview where the transcription software was insufficient. Non-data portions of the transcriptions were then removed as well as identifying details like names. Non-data portions of the interviews mostly consisted of interruptions by others not participating in the study. Since most of the interviews took place on site at the schools, there were occasional interruptions by other people moving through the space or asking the participant a workplace question. Thus, the interview data were converted to textual data ready for analysis.

Field notes taken during classroom observations were immediately typed and organised within each observed period according to activity observed. Documents gathered were also organised by type: documents pertaining to schedule, philosophy, lesson planning and communication with parents. These types of data were already in textual form.

Such multiple re-readings of these transcripts and organisation of data materials helped accomplish the first step of framework analysis – the familiarisation phase. Longer transcripts were printed out and reviewed on paper to accommodate more notes. Shorter transcripts were reviewed in their digital form. When the researcher felt she had a good understanding of what the data from a case contained, the second step was begun for that case.

5.6.2 Second Step: Identifying or Constructing a Framework

The second step, identifying or constructing a framework, happens as a natural next step to familiarisation. It is at this step that textual data may be uploaded to qualitative data analysis software (QDAS). The QDAS chosen for this study was Dedoose. During familiarisation, themes, key issues and ideas emerge and these are noted as codes, which the software can help keep track of (Ritchie & Spencer 1994:180). It is a deeper read of the data, but it does not yet sort and

categorise all data. Although a QDAS helps to keep the data organised, it is the researcher/analyst who assigns all codes. At this point, many codes used may be in vivo – in the words of the participants to stay as true to the data as possible (Baškarada 2014; Smith & Firth 2011). Goldsmith (2021) encourages both induction and deduction to tease themes out from the data. Then, in the construction of a framework, these themes are revisited and organised into a framework. Issues identified may be a priori: in direct response to the research questions; emergent: having arisen in the course of the study; or analytical: patterns found upon reviewing the data (Ritchie & Spencer 1994:180).

In this study, each case was focused on by itself so the themes and concepts emerging from that particular case were not affected by the data of the other cases. Data was uploaded onto Dedoose, a QDAS software. Initial "parent" codes (what the software calls the broadest layer of coding) were also entered into Dedoose. These "parent" codes are general terms summarising larger portions of the data; these codes seemed to characterise the main information in each document or portion of interview or observation. As the data was reviewed during this step, other "child" codes, subsets of the "parent" codes became apparent and were added to the framework. Many codes were in vivo, like "child-centred," "child independence," "curriculum," or "teacher training." Some were named to capture in fewer words what the data was about, like "child choice," or "respect for children's nature." The chart below contains the various codes that emerged from the data.

Table 5.1: *"Parent" and "child" codes reported by case*

Case	Parent Codes	Child Codes
Site A	Administrator Role/responsibilities	Administration-staff relationship; attitude about academics
	Child-centred	developmentally/age-appropriate; child choice; direct instruction; play-based; child voice; individual needs; child autonomy
	Resources	Classroom setup; curriculum; materials; resource control; staffing; time
	Schedule	
	Start-up kindergarten	Teacher training

Case	Parent Codes	Child Codes
	Teacher Role/Responsibilities	Discipline; levelling/individually appropriate assignments; parent inclusion; teacher autonomy; teacher share (planning)
	State Requirements	
Site B	Administrator Role	Teacher training
	Child Centric	Child autonomy; child choice and voice; dramatic play; hands-on/handwork/project-based; learn through play; organic/flexible plans; needs: emotional learning, individual
	District vs Charter	
	Resources	Aide/other staff; budget; classroom setup; materials: Montessori-style, toys, manipulatives; nature/natural; outdoor space
	Schedule	Lesson plans
	Start up	
	State requirements	
	Teacher role	Curriculum, discipline, parent involvement, teacher autonomy, teacher philosophy, teacher share
	Waldorf-inspired	Larger community/field trips; classroom community/teamwork/inclusion
Site C	Child-centred	Child choice; child independence; child needs: child skill development, individual needs
	Establishing child-centredness	
	Resources	Curriculum: child-centred, needs identified from older grades, flexible; environment
	Teacher responsibilities	State standard; discipline; faculty respect/collaboration; parent involvement; respect for child nature; schedule; teacher autonomy; teacher training

Note: Each "child" code is a sub-code of the "parent" code it is attached to. "Child" codes are generally *in vivo* codes and parent codes are umbrella terms for common themes found in the data.

5.6.3 Third step: indexing

Indexing, the third step, is the process of applying the framework to the data (Ritchie & Spencer 1994). It is a sorting and labelling process. This process is made easier with qualitative analysis software, but ultimately it is the researcher who judges what data fits which theme (Ritchie & Lewis 2003). Indexing is different from the familiarisation step because all the data must be annotated this way. Indexing allows patterns to be found in the data (Ritchie & Spencer 1994:182).

At this point, with several codes extracted or suggested by the data, each piece of data, usually a sentence or a small paragraph, was evaluated and assigned a code. Some of these were "child" codes and some "parent" codes, making it easier to begin to see patterns in the data and how some data were related. Most "child" codes are in vivo codes and are more specific, while most "parent" codes are larger themes and more general.

5.6.4 Fourth Step: Charting

The fourth step is charting. Charting involves "lifting" the individually indexed pieces of data and making them into a whole picture (Ritchie & Spencer 1994:182). This may be done in a literal chart, where one chart is built for each theme, with the heading of each column a sub-theme, and each row is a unit of data analysis, like one interview or document (Spencer et al. 2014). It may also be set up by case, where one case is a row, and the columns represent the themes (Spencer, et al. 2014). This is another step that may be aided using software.

In this study, once all the data was coded and sorted at the indexing phase, charts were constructed of each code or similar codes. For example, the codes "curriculum," and "flexible curriculum" are related and thus placed into the same chart as a heading and subheading. Dedoose can assemble Excel charts according to each code. This was executed as the first rough charting for each case, focusing on the themes that emerged in Step 3. For each site, charts were then created in Word, grouping common or smaller themes into larger themes. Many of the "parent" codes became the emergent themes once multiple reviewing and rereading of the coded data was finished. These charts were assembled with an eye to answering the specific research

questions, organising the emergent themes into their relationship to the research questions. Table 5.2 demonstrates the organisation of one of these charts.

Table 5.2: *Example of a chart for the Emergent Theme: Resources, Site A. For*

Sub-theme:	Data:
Classroom setup	• Interview excerpts • Document analysis report • Observation excerpt
furniture	• Interview excerpt • Observation excerpts
curriculum	• Interview excerpts
materials	• Observation excerpt • Interview excerpt • Document excerpt
Resource control	• Interview excerpts
staffing	• Observation excerpt
time	• Interview excerpt • Document analysis report

Note: For brevity's sake, the actual excerpts are not included, just listed as "excerpt" as the actual chart this example is inspired from is multiple pages long.

5.6.5 Fifth Step: Mapping/Interpreting

This is the serious and systematic process of detecting the answers to the original research questions and any other discoveries the data lead to (Ritchie & Spencer 1994). There are several types of analysis that can be done at this step, depending on the one(s) most applicable to the aim of the qualitative research being done (Ritchie & Spencer 1994). These may include creating typologies, finding associations, defining concepts, developing strategies or mapping the range and nature of a phenomenon. The interpreting or mapping of the data in this study is reported in Chapter 6.

5.7 DATA PRESENTATION

This section presents the data collected in this study, organised by theme. The data from each of the three cases is reported as they pertain to each theme. Five main themes emerged upon review of the data: starting up a child-centred kindergarten, child-centred learning philosophies utilised

by kindergarten, the responsibilities and roles of administrators in supporting child-centred kindergarten, the responsibilities and roles of educators in supporting child-centred kindergartens, and resources regarded as important or necessary for supporting child-centred kindergarten. Each of these themes is listed below with the data from each case that pertains to it.

5.7.1 Starting a Child-Centred Kindergarten

Setting up a child-centred kindergarten is not easy. In fact, the one administrator in the study, Admin A, said of the first year they were open, "*It was hell*" (Admin A). The study participants pointed out challenges and recommendations for anyone wishing to create their child-centred kindergarten. Challenges included funding, staffing and agreement on approaches. Recommendations included teacher training and focusing on children's developmental and emotional needs.

5.7.1.1 Site A

Admin A wrote the charter for Site A and worked with the state for a few years to secure funding to build the school and hire the staff. She described this process of working with the state when trying to establish a school with child-centred priorities as challenging. Utah State recently passed legislation requiring the use of certain curriculum and training for kindergarten teachers. Admin A says, "*this is the first time a state law has interrupted our model or our operations. They've this law saying you can't use Waterford anymore. You have to use this. And we don't agree with it, and curriculum decisions should be ours.*"

Admin A, Teacher A1 and Teacher A2 all had advice regarding the establishment of a child-centred kindergarten. Admin A expressed her concern that teachers might try to make kindergarten focus away from the whole child if they were not lead properly: *"I think at the beginning, it is setting culture, setting tone. For me the whole time, probably the biggest issue is the give and take with teachers on being too academic"* (Admin A). Teacher A2 gives advice for a new kindergarten, "*I've learned a lot to not try to reinvent the wheel when it is not broken, essentially. So, if you find a system that works, great, keep it... love and understanding is going to be your main ingredients for setting a new programme up*" (Teacher A2). Teacher A1 pointed out the benefits of moving around, having time spent on play and free-choice activities, especially for students with learning disabilities. She advised that kindergarten should focus *"more on just building and using their imaginations"* (Teacher A1).

5.7.1.2 Site B

One thing Teacher B1 had learned from working at both Site B and other schools is how challenging it can be to get funding. She said that Site B ran into trouble getting funding because of their unique approach being different from the norm:

"*There is a lot of red tape you have to go through to make sure that the powers that be are satisfied so you can get funding, right? That's really the biggest, it always comes down to money...because they were still kind of trying to play both fields and they didn't know quite like how far can we push this versus that*" (Teacher B1). She also knows finding staff can be a related challenge, "*because they didn't have the funding to get people in here to do the work, you know yet. And so that was the biggest hurdle I've heard about... every year, it's just gotten a little bit more refined, and nicer. And, and they found more money, you know, like, oh, there's this grant I didn't know about last year that we can apply for now.*" (Teacher B1)

Teacher B2 believed it was important for a child-centred kindergarten to be led by an administration that understands and supports child-centred ideals. Her advice for someone setting up a new programme is to give the teachers autonomy, or at least competently lead them in child-centredness:

"*...if we're going from a programme that's really rigid, where teachers aren't given a lot of autonomy, and that programme is not already set up to be child-centred, I think it would have to be either give the teachers more autonomy, and also some training in what, what some child-centred activities look like. Or someone, if they're not going to get autonomy, whoever makes the decisions has to know what they're doing.*" (Teacher B2)

For the teachers setting up a child-centred programme, Teacher B2 also advised studying child-centred philosophies and approaches:

"*I would encourage study of Waldorf handwork routines and these Montessori works ideas. I've gotten a lot of ideas and helpful information from studying those two philosophies. Studying play-based learning, studying developmental knowledge about five-year-olds or whatever age they're working with, and feel like, there's so much study that, that points to, that little kids going through play, that that's where their most meaningful learning comes from. And so then to look at it, and there's so many ways to*

do that, and it can look different and still be successful. So, I would just encourage lots of studies with those things." (Teacher B1)

Neither Teacher B1 nor Teacher B2 were present when site B first opened its child-centred kindergarten. However, both of them maintained such kindergartens and their advice can be informative for those beginning such a kindergarten.

5.7.1.3 Site C

Although the administrator at Site C helped to create the school, she did not consent to be a participant. However, Teacher C1 at Site C had some information about how the school came to be. Teacher C1 recounted that the current and a former administrator had been teachers together. Through their own teaching experience, they came to want a child-centred school for their own children, but one did not exist in the area. As they researched programmes, these two eventual founders of Site C choose Maria Montessori's philosophy as the one matching their philosophy of what child-centred is.

> *"And they said that we were going to keep following Maria Montessori's curriculum, a teaching of how a child learns, child-centred."* (Teacher C1)

They founded the school by writing a charter and following the process outlined in Utah State to create a charter school. The current administration at Site C continued to ensure the quality and nature of their programme by constantly training their teachers and aides. According to Teacher C1, everyone who worked in the classrooms at Site C must have Montessori training. The history of Site C demonstrated one pathway to creating a child-centred kindergarten, by adopting an established, ready-made child-centred programme someone else had created.

5.7.2 Child-centred Learning Philosophies

Each of the case sites boasted a unique child-centred learning philosophy for kindergarten. Though some elements overlapped, each participating kindergarten site created its own version of child-centred learning as shown in Figure 5.2.

Figure 5.2: Child-centred philosophies of the three sites

5.7.2.1 Site A

Site A was a kindergarten school that implemented a child-centred learning approach without subscribing to a specific, codified philosophy. This approach was evident in the school's daily schedule, which included a generous amount of play, non-academic kindergarten activities and skills. Site A's schedule was rigid due to the shared space between all four kindergarten classes on a rotation. However, the schedule included ample time for play and non-academic subjects such as art, music, drama, wellness and STEM subjects. Besides, the school had a cultural de-emphasis on strictly academic work, and students spent a significant amount of time on non-academic subjects. This emphasis on non-academic subjects helped to keep the academics in check and maintained a play-based setting.

The school day in Site A is six hours long and is designed to reflect the school's child-centred learning philosophy.

> "*So, allowing, allotting the six-hour time frame instead of the four, gave us an extra 45 minutes that I can give my kids an option just to go look at a book if they need to, to rest or to colour or sort of just take a break. And help them refocus. Because a six-hour day is a long day for a five-year-old, I feel like.*" (Teacher A2)

The daily schedule for each kindergarten class included 1.5 hours of math and literacy and 4.5 hours spent in music, art, recess, various types of play and lunchtime. This variety of activities spread throughout the day demonstrated Site A's attention to whole-child development. During the most academic periods of the day, which is the 90-minute math and literacy time, students experienced movement and variety. Students moved between three areas: a computer lab, small-group tables and large group rug area.

Site A's emphasis on play and non-academic subjects was evident in the school's R&R (Rest and Relaxation) period, which is a flexible period when kindergarten students could choose either quiet activities, naptime or playtime, all planned by the teachers. This period was a new addition when the kindergarten day was expanded to six hours rather than four, giving students an extra 45 minutes that they could use to rest, read, colour or play.

> "*I think at the beginning, it's setting culture, setting tone... I just want to keep it not heavily academic*" (Admin A)*.*

Besides the R&R period, students in Site A's kindergarten also had a 45-minute recess/lunch period per day, which represented about an hour of free playtime in the six-hour school day.

Site A's child-centred learning approach is further supported by the school's cultural deemphasis on strictly academic work. According to Admin A, the school strived to be non-academic in emphasis, and teachers were encouraged to maintain a balance between academic and non-academic subjects. Admin A referred to Site A as a developmentally appropriate place for children because it was a play-based setting. This balance between academic and non-academic subjects was achieved through the daily schedule, which included ample time for play and non-academic subjects such as art, music, drama, wellness and STEM subjects.

> "*So, this is the year we're doing full-day kindergarten.*"

But she [the administrator in charge of kindergarten, Admin A] said:

> "*I don't necessarily want to add in more academics. They just need to have maybe a longer, more imaginative or rest time. And I've enjoyed that. Because I feel like at this age, what they really need is to build friendships, to learn how to socialise, to learn how to be in school, to learn how to line up in the line. It's not just all academics, and so I appreciate the admin for giving us that with the children.*" (Teacher A1)

5.7.2.2 Site B

Site B was a Waldorf-inspired child-centred learning school. The kindergarten at Site B incorporated several elements of Waldorf philosophy including immersion in nature, experiential and project-based learning and child choice and autonomy. The school had a nature table in every classroom with natural materials, including preserved dead bugs, to teach the children about death and decay.

"*And we have our nature table, that's a very Waldorf thing; every classroom should have a nature table. And so, kids can bring stuff in and contribute to that, I have a bunch of my stuff on there, but it's always natural materials.*" (Teacher B1)

The kindergarten classes shared two outdoor spaces for exploring nature and gardening, and the students were taken on field trips to parks and outdoor spaces for nature journaling, making cornhusk dolls and exploring boardwalks. Hands-on projects and child autonomy were also important parts of the school's philosophy, and the students were given full autonomy to craft whatever they liked out of air-dry clay and choose their learning activities during free play periods. The day the researcher was invited to observe Teacher B1's classroom, the students were completing a large hands-project. The students had previously shaped items out of air-dry clay. Teacher 1 informed the researcher the students were given full autonomy to craft whatever they liked out of the clay. Indeed, this seemed apparent from the variety the researcher saw during observation. For the day the researcher attended, the projects were to be painted in preparation for taking home. The students were instructed on how to properly care for the paints and brushes but given full autonomy to finish their projects how they chose.

Another child-centred learning philosophy espoused by the Waldorf philosophy and incorporated into Site B's kindergarten is child choice and autonomy as confirmed by Teacher B2:

"*I think because it's in our charter. It's a huge part of Waldorf, the way our school interprets Waldorf. I think they're very supportive of it, they encourage it. They never, I've never been encouraged to not do child-centred...But I do try to incorporate lots of choice within it and lots of hands-on within the learning.*" (Teacher B2).

Both Teacher B1 and Teacher B2 built child choice into their class routines. According to her posted schedule, Teacher B1 began the day with a free-play period. The researcher observed this period where children could play with the dramatic play items (a pizza restaurant theme at the time of observation), crafting and drawing supplies, books, or what Teacher B1 calls "academic centres" (explained in Section 5.7.5). Teacher B2 also had a free play time period but placed it after lunch, according to her printed schedule.

5.7.2.3 Site C

Site C was a Montessori school that fully adhered to the Montessori model of education. The school was founded on the principle of being child-centred and aims to follow the philosophy of Maria Montessori.

> "...*Our lessons are still designed as a Montessori and child-centred learning*" (Teacher C1).

The curriculum is tailored to meet the needs of each individual child after a careful assessment at the beginning of the school year.

> "*So, in our child-centred class, we actually start the year off by observing and doing assessments with the kids. What is it they know, what is their skill? What their emotional, behavioural, fine motor, gross motor skills are so we know what best suits them.*" (Teacher C1)

The largest part of the school day was devoted to independent child-centred work time, where children were free to choose activities that aligned with their interests and abilities. For the half-day students, this accounted for one hour, 40 minutes of the 2½- to 3¼-hour school day (students in need of extra instruction had an extended day). For full-day students, independent work accounted for three hours, 20 minutes of the 6½ hour school day. The school also emphasised child autonomy, social learning and adaptation of lessons to meet individual children's needs.

> "...*like this one is our practical life. Okay, they learn how to create their own patterns and see patterns, which is a key to helping with math and science and reading. But it's also fine motor. They have to learn how to string the beads on the string. And that's important because it helps develop their hand muscle and eye coordination for writing.*" (Teacher C1)

During the observations, the kindergarten students were all engaged in activities, some with a partner, some alone, and teachers monitored how students were doing and reminded them to come get an instructor to "pass off" an activity before getting a new one. But besides this reminder, the children appeared to be completely self-directed. All activities observed could be done by a child independently. The children were also observed cleaning everything up independently. According to the schedule, teachers might also use this time for individual or small-group instruction.

Other elements of child-centredness learning philosophy at Site C were also related to the schedule and teaching methods. According to the printed schedule documents, all-day students had three recess periods outside. Half-day students had one. All-day students had a "specialty" class each day, which rotated between "library, coding, physical education, and outdoor immersion," according to the printed schedule document. Direct instruction was limited to a 20-minute period called "line time" for each group of students. Even this direct-instruction time did not look like students doing worksheets, but rather used several learning strategies that were more child-friendly.

5.7.3 Administrators' Responsibilities and Roles in Supporting Child-Centred Kindergarten

5.7.3.1 Site A

It should be noted that only the Site A administrator agreed to participate in this study and in Site B and C, the researcher relied on information given by the teachers. Site A's administration supported child-centred learning by controlling the schedule, giving teachers autonomy, taking care of the teachers, and defining and defending the school's child-centredness.

> "...*my specific responsibilities include setting the schedule, and so making sure we have the correct schedule in place for every student to go at every moment in time that they're here. And then taking care of the teachers.*" (Admin A)

5.7.3.2 Site B

Site B's administration, according to Teacher B2 and Teacher B1, was responsible for staffing the school, setting academic expectations that teachers were expected to follow, providing Waldorf training, giving teachers autonomy and providing resources.

> "*She [the administrator] gives us a lot of autonomy, and kind of puts it back on us to like, if you can make it happen, I'm happy to let you, you know'.*" (Teacher B1)

The administrator at Site B gave the teachers some of the resources they needed to carry out the child-centred learning philosophy of the school. Unique among the sites in this study was Site B's large outdoor spaces. Teacher B1 identified this as a way the administration supports the kindergarten:

"*Providing us things like garden space, the chickens are brand new this year, and they're just for our kinder team.*" (Teacher B1)

However, she explained that the budget was smaller than she had at her previous school:

"*Yeah, so for returning teachers, I believe it's $200US for the year...* for new teachers, I think it's $250. *But we have open stock like printing, so we don't have to pay for printing. But it still is not that much, $250. And that's like we've got to buy – Yeah, we gotta buy our own construction paper and cardstock. And you know, those supplies.*" (Teacher B1)

So, although it was the administration's role to provide resources, this role may be limited.

5.7.3.3 Site C

Teacher C1 shared information about the role the administrator at Site C played in establishing child-centredness in the past. Her current supervisor, the chief administrative officer, was one of the two people to originally found the school and bore responsibility for its establishment and adoption of Montessori methods at Site C. The administration at Site C also gave Teacher C1 a budget, provided Montessori-specific training and provided her with the staff she needed, which could fluctuate depending on the needs of the students each school year.

The head administrator at Site C worked with another educator to create Site C as a charter school. Teacher C1's understanding was that the whole purpose of creating Site C was to create a child-centred school in an area where there wasn't one. Teacher C1 recounted:

"*And so I think that what it started is, is that two brilliant minds that wanted something better for their kids knew of this philosophy of teaching and researched to create what it was that they wanted. And then they wrote the charter and everything for it to get the founding.*" (Teacher C1)

Indeed, Site C was the oldest school in this study, so it is likely true that no other schools in the area prioritised child-centredness when Site C had been founded.

Besides founding the school, the administrator supported child-centredness at Site C by providing funding and training to Teacher C1. According to Teacher C1, she was given an annual budget of US$150 for supplies. This is the least amount of all the sites; however, the researcher observed the most reusable and durable materials at this site, discussed further in Section 5.7.4. In a follow-

up question over email, Teacher C1 affirmed that Site C provided the tuition money for their teachers to become Montessori certified, which was a significant expense. The American Montessori Society (AMS), though which Teacher C1 was certified, currently charges $4500US for this training (American Montessori Society 2022). To teach at this school a teacher must have this Montessori certification, according to Teacher C1. Teacher C1 outlined ongoing training she was given through the administration:

> "*So, I had to get a main training certification to do three to six-year-olds, which is called early childhood. So, I got main training to do that. And then we have conferences that we go to like a professional development twice a year. And so, it's like a refresher information, but they also have some online professional development where you get to participate in continued learning.*" (Teacher C1)

The final way the administrator at Site C supported child-centredness in kindergarten is by adequately staffing the kindergarten. Teacher C1 had two assistant teachers, as well as support staff for the extended day work some of the half-day students attended, which was detailed in the documentation shared with the researcher. Teacher C1 also indicated in the interview that if a "para-aide" was needed for children with "unique qualities", then she may end up with an additional staff member to help in the kindergarten, depending on the make-up of the class each year. For a class of 32 children, having three to four adults is an enviable teacher-student ratio.

By founding a school with child-centred values, and providing budget, training and support staff, the administration at Site C supported child-centred kindergarten.

5.7.4 Roles and Responsibilities of Educators

Teachers have a more diverse range of responsibilities compared to the administrators in the participating sites. The teacher-student relationship is deemed the most important contributor to child-centred learning. Teachers set the tone of the classroom by being positive, using affirmations and embracing silliness. They have autonomy in creating and implementing the curriculum, and their lesson plans engage students. The researcher observed one such lesson, a rhythming game of matching paper apples to baskets, which was an example of child-centred curriculum.

5.7.4.1 Site A

Site A teachers highlight the importance of autonomy, positive teacher-student relationships and engaging lesson plans in supporting child-centred learning. The roles of teachers in maintaining a child-centred kindergarten at Site A are described as follows:

- Nurturing the teacher-student relationship - *To me, their main role is the student teacher relationship. And so that in and of itself supports it."* (Admin A);
- Setting the tone of the classroom - *"I really think a teacher's voice and a teacher's presence can really like make or break a classroom...I always trying to leave on a positive note, whether it's, they're giving themselves a hug, telling, you know, having them say some positive affirmations."* (Teacher A1);
- Creating and implementing curriculum;
- Coordinating with other teachers to create curriculum;
- Matching lessons to the levels or needs of the students;
- Providing discipline; and
- Including parents in the learning process.

Additionally, the teachers at Site A are described as having autonomy in curriculum development and lesson planning, which they use to create child-centred lesson plans that engage students and foster a positive learning environment. The teacher-student relationship is emphasised as the most important contributor to child-centredness in the kindergarten, and teachers are expected to establish positive relationships with their students and create a supportive, fun and engaging classroom environment.

5.7.4.2 Site B

In Site B, the roles and responsibilities of teachers are described in relation to the teaching styles and priorities of Teacher B1 and Teacher B2. Unlike Site A, Site B allows for near-complete autonomy for teachers to choose how to support child-centred learning.

> "*So, all the teachers have tons of autonomy to kind of choose, pick and choose what works for them and their own teaching style*" (Teacher B1).

Teacher B1 prioritises social-emotional learning:

"Yeah, I think we do a lot of social-emotional learning in here. Because, I mean, everybody needs it, right. But in kinder, especially, they just don't have a lot of those skills yet… And then a lot of teamwork. So, we don't do anything competitive." (Teacher B1)

Both teachers valued collaboration with their kindergarten team but had the freedom to choose how they will support child-centred learning. Teacher B1 prioritises Forest-School experiences, parent involvement and flexibility in the school day. Teacher B2 prioritised incorporating state standards, project-based learning, weekly themes and a flexible curriculum:

"Because we, there's four kinder classes here...we collaborate a lot, but we also, like each classroom looks quite different. Sometimes I want to do a project based on a children's book, they're doing a different project. It's okay, like that's allowed...we try to collaborate, but it's not, it's also not a forced collaboration." (Teacher B2)

5.7.4.3 Site C

Teacher C1 was the only licensed teacher at Site C and taught kindergarten. Her responsibilities included individualised teaching, pursuing continuous training, making positive changes to the kindergarten, assessing individual student needs, keeping the curriculum in line with state standards, working with parents, implementing a Montessori-style curriculum and documenting student progress. Teacher C1 focuses on teaching appropriate lessons to each child, focusing on handwriting, language, math, geography, science, history, botany and zoology.

"So, the responsibilities I have are teaching appropriate lessons per each child. So – what academic needs, what lessons do they need, basically focused on handwriting, language and math." (Teacher C1)

She supported student learning through continuous training and improvement, such as by researching and implementing a better handwriting programme. Teacher C1 used assessments to determine student needs, including letter sounds, counting, manipulatives, writing skills and Utah's kindergarten curriculum.

Another way Teacher C1 worked to meet the needs of each student in her class was by constantly changing and improving her kindergarten.

"That's, that's why I'm here. I like knowing that each child is special, and they need to feel that way to learn. Because they do learn, I think they learn a lot better" (Teacher C1)

As the only kindergarten teacher, this task fell to her. She described "gaps" the students have, as told her by state-mandated assessments and by the older-grade teachers who inherit her kindergarten students as they grow older. To shrink these "gaps" she continually makes changes to her curriculum. She spent two years researching this new writing programme she wanted to use. Each year she makes improvements, like adding brief phonics instruction and collecting donations for new furniture in the 2022-2023 school year.

5.7.5 Resources Regarded As Important for Child-centred Kindergarten

Kindergarten is a crucial stage in a child's development, as it marks the beginning of their formal education. In a child-centred kindergarten, the emphasis is on meeting the individual needs of each child through interactive, play-based learning experiences. To create an environment that supports this approach, certain resources are considered essential. These resources provide opportunities for children to explore, experiment and learn through play while also promoting social and emotional development. In this section, the researcher presents some of the resources that are regarded as important for child-centred kindergarten as mentioned by the teachers.

5.7.5.1 Site A

Site A was a kindergarten and first-grade facility that boasted the largest and most diverse space, including nine dedicated areas for different activities, specialised furniture and clean and sunny spaces with rugs. The site had a 100:15 student to staff ratio, allowing for individual attention to student needs and a variety of activities. Staffing and child-centred curricular and play resources were regarded as essential for Site A's success. The site's administrators and teachers emphasised the importance of hands-on learning materials, child-centred curricular resources, and a wide variety of play activities, including building blocks, puppets, drama rooms and toys. They create their curriculum using available materials, including games, crafts and colouring activities, to engage their students in learning.

Site A had nine separate areas dedicated to the kindergarten/first-grade classes. Each class rotates through these spaces. Each space had a purpose. There were two rooms specifically for the 45-minute period called "Welcome Crew" which was the time of day the teacher could use for

whatever instruction they deemed appropriate. These rooms were also used for the R&R time previously described. There was an art room, a music room, a drama/wellness room, a STEM room, a play area, a math and literacy area, and a computer lab. These spaces varied in size depending on their purpose:

> *"It's important to have different like areas of play... with our rest and relaxation time, in our hallway... there's like a little tent, and there's like a wooden [play structure] that kids can go on, and having different toys that we can rotate out."* (Teacher A1).

So, Teacher A1 saw these multiple spaces as a benefit for students, allowing them a variety of play.

Teacher A1 also emphasised a need for clean spaces and rugs as opposed to desks for kindergarten students, especially where there was access to sunlight for vitamin D. She mentioned specialised furniture that was meant for children who needed to move around, called:

> "*wobble seats...that can adapt for kids with ADHD or have a hard time sitting still.*" (Teacher A1)

Teacher A2 also agreed that children had a need for movement and so suggested alternating time at tables and the rug, which required adequate space for both types of furnishings.

Besides space, another abundant resource at Site A was their staffing. None of the participants mentioned staff when asked about necessary resources, perhaps because it was such an ingrained part of their model throughout the whole school, that they did not think of it as a kindergarten resource. However, it is the researcher's judgement in observing how the Site A model worked that it could not be accomplished with fewer staff. There was at least one teacher's aide or teacher in every room mentioned previously. There were multiple teachers in the math/literacy room where students met in groups of 4-6 for instruction tailored to their level. All told, there were 15 staff members who worked in the kindergarten for four classes of approximately 25 students each. This remarkable 100:15 student to staff ratio allowed for individual attention to student needs.

The researcher observed cabinets and shelves full of hands-on learning materials, especially for early reading skills and math skills. One such lesson plan can be found in Appendix I. This lesson plan for the Guided Reading table demonstrates how the teachers create their own curriculum with materials they could create or obtain. Teacher A2 regarded learning games such as the Apple

Crunch game mentioned in the lesson plan in Appendix I as essential resources for kindergarten child-centredness because children loved it, and they learned a lot while having fun.

The lesson plan in Appendix I mentions items such as craft paper, glue, stickers, markers, popsicle sticks and what sounds like a poem printed on paper for each child. Each room observed by the researcher boasted a wealth of materials teachers could use to create similarly engaging lessons. Teacher A2 also mentioned resources like Teachers Pay Teachers that she has access to in planning engaging lessons. Besides materials used for lesson plans, Site A also has many play resources such as building blocks, buildable train tracks, a puppet show theatre and puppets, and a drama room with costumes and toys to enhance their fantasy and imagination skills.

5.7.5.2 Site B

Site B teachers had access to many of the same resources; however, they designed their classrooms to meet their individual needs and preferences. Teacher B1 created a cosy, home-like environment with a large couch, plants and shelves dividing the room.

> "*My classroom is designed to look like a home because I want it to feel like I want the transition to be gentle for children.*" (Teacher B1)

Teacher B2, on the other hand, had a more organised classroom with labelled bins and a teacher's desk. Both teachers made use of the outdoor space at Site B, which included an enclosed playground and a garden area. The playground was used for gross motor activities, while the garden area was used for gardening, learning about nature and other inquisitive activities. Both teachers also used play-based learning materials, but they had different preferences. Teacher B1 used academic centres with activities such as math matching games, alphabet games and fine motor activities. Teacher B2 used Montessori-inspired resources on trays that students could use when they finished their work early.

> "*Sometimes I put out specific activities like a handwriting activity...fine motor stuff...sometimes I just put these [Montessori-inspired activities] out at a table... like yesterday, they did a worksheet page. And as soon as they were done, then they... quietly get up and come and take one and they're all organised so that they can put in all the trays.*" (Teacher B2).

Finally, both teachers also used play materials for free play, but again, they had different preferences. Teacher B1 preferred natural materials such as wooden blocks, while Teacher B2 used toys such as dollhouses, train sets and building blocks.

5.7.5.3 Site C

Site C was a Montessori-certified school with unique resources to support its large class size and child-centred classroom. The classroom environment was set up with large, delineated spaces for simultaneous work on different subjects, with child-sized furniture and Montessori manipulatives available, including things like counting beads, "brown stairs", sand and water globes, paper punching materials and measuring and pouring materials. The curriculum included the use of computer tablets with specific learning software, a Haggerty phonics programme and a simple paper clipboard for tracking student progress, which was entered daily into Montessori Compass software. The teacher recommended a variety of learning materials for use at home, including activities to develop large and small muscles, counting and shape recognition games, and creative expression resources.

5.8 CONCLUSION

The three sites studied each had a unique approach to child-centredness. Founded on distinctly different philosophies and governed by teachers with varying degrees of autonomy, training and experience, the realisation of child-centred values did not look the same at any of these schools. However, each one has found its own path to creating a joyful, whole-child nurturing kindergarten. Taken together, these three sites demonstrated that there are several paths to child-centredness that are valid and achievable in the context of today's government-determined standards. When administrators, teachers and resources meet with child-centred ideals in mind, it can be done.

This chapter described the three kindergarten sites that comprise the cases of this multiple case study, as well as the six participants. The five steps of framework analysis were explained and applied to the data collected from the participants in each case. Finally, the resulting data was presented thematically per each case. The next chapter places the findings of this study in the context of the wider research and uses these findings to answer the research questions and provide recommendations.

CHAPTER 6: DISCUSSION OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

Chapter 5 described the cases, or sites, of this study. It presented the data according to the emergent themes, namely establishing a child-centred kindergarten, child-centred learning philosophies employed in the three sites, roles of administrators and teachers in carrying out those philosophies in the classroom, and resources used in child-centred kindergarten. This chapter first discusses the findings of this study by placing them in the context of the theorical framework guiding this study and in the context of the literature reviewed as background to this study. Based on these findings, conclusions regarding the research questions and recommendations for future study are presented. These conclusions represent the final stage of framework analysis – the mapping of data to the research questions. Finally, recommendations for both field applications and future research are presented.

6.2 DISCUSSION OF FINDINGS IN THE CONTEXT OF THE THEORETICAL FRAMEWORK

As discussed in Chapter 2, Sections 2.2 and 2.3, this study is grounded in a theoretical framework with two main pillars: child-centred pedagogy and constructivism. Child-centred pedagogy advocates for meaningful experiential learning and play, child autonomy and attention to the needs and developmental stages of children by a positive, nurturing teacher. Constructivism theory posits that learning is an active process rather than a passive one and emphasises the social and meaning-making aspects of learning. Child-centred learning is one offshoot of the constructivist theoretical work of Piaget, Vygotsky and other constructivists reviewed in Section 2.3.

Several topics discussed by participants in this study and observed by the researcher were familiar from the theoretical framework literature. The pedagogical ideas of Rousseau, Pestalozzi, Frobel, Piaget, Dewey and Vygotsky were all reflected in the philosophies and strategies utilised by the participants.

Respect for children's autonomy was a common concern among participants. Rousseau (1762), Pestalozzi (Hewes 1992) and Dewey (1938) all advocated for children's voices to be heard, their preferences and choices taken into account. This sentiment was echoed in how Teacher B1 and C1 both prioritise children's preferences and voices over the teachers'. It was also incorporated

into the very schedule of the day at Site A when children are given several choices of activities during the daily R&R 45-minute block. Children's autonomy is also integral to the independent work time that comprises the bulk of the day at Site C, where children are free to choose from an ever-growing number of Montessori-style self-directed learning and play activities. The idea that adults should not do for children what they can do for themselves was repeated by at least three participants, which is an idea repeated often in Rousseau's signature work on education, *Emile (1762)*. Nurturing this ability to do for oneself is a vital cornerstone of child autonomy.

Another widely held belief among participants was that school should suit children's needs, be they developmental or academic. Rousseau is thought to be the first to advance the idea of linking learning ability with developmental stages. Piaget (1954) codified children's developmental stages. Participants in this study were also concerned with matching developmental readiness to student learning. Teacher C1, A1 and B2 all routinely adjusted expectations for a learning activity according to each child's ability to accomplish the task. Teacher B1 emphasised social-emotional learning in her classroom above all else. Every participant interviewed mentioned concern for the whole child, echoing the ideals of Rousseau and Piaget.

Dewey's advocacy for experiential learning and giving children opportunities to learn in authentic ways (instead of skill and drill methods) can be seen in all three sites included in this study. The kindergarten schedule of Site A includes time in the STEM room, problem-solving, using building and engineering toys, and learning math and science from models and experiments rather than worksheets. The "practical life" area in Site C's kindergarten is another example of learning by doing – students measure, pour, tie, string and arrange in this station. The children of Site C and Site B also have a weekly gardening class where they learn about plants outside in the real world. Site B's Waldorf influence includes the use of "hand work", hands-on, creative, projects related to science, social studies, literature or stories being studied. All of these are examples of Dewey's (1938:19-20) ideals of "learning through experience".

Vygotsky's social constructivism puts more emphasis on the greater cultural and social setting in which learning occurs than on the inner life of the child. Teacher B1's philosophies and classroom culture reflected this idea. Teacher B1 intentionally styled her classroom as a home, with a large couch, a soft rug, potted plants and blankets and stuffed animals for quiet time, explaining that she did this to help meet children's emotional needs for comfort. The researcher observed Teacher B1 reinforcing a culture of community, mutual respect between teacher and students and between students and students, allowing children's voices and preferences to be heard and acted

on. Teacher B1 clearly wanted the culture of her class to be conducive to social and emotional development, and she did this on a classroom level rather than solely on an individual level.

6.3 DISCUSSION OF FINDINGS IN THE CONTEXT OF THE LITERATURE REVIEW

Many studies have investigated child-centred learning in the kindergarten context. Some scholars have identified impediments to the application of child-centred learning in kindergarten. These impediments include an over-reliance on didactic teaching methods (Brown, Ku & Barry 2020), a decrease in play, recess and rest time in kindergarten schedules (Fowler 2018), a lack of teacher training in child-centred strategies (Cavanaugh, et al. 2016; Heery 2018), and even administrators who are adversarial about child-centred practices (Lynch 2015; Minicozzi 2016). However, some studies point the way for positive change to happen, to restore or convert kindergartens to child-centred places of learning. These highlight the need for quality teacher preparation (Avornyo & Baker 2021; Bubikova-Moan et al. 2019), retraining of teachers (Greaves & Bahous 2021; Fleer & Li 2021; Vogt et al. 2018,), expanding the teacher's role in the classroom to include more play and observation (Keung & Cheung 2019), adequate space and materials (Allee-Herndon et al. 2022; Jensen et al. 2021; Thu 2021) and commitment to a school culture conducive to child-centred practices (Buchanan & Frederick 2020).

The findings of this study mostly support and reiterate those of previous studies. The themes that emerged from the data agree with the wider literature pertaining to the experiences other teachers and administrators have had in establishing or maintaining child-centred kindergartens. However, a few findings seem to be unique. Sections 6.3.1 through 6.3.6 relates the findings of this study to those of previous research.

This study both reiterates and adds to the findings of the wider literature regarding child-centred kindergarten. It offers hope for the "changed" kindergarten. It documents additional strategies for establishing a child-centred kindergarten, both as a new programme, and for administrators and teachers. It also reiterates the need for specialised resources for child-centred kindergarten, and additionally demonstrates how vital an appropriate schedule is for a kindergarten to be successfully child-centred.

6.3.1 The "Changed" Kindergarten

Brown et al. (2020) discussed the "changed" kindergarten. In this "changed" kindergarten, there are more assessments, less fun, less emphasis on social development and play, and an increase

in duties for the kindergarten teacher. Fowler (2018) adds that kindergarten teachers report being required to use scripted curriculum instead of a flexible or teacher-created curriculum. In line with these scholars' report, Teacher B1 recounted previous experience working at another school as a regimented, highly didactic experience where she was not allowed to give the students dramatic play or recess opportunities. However, the kindergartens at Sites A, B and C, did not fit the profile of this "changed" kindergarten. Like participants in Bauml (2016) and Miller (2019), these sites had found ways to adapt the requirements of state-mandated standards with the needs of children for whole-child development and play. Site A used computer-delivered curriculum to each child for 40 minutes of the day to cover the required state standards in math and literacy and was then free to devote other time to the subjects it deemed important, like daily art, music, exercise and free play. At Site B, teachers were required to teach the standards, but on their own terms, with considerable flexibility and freedom, as evidenced by Teacher B1's weekly Forest-School outing and Teacher B2's project-driven learning. At Site C, the Montessori approach drove everything the kindergarten did, but Teacher C1, under approval from the administration, adjusted the programme when the state standards required it, but did so in a Montessori-inspired way. Although their pathways were different, the three sites in this study offered three glimpses of a path forward, away from the "changed" kindergarten.

6.3.2 Teacher Training

The reviewed literature points to the importance of teacher training as the lynchpin of successful establishment of a child-centred kindergarten. Sau et al. (2020) recount how the lack of adequate teacher training prevented 47 new kindergartens in Vietnam from achieving child-centredness. Greaves and Bahous (2021) report that it took a tremendous investment in teacher training to convert a private Lebanon kindergarten from a teacher-directed institution to a child-centred one. Greaves and Bahous (2021) enabled two solid weeks of teacher training at the start of the school year, then provided ongoing training and mentorship for an additional six months. They reported that it took the entire six-month period for teachers to believe in and fully apply child-centred methods like learning through play and developmentally appropriate discipline.

The results of the present study, however, offer both reiterative and contradictory perspectives on the necessity of teacher training. Of all the participants, Teacher C1 had received the most specific, child-centred training. To become Montessori-certified through AMS, as she was, required a seven-week initial full time training course, a year of practicum, and four additional weekends of training (Montessori Education Center of the Rockies 2021). This tremendous

investment in training ensures a high fidelity to the ideals of the Montessori approach, which is inarguably child-centred. However, it may not be necessary. The other participants had varying amounts of training in child-centredness. Teacher A1 and Teacher A2 held no specific certifications or college degrees in ECE or child-centred practices. All three participants at Site A agreed that there was no specific training offered them in child-centred strategies. At Site B, Teacher B1 had an education specific to early childhood. However, Teacher B2 had an education in music. Teachers B1 and B2 said there was limited teacher training given them through the school. According to Teacher B2, it took place about twice a year. Neither of them is a Waldorf-certified teacher. So how are Site A and B able to maintain child-centred kindergartens without the training deemed necessary in the wider literature?

The answer may be in the school cultures of Site A and B and the hiring practices at these sites. At Site A, Admin A was in charge of kindergarten. She was adamant that kindergarten be a space where children were free to be children. Teachers A1 and A2, Admin A's subordinates, both mentioned Admin A's desires and direction for kindergarten, which suggests that Admin A set the culture and expectations for the kindergarten. Or, it may be as Teacher B2 suggested, that Site B just tried to find people to hire who already had that teaching philosophy, so they did not need training. Though they may not be the ideal approaches, setting culture and expectations and hiring people who already believe in child-centredness are two approaches that may overcome the need for teacher training in establishing a child-centred kindergarten.

6.3.3 A Unifying Philosophy

In addition to teacher training, the wider literature points to the need for a unifying philosophy which can guide a school to be child-centred. This incorporates teacher beliefs as well. If a school does not support and encourage a pro-child-centred philosophy, and encourage teachers to believe in it, the literature suggests schools will struggle to establish child-centredness. The findings of this study also add testimony that a unifying philosophy is a helpful element in establishing child-centredness. Bubikova-Moan et al.'s (2019) review of 62 qualitative studies on play and learning in kindergarten found that a divide between rhetoric and application in the classroom was a major inhibitor to using child-centred strategies. Jensen et al. (2021) also found that teacher beliefs prevented the use of child-centred strategies. So, teacher beliefs must be in line with the philosophy of a school for child-centred strategies to be carried out. In other words, the school as a whole must share a philosophy. Fleer and Li (2021) documented a school where there was a unifying philosophy, led by the administration, which valued the teacher's new role

as guide and cooperator in the play rather than as a manager of the children. When both the administration and teachers share the same values and beliefs, child-centredness can flourish.

Each of the sites participating in this study had such a unifying philosophy, like that of the school studied in Fleer and Li (2021). Because they were charter schools, they were obliged to legally adhere to the document, called a charter, that is registered with the government, outlining the philosophy of their school. They could not change this charter document without getting approval from the state government, and their charter must be publicly accessible. Most charter schools fulfilled this latter requirement by posting the charter on their school's website. Site C was a certified Montessori school, Site B was a Waldorf-philosophy inspired school, and Site A's charter frequently mentioned such child-centred practices as discovery learning, hands-on learning, individualised learning and whole-child development concepts. So, although Site A did not name a specific learning philosophy, all the participants at Site A identified the school as child-centred and seemed to have a good understanding of these ideals. (These charters are not cited here to protect the anonymity of the participants.) The charters at these schools, and the philosophies they embraced, formed a framework for a uniform philosophy. Teachers who worked at these sites knew that their charter was the guiding philosophy of the school, and they were expected to uphold it. Teacher B2 and C1 both explained how they felt beholden to the ideals in the charter. As Heery (2018) found that teachers who believe in developmentally appropriate practice are much more likely to use it, it is reasonable to assume the same for other child-centred practices. The teachers at Sites A, B, C used child-centred practices because they believed in them, and this belief was reinforced by the philosophies of their schools, codified in their charters.

6.3.4 Administrator Roles

The administration's job at any school is to oversee the school and ensure the school's philosophies and goals are followed. Unfortunately, only one administrator (Admin A) consented to participate in this study. Despite that, Teachers A1, A2, B1, B2 and C1 all shared their experiences about their administrators and how they supported child-centred learning. This is similar to how Minicozzi (2016) and Lynch (2015) gathered data from teachers that included their experiences trying to get support from their administrators. However, unlike in Minicozzi (2016) and Lynch (2015), who found that most teacher participants in their studies felt misunderstood and even adversarial about their administrators, Teachers A1, A2, B1, B2 and C1 all had positive things to say about their administrators.

Lynch (2015) reported that teachers with supportive administrators that allow play in the classroom felt "lucky." This is like the findings in this study. Teacher B1 and B2 both expressed appreciation that the administrator at Site B gave teachers permission to do what they thought best for their students, even allowing weekly field trips, extra time outside as teachers desired, and allowing a large couch in the classroom. Teacher C1's experiences with other schools made her appreciate the values of Site C as well, expressing that she would not want to teach at a typical school. It seems to be the consensus of both Lynch (2015) and the findings of this study that teachers feel it is more common to find administrators that do not support child-centred strategies than it is to find administrators that do.

Brown et al. (2018) uncovered some possible explanations for why this administrator support for child-centred pedagogies might be so hard to come by. They reported that administrators see it as unfortunate that the fun has gone out of kindergarten to make way for more rigorous academics, but that these administrators felt it was necessary to prepare kindergarteners for the academic expectations of future grades. Indeed, Teacher C1 reported feeling this same pressure. However, Site C had been able to maintain a child-centred focus despite this pressure. They accomplished this by adapting some of their Montessori curriculum to meet the specific requirements of the older grades. Site C, with collaboration between Teacher C1 and the administration, had also added additional materials or non-Montessori elements. Teacher C1 gave an example of this. Teacher C1 was teaching the kindergarteners how to use 10-frames this school year, a skill required by the state of Utah, and found in the KEEP test, but it is not a Montessori skill. Teacher B2 also expressed an awareness that she was expected to teach the Utah State standards, but she did not seem to feel pressured by this because she felt free to accomplish this in any way she chose.

Buchanan and Frederick (2020) profiled schools with cooperative administrators who supported child-centred approaches. In their study, they gave credit to the administrators in these schools for establishing a cooperative culture between administration, teachers and parents and for giving teachers high levels of autonomy. Buchanan and Frederick (2020) ascribed the schools' success to this culture of cooperation and respect. Teacher autonomy and coordination between administrators and teachers speak of a trust between the administrators and teachers. Findings in this study echoed some of these elements. Teacher C1 reported feeling that her ideas were respected by the administration, and that she had been able to make changes she felt were important, despite the school's fidelity to Montessori methods. Teacher B1 was allowed to take her students on field trips every week as long as she secured her own transportation and funding.

Admin A reported consciously allowing her teachers autonomy, and claimed that taking care of the teachers was one of her main duties.

Unique findings in this study regarding administrator roles in the child-centredness of kindergarten were found in the data from Site A and Site B. This included approaches to scheduling. Admin A completely controlled the schedule while the administrator at Site B let the teachers there decide most elements of the schedule. Both Site A and Site B had ample time in their schedules for play and choice time and recess; but it is interesting that they arrived at those schedules differently – Site A because it was dictated by Admin A, and Site B because the teachers chose it. Also somewhat unique is the lack of teacher training given to the teachers at Site A and Site B by the administrators there. It is somewhat surprising that Teachers A1 and A2 received so little training in child-centred strategies but had kindergartens with many child-centred elements, especially because literature like Heery (2018) points to teacher training as being an essential ingredient in the successful application of DAP. According to Teacher A1, she had made it a priority for herself to read books on the subject so she could use such methods. Likewise, Teacher B2 had made it a point to learn about Montessori and Waldorf philosophies herself to help her teaching. So, although it may be said the teachers are trained because they seek this training themselves, administrators did not take this on as a responsibility in Site A or B. This runs somewhat counter to what the greater literature describes as the norm.

6.3.5 Teacher Responsibilities

Besides seeking their own training sometimes, teachers in this study described several other responsibilities they had. Many of these are like those teacher responsibilities identified in the wider literature. Fesseha and Pyle (2016) concluded that the responsibility of finding the balance between requirements and DAP lay with the teacher, their understandings, beliefs and values. Teacher B2 agreed with this conclusion. When asked about her responsibilities to provide child-centred learning to her class, Teacher B2 indicated that she had all of the responsibility for this. Cavanaugh et al. (2016) described how the same literacy materials can be used for either child-led or teacher-led learning, highlighting the responsibility of the teacher to choose what kinds of approaches she uses despite what materials are available to her. Teacher B2's description of taking the state standards and applying them in her classroom on her terms, without scripts or specific direction, highlights both the power and responsibility to do this as described in Cavanaugh et al. (2016).

The teachers studied by Keung and Cheung (2019) said they had many changing roles, including organiser of the play, leader, facilitator and participant. Many of these roles are similar to the roles fulfilled by Teacher A1 and Teacher B1 as observed by the researcher. Teacher A1 was observed by the researcher sitting and reading a book to a child on the floor when the child asked her to during a choice time, making her a participant. Teacher B1 organised activities but then let the students freely choose between activities, led the class when it was time to switch activities, and facilitated working out conflict between the students (but did not solve problems for them). The teachers mentioned in Keung and Cheung (2019) were also required to report their observations of the play, assess what the children were learning, and adjust the curriculum accordingly. These are similar responsibilities to those described by Teacher C1 who needed to coordinate with her aides to document the progress of each student on a daily basis.

A unique teacher responsibility found in this study and not identified in the literature comes from Site A. At Site A, instead of having their own classrooms, each teacher rotated with her students through several different spaces. Also, students were placed in small groups for literacy and math skills. The upshot is that the teachers must work together and coordinate a "divide and conquer" approach to all lesson plans, each teacher taking responsibility for only one or two spaces per day, or about 45 minutes – 1.5 hours of instruction time. Then these plans and prep work were given to the other teachers to use. This is an approach that can allow high quality lesson plans to be available to all at every station, as each teacher need only plan for one or two subjects each day, yet her students could benefit from several child-centred lesson plans throughout the school day. This is an alternative approach to that taken by Greaves and Bahous (2021) where child-centred lesson plans were incorporated gradually only once a week at first until the teachers felt capable of creating daily child-centred plans.

6.3.6 Resources

The final category of findings in this study consists of resources deemed necessary or vital to maintaining a child-centred kindergarten. Many resources identified at the three sites involved in this study are like resources used at other child-centred kindergartens or regarded as important to realise child-centred pedagogies. However, this area of inquiry yielded one surprising finding.

Feeseha and Pyle (2016) studied Ontario kindergartens after they had all become all-day kindergartens and were then required to incorporate play-based strategies. However, over half of their participants reported not using play-based strategies despite this additional time and

mandates. Thus, it is not just the additional time that ensures child-centred pedagogies are used. At the sites participating in this study, schools chose to use this additional time to accommodate additional play and choice times; but it was not just a given.

This study agrees with the wider literature regarding resources important to child-centred kindergarten. As summarised in Table 6.1, for each resource identified as vital for child-centredness in the literature, at least one of the sites in this study, and often all three of them, used the same resource. Interestingly, although each kindergarten was run differently, looked different and ascribed to a different philosophy, they had many of the same or similar resources in common.

Table 6.1:

Comparison of resources used for child-centred kindergarten as found in the wider literature and Site A, Site B and Site C.

Resource advocated in the literature	Site A	Site B	Site C
Gross motor play equipment (Allee-Herndon et al. 2022; Greaves and Bahous 2021; Thu 2021)	Enclosed outdoor playground and smaller indoor play area with variety of play equipment	Enclosed outdoor playground with climbing, sliding, swinging toys	Enclosed outdoor green space for running, climbing
Adequate space (Greaves and Bahous 2021; Thu 2021)	Nine spaces classes cycle through daily	Spacious classrooms, large outdoor areas	Spacious classrooms, large outdoor area
Garden (Greaves and Bahous 2021)	No	A garden area specific for kindergarten that including chickens and a small wilderness area	Once-weekly "outdoor immersion" class

Resource advocated in the literature	Site A	Site B	Site C
Play centres (Allee-Herndon et al. 2022)	In R&R time and during STEM class	Classroom set up in centres with specific activities; free play available once daily	Most of the room has themed centres for play-based learning
Dramatic play area (Allee-Herndon et al. 2022)	Drama class 2x a week	Designated drama area of the classroom for free play time	None apparent
Colourful decor (Allee-Herndon et al. 2022, Greaves and Bahous 2021)	Every room is a bright, different colour; colourful carpets on the floors and decorations on the walls	Teacher B1 used home-like furniture, natural materials like glass, metal, wood, plants. Teacher B2 used colourful bins and trays, and a colourful rug on the floor	Colourful decorations, everything placed below 4' high; fish tank, posters, colourful rug on the floor, manipulatives and activities are all colourful
Planned learning stations (Thu 2021)	7 learning stations with staff at each	Each classroom has delineated spaces for specific learning activities	Several areas corresponding with specific Montessori learning
Age-appropriate furniture (Thu 2021)	Tables, chairs child-sized, sitting rugs Computer desks were too big	Tables, chairs were child-sized; sitting rugs, B1 had a couch, rocking chair Computer desks were too big	All furniture was child-sized, no teacher furniture

Resource advocated in the literature	Site A	Site B	Site C
Classroom library (Allee-Herndon et al. 2022)	Multiple stations had bookshelves filled with books; children may access them at designated times	Limited number of books available during "story time" or at designated times	Students had a once-weekly library class at the school library
Literacy skill games (Allee-Herndon et al. 2022)	Used at small-group tables, and at discretion of the teacher	Available during free play time, or for "fast finishers" and as part of small-group rotations	Many included in the Montessori curriculum materials used for independent work time
Materials accessible to children (Greaves & Bahous 2021; Thu 2021)	Most materials were stored away; teachers must retrieve them	Most materials were easily reached by students	Everything was readily available to students
Open-ended play materials (Greaves & Bahous 2021)	Building materials, blocks, tinker-toys, train tracks, Legos, puppets	Train tracks, blocks, doll houses, stuffed toys, building materials	Beads for stringing, measuring cups for pouring, blocks, pretend play
Free play time (Allee-Herndon et al. 2022)	R&R time; outside recess	Free play period, outside recess	Outside recess, independent work time was free choice

One resource observed in all three sites that was not mentioned in the reviewed literature was adequate staffing. At each study site, every teacher had at least one, and often, several aides. Having such a low student to teacher ratio enables many of the child-centred practices participants spoke about and the researcher observed. Freed from needing to manage an entire class of 20-30 students by herself, a teacher can observe and meet individual needs more easily.

Another unique finding in this study is the importance of time to the successful implementation of child-centred strategies. Allee-Herndon et al. (2022) mention time for free play as an important

resource in child-centred kindergarten. Each site in this study had scheduled free time, as advocated by Allee-Herndon et al. (2022). However, the entire schedule of each site is essential to the support of child-centredness. Each site has full-day school (6 hours), time that only 30% of Utah kindergartens have (Jacobs 2022). Each site has portions of the day dedicated to play-based learning outside of free play. Each site had daily time dedicated to outside play, time set aside for individualised learning, and minimised the time spent on didactic teaching.

In other words, the goal of being child-centred dictates much of the schedule in these three sites. This makes a notable comparison to the school in Lebanon that Greaves and Bahous (2021) helped transform into a child-centred school. The Lebanon school kept its schedule the same but substituted child-centred lesson plans for previously used lesson plans, first once a week, then once a day. It substituted more child-friendly discipline practices for the previously used ones. Not Greaves and Bahous (2021), nor any of the other consulted literature, mention overhauling the school day schedule to accommodate child-centred values. But this is what happened during the 2022-2023 school year when Site A moved from a 4.5-hour day to a 6-hour day. At Site B, each teacher was free to make their own schedule, creating it to serve the students' needs. At Site C, in order to accommodate both half-day and full-day students, the schedule was set up to give all students the maximum time in independent work time. Teacher C1 even taught certain subjects twice every day to half the class at a time to make sure all students engaged with the most essential elements of the Site C curriculum. In other words, the schedule used in her classroom served the students, not the other way around.

Purposely engineering a school day schedule that accommodates child-centred teaching and learning strategies is a management of the resource of time that seems essential to all three sites in this study. The schedules of all three sites are provided in Appendix J. Though each site's schedule was unique, they all reflected similar dedication to child-centred learning, with ample recess and rest time, dedicated free play or choice activities, enrichment classes like art and physical education, and dedicated time for teachers to add instruction they believed the students needed.

In sum, the findings of this study mostly reiterate those of other studies. The findings of this study agree with the wider literature that child-centred kindergarten has certain characteristics. Among these are attention to children's needs, prioritising autonomy for both children and teachers, having highly trained teachers, having a school philosophy or culture that supports child-centredness, and providing kindergarten classrooms with rich resources in space and materials.

Unique findings include the finding that teachers must often self-train because training is not provided for them. Another unique finding is that having one or more aides in each classroom is beneficial, and perhaps necessary, for successful child-centred learning.

Also noteworthy is the vital role time and schedule play in supporting child-centredness. Included in documents from Site A were many other iterations of the schedule that had been used by that site in the past. It appears to be a challenge to find a schedule that can accommodate all the requirements of meeting children's myriad educational needs. A school that chooses to embrace child-centredness in their kindergarten programme should consider starting with a schedule that will allow time for free play, recess, breaks, autonomous work time and child-directed activities.

6.4 CONCLUSIONS

The research question driving this study was: What are the experiences of administrators and teachers in espousing child-centred learning in selected kindergartens located in Utah County Charter Schools?

Conclusions drawn from the data are reported in each section that follows, mapped to each sub-question.

6.4.1 How Administrators and Teachers Establish Child-centred Learning in the Classroom

In the sites studied, a primary way child-centred learning was established was through the charter governing the school. In each of these sites, the charter dictated a philosophy the entire school was expected to follow. These philosophies had a unifying effect on the school so that each teacher's classroom should reflect the values of the school, even if, as at Site B, different teachers chose to emphasise different parts of the philosophy, thereby expressing their autonomy and preferences. Teachers and administrators at each school in this study bought in to their school's philosophy. None of the participants in this study disagreed with their school's philosophy, and in fact, each had praise for it. Having a document, like a charter, that all stakeholders support, is an important way these sites established child-centredness in their kindergartens.

Each of these schools embraced a different child-centred learning philosophy. One was Montessori, one was Waldorf-inspired and one championed discovery and whole-child development. But each of them had a successfully child-centred kindergarten. It seems there are many paths to achieve child-centredness. The key is in defining a path, ideally led by the administration with teacher input, and having all stakeholders uphold it.

6.4.2 Strategies Administrators and Teachers Use to Support Child-centred Learning in the Classroom

Administrators and teachers do not have equal influence on child-centred learning in the classroom. Administrators help from a place slightly removed from the classroom, making policies, budgets, and school culture, and teachers are in the daily details of student lives.

Administrators in this study supported child-centred learning by providing teachers with budget and permissions for teacher training, play materials and use of school resources. Administrators in this study support teacher autonomy, trust teachers to do what is best for their specific students, allow teachers to use curriculum they choose instead of scripted curriculum, and help create a schedule that supports child-centred learning.

Teachers in this study create spaces and time set aside for free play, recess, self-guided learning, explorative or child-chosen learning activities. Teachers at all three sites limit teacher-directed learning. Teachers include a wide range of subjects in their curriculum. The teachers at the study sites coordinate with aides in the classroom for the better meeting of individual needs of children, which was observed in all three sites and discussed specifically by Teacher C1. Teachers at these sites trust children to do things for themselves and make choices for themselves, which was also observed at all three sites.

6.4.3 Resources Required for Maintaining Child-Centred Learning in Kindergarten

All three sites studied have several resources in common, in five categories. These categories are space/environment, learning materials, play materials, adequate staffing and a schedule conducive to child-centred learning. The space/environment category includes at least one large outdoor space for recess-type play, a spacious indoor classroom space (or spaces), a wide variety of furnishings, and dedicated areas for specific types of learning. All three sites have their versions of all of these components of space/environment resources. All three sites have adequate spaces and a variety of furnishings. Site A has the most indoor spaces specialized for specific types of learning. Site B has the most varied outdoor spaces. Site C has the most specialized furnishings for children. Though the specific makeup of space/environment resources is unique to each school, each boasts generous resources in this area.

For learning materials, all three sites have these: manipulatives for self-guided learning, materials for small-group learning, curriculum for whole class learning, and a class library. For play

materials, there is more variety between sites, though all have toys of various types. Some classrooms have toys for drama, some for non-specific free play, some have games and puzzles, some have building and creating materials, some have art materials. All three sites have a combination of these types of learning materials.

All three sites had adequate staffing, a ratio of at least 1 teacher : 10 students. Considering teachers who only teach a special subject once a day to kindergarten students further improves this ratio, which each site does for at least some of the school days. According to the National Center for Educational Statistics, a repository of data collected by the US Department of Education, Utah averages a teacher ratio of 1 teacher : 22 students in elementary school. So, this ratio of <1:10 maintained by the sites in this study is far better than average and is likely an important resource these schools rely on for child-centred learning.

Finally, all three sites had school day schedules conducive to child-centred learning. The schedules at each site, though varying, include purposeful time set aside to incorporate child-centred elements. All the school sites spend time on state-required standards for literacy and math. But they have purposely budgeted time on those other elements they prioritise, whether that be a daily art class for 45 minutes (like Site A), or two outdoor recess periods (like Site B), or enrichment classes like computer coding and outdoor immersion (like Site C).

Child-centred learning does not happen in these kindergartens by chance. It is planned for with space at the school, purchased or created learning materials, adequate staff and scheduled time for it.

6.5 RECOMMENDATIONS

Based on the findings of this study, it is recommended that schools prioritise staffing each kindergarten class with at least two adults, which is currently a rarity in the researcher's experience. It is recommended that schools provide training in child-centred learning and teaching strategies. It is also recommended that schools consider reworking the schedule of the kindergarten day to include time purposely budgeted for independent, chosen free play and self-guided learning, extra recess or break time, and subjects beyond literacy and math. However, the main recommendation which comes as this study's contribution is a set of guidelines for establishing child-centred learning based on child-centred pedagogy and constructivism.

6.6 CHILD-CENTRED LEARNING ENVIRONMENTS: A GUIDE BASED ON CONSTRUCTIVISM

The findings of this study show how three kindergartens applied the principles of child-centred pedagogy and constructivism to create unique but dedicated child-centred classrooms. They are examples of von Glasersfeld's (1995) constructivist belief that teachers can only lead students in the right direction and that students must learn for themselves. The essence of child-centred pedagogy is a trust in children to learn. Teachers must prepare their way by modelling, providing opportunities and putting in place the supports to allow them to learn.

The definition of child-centred pedagogy used in this study is the sum of methods, attitudes and policies used in the classroom that an educator or administrator chooses based on the needs of children to experience for themselves, choose for themselves and become for themselves. These needs form the impetus for the choices the educator or administrator makes. It is an umbrella term for related concepts like play-based, learner-centred, and child-friendly pedagogies.

Child-centred pedagogies are a natural application of constructivist approaches to learning and knowing. Central to constructivist philosophy is the notion that each person – adult or child – constructs their own view and understanding of the world based on the complexity of context in which they exist, and on the experiences they have (von Glasersfeld 1995).

Given these theories, and the data collected in this study, anyone wishing to establish child-centred learning should consider the suggested guidelines entitled: Child-Centred Learning Environments: A Guide Based on Constructivism. The guidelines are divided into nine steps illustrated by Figure 6.2 and are described in detail in the next section.

6.6.1 Framework for Designing the Child-centred Learning Environment Guidelines.

Drawing from the findings presented in Chapter 5, discussions in Sections 6.2 and 6.3, conclusions in Section 6.4 and the theoretical framework discussed in Sections 2.2. and 2.3, the following framework has been used in the development of the child-centred learning environment guidelines (that will form part of a child-centred learning policy document available to Utah County Charter School kindergartens). The framework is presented visually in Figure 6.1. This figure should be interpreted in relation to the two theories that form the theoretical framework that underpins this study. The theoretical framework in the design played a crucial role because the

common concept that linked the two theories (autonomy) informed the design and the implementation of the guideline.
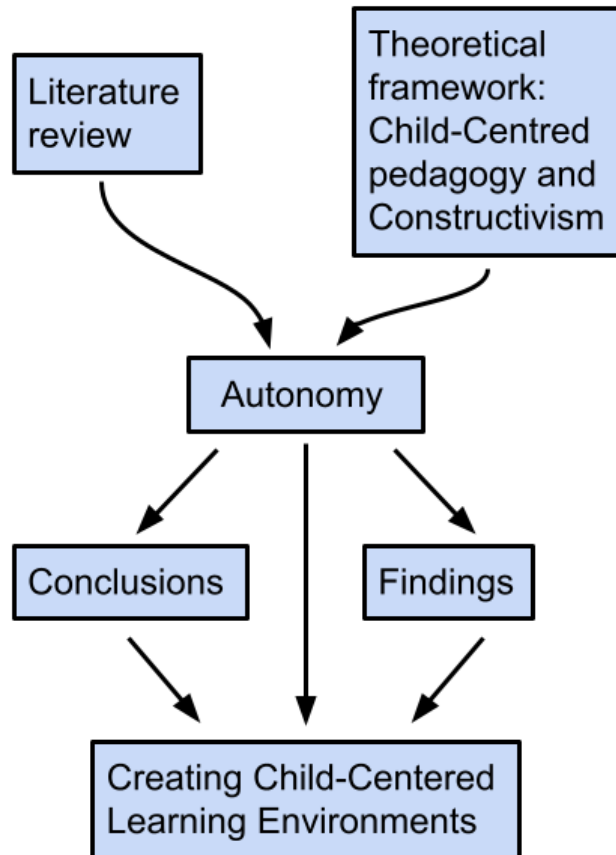

Figure 6.1: Visual overview of the framework

It is evident in Figure 6.1 that the literature review and the theoretical framework revealed autonomy as the key concept in the establishment of a child-centred learning environment. It was also reiterated in the findings, which led to the conclusion that autonomy encourages exploration and discovery of new things in a safe and supportive environment. Autonomy is an essential component of child-centred learning because it promotes engagement, motivation and independent thinking. Now that the design framework is explained, Table 6.2 outlines the framework for the child-centred learning environment guidelines.

Table 6.2: *Framework for the child-centred learning environment guidelines.*

What administrators can do	What teachers can do
• Prioritise child-centredness in space (indoor and outdoor) and scheduling • Provide adequate staff to support the less "orderly" nature of child-centred activities • Provide adequate access to experiences for students – field trips, rotating materials • Adopt a unifying philosophy of the school • Provide training to teachers in child-centred pedagogy, then trust them with autonomy	• Limit teacher-directed instruction • Child choice should be a part of every day • Lesson planning should include teacher modelling, preparing materials and space for children to work independently • Assess children's needs at the whole-child level and not just literacy and math learning needs • These assessments should include observation not just testing

6.6.2 Theory Underlying the Suggested Guidelines

The theory underpinning the Child-Centred Learning Environments: A Guide Based on Constructivism emphasises the importance of learners actively constructing their own understanding and knowledge of the world through experiences and interactions with their environment. As such, it is a suitable theory for creating child-centred learning environments. These guidelines are based on the following key principles of constructivism, synthesized in part from Vygotsky (1962), Piaget (1954), Dewey (1938), Mcleod (2019) and Amineh & Asl (2015) that can guide the creation of child-centred learning environments:

• Learning is an active process: Children learn best when they are actively engaged in the learning process. This can be achieved by providing hands-on activities, problem-solving tasks and opportunities for exploration and discovery.

• Prior knowledge and experiences influence learning: Children bring their own prior knowledge and experiences to the learning process. Teachers can build on this by providing activities and experiences that connect to what children already know and have experienced.

• Social interaction is important for learning: Children learn through interactions with others, including teachers, peers and family members. Creating a supportive learning community where children can collaborate, and share ideas is key.

• Learning is individualised: Every child has their own unique learning style and pace. Teachers can support individualised learning by providing a range of activities and materials that appeal to different learning styles and by allowing children to choose activities that interest them.

- Reflection is essential for learning: Children learn best when they reflect on their experiences and make connections between what they have learned and their own lives. Teachers can encourage reflection by asking open-ended questions and providing opportunities for children to share their thoughts and ideas.

6.6.3 The Nine Guidelines

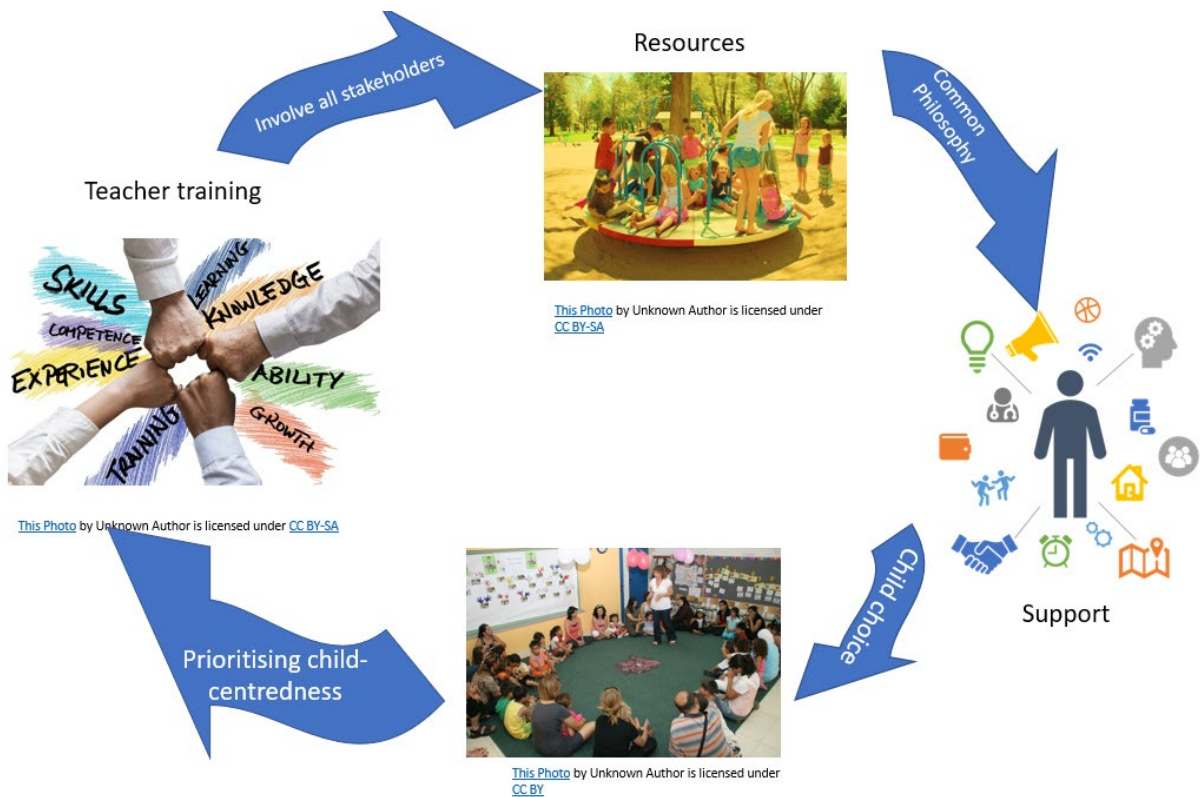Child-Centred Learning Environments: A Guide Based on Constructivism is illustrated in Figure 6.2.

Figure 6.2: Child-Centred Learning Environments: A Guide Based on Constructivist principles inspired by Vygotsky (1962), Piaget (1954), Dewey (1938), Mcleod (2019) and Amineh & Asl (2015), and data from this study.

As shown in Figure 6.2, these are the nine guidelines:

- Start with prioritising child-centredness. If converting an established school, be willing to rehaul the schedule and space if needed. If starting a school from scratch, consider how the time and space can be designed to serve children's needs best.

- Adopt a common, overtly delineated philosophy for administration and teachers. It takes all stakeholders buying-in to protect child-centredness, as there may be threats to its continued use.
- Train teachers in child-centred philosophy and practice, then trust them.
- Give teachers autonomy and resources to realise their vision.
- Find ways to limit teacher-directed instruction and ways to lengthen child-chosen activities.
- Experience is key. Furnish students with as many types of quality experiences possible – field trips, garden space, exploration space, rotating materials often, exposure to many kinds of people, ideas and books.
- Assess children's needs at the whole-child level and not just at the level of literacy and math learning needs. This includes having protocols to record children's needs and progress without having to resort to formal testing often.
- Provide adequate staff for the class size and needs.
- Lesson planning should include teacher modelling and preparing materials and space but allow time for students to work with the materials in their own way.
- Child choice should be a part of every school day.

6.7 RECOMMENDATIONS FOR FUTURE RESEARCH

In the course of data gathering for this study, topics related to child-centredness but not this study's particular research questions came up. As interviews were only semi-structured, participants often wanted to share topics of their interest but unrelated to the research questions. Also, as the researcher conducted classrooms observations, interesting phenomena were observed, but as they were not related to the research questions, these were not reported as findings. However, these topics would add to the field's understanding of child-centred kindergarten. One of these is how parents choose a school in the face of so many choices and approaches to kindergarten. What do they base their decisions on? How could schools either meet parents' perceptions of what their children need in kindergarten, or re-educate parents about what their children need?

Another relevant question is: are teachers being prepared to teach in child-centred ways by teacher preparation programmes? Have the requirements placed on schools by No Child Left Behind and Every Student Succeeds Acts changed how teacher preparation programmes prepare teachers, and if so, how? Teacher B2 mentioned that child-centred philosophy questions were part of her work interview to teach at Site B. Is it rare for a teacher to have this philosophy? From

the sampling strategy used in this study, it is apparent that it is rare, in Utah County at least, to find a school that has this philosophy. Relatedly, how easy or difficult is it for schools like those included in this study who espouse child-centred approaches to find teachers prepared to teach these ways? Considering that half of the teachers at Site A were first year teachers, perhaps it is difficult to find teachers experienced in child-centredness to hire. If so, why?

Another course of research inquiry suggested by some of the extraneous data gathered for this study is, how are charter schools evaluated by the state, and is it too narrow of an evaluation? Admin A mentioned feeling pressured to change Site A's model to meet new legislation. Is the state looking at the whole school or just testing schools in a few subjects to determine if it can be allowed to function as it is?

A significant element of this study is that all the sites included in this study were charter schools. Charter schools in Utah must declare their philosophy and founding principles in a public document called a charter. The realisation of these underlying principles is what makes each charter school unique. It would be an interesting research question to find schools that are not charter schools that use child-centred approaches. Do these commonly exist in Utah or in the US? And if so, under what circumstances? Because non-charter schools (called neighbourhood schools) are governed by a much larger bureaucracy, they generally lack local control and must follow the philosophy of the governmental officials that oversee them. Another potential research question is how could child-centred kindergarten gain traction in such a bureaucracy?

Finally, this study was limited in its data on administrator roles regarding child-centred kindergarten because only one site's administrator participated. Future inquiry that recruited more administrator participants would provide a better picture of administrator responsibilities in this area of child-centred learning.

6.8 CONCLUSION

Though child-centred pedagogies are threatened by scripted lesson plans and didactic teaching practices made more popular by rising academic standards and other demands on teachers, they can be successfully deployed in today's kindergarten classrooms. The findings of this study demonstrate that it takes a commitment to child-centred ideals to make this happen, both on the part of administrators and teachers. The unique qualities of each site in this multiple case study demonstrate that there is not just one right way to go about doing this, however. Child-centred pedagogies vary widely and can be adapted to the needs of children in a wide range of contexts.

What is needed is a prioritisation of time and resources, a willingness on the part of administrators to train and trust teachers, and a willingness of teachers to perceive the needs of their students and prepare lessons and materials to meet those needs in a way that respects children's nature and autonomy.

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APPENDIX A: ETHICS APPROVAL CERTIFICATE

UNISA | university of south africa

UNISA COLLEGE OF EDUCATION ETHICS REVIEW COMMITTEE

Date: 2022/07/06

Ref: **2022/07/06/67072151/27/AM**
Name: Mrs ES Jorgensen
Student No.: 67072151

Dear Mrs ES Jorgensen

Decision: Ethics Approval from
2022/07/06 to 2027/07/06

Researcher(s): Name: Mrs ES Jorgensen
E-mail address: Jorgensen.emily@gmail.com
Telephone: 1-385-204-1064

Supervisor(s): Name: Dr RSS Mphahlele
E-mail address: Emphahrs@unisa.ac.za
Telephone: 012 429 4941

Title of research:

Experiences of Administrators and Teachers in Establishing Child-Centred Learning in Three Utah County Charter School Kindergartens

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Qualification: PhD Early Childhood Education

Thank you for the application for research ethics clearance by the UNISA College of Education Ethics Review Committee for the above mentioned research. Ethics approval is granted for the period 2022/07/06 to 2027/07/06.

*The **medium risk** application was reviewed by the Ethics Review Committee on 2022/07/06 in compliance with the UNISA Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.*

The proposed research may now commence with the provisions that:
1. The researcher will ensure that the research project adheres to the relevant guidelines set out in the Unisa Covid-19 position statement on research ethics attached.
2. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.

3. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the UNISA College of Education Ethics Review Committee.

4. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.

5. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing.

6. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.

7. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data requires additional ethics clearance.

8. No field work activities may continue after the expiry date **2027/07/06**. Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

Note:

The reference number **2022/07/06/67072151/27/AM** *should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.*

Kind regards,

Prof AT Motlhabane
CHAIRPERSON: CEDU RERC
motlhat@unisa.ac.za

Prof Mpine Makoe
ACTING EXECUTIVE DEAN
qakisme@unisa.ac.za

Approved - decision template – updated 16 Feb 2017

University of South Africa
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APPENDIX B: REQUEST FOR PERMISSION FROM GOVERNING BOARD AT TO CONDUCT RESEARCH

Experiences of administrators and teachers in establishing child-centered learning in three Utah County Charter School Kindergartens

August 14, 2022

Governing Board of _____

Dear Governing Board Members,

I, Emily Jorgensen, am doing research under the supervision of Dr Ramashego Shila Mphahlele, Senior Lecturer in the Department of Early Childhood Education, towards a PhD at the University of South Africa. We are inviting you to participate in a study entitled Experiences of Administrators and Teachers in Establishing Child-Centred Learning in Three Utah County Charter School Kindergartens.

The aim of the study is to explore the experiences administrators and teachers have when establishing child-centered kindergarten programs in Utah County Charter Schools.

Your school has been selected because information procured from your schools website indicates your school follows child-centered strategies and philosophies.

The study will entail the collection of data through interviews, observations and document analysis. The researcher will interview one school administrator, (who is most responsible for kindergarten): and three teachers. Observations will be done in one classroom per school. For data analysis, the following documents will be requested from the teachers: informational documents usually given to parents regarding the kindergarten program, and lesson planning documents, including schedules and supply lists.

The benefits of this study are to make administrators and teachers aware of kindergarten programs that are striving to be child-centered to use when establishing child-centered kindergarten programs.

Potential risks are very minimal and may include feelings of discomfort or disturbance to routine when the researcher is present to interview or observe.

There will be no reimbursement or any incentives for participation in the research.

The feedback procedure will entail holding a dissemination session with participants in the form of a seminar or webinar for participants to verify if their views and perceptions were well represented. Secondly, the thesis will be published at the Unisa repository and the participants will be given access to the final product.

Yours sincerely,

Emily Jorgensen
1911 S 375 E
Orem, UT 84058
385-204-1064
PhD Candidate, UNISA

APPENDIX C: PARTICIPANTS' INFORMATION SHEET AND CONSENT LETTER

Participants Information Sheet and Consent Letter to be Signed by Administrators and Teachers

Date …….............

Title of Research: Experiences of Administrators and Teachers in Establishing Child-Centred Learning in Three Utah County Charter School Kindergartens

Dear Prospective Participant,

My name is Emily Jorgensen, and I am doing research under the supervision of Dr. Ramashego Shila Mphahlele, a Senior Lecturer in the Department of Early Childhood Education, towards a PhD at the University of South Africa. We are inviting you to participate in a study entitled "Experiences of Administrators and Teachers in Establishing Child-Centered Learning in Three Utah County Charter School Kindergartens."

WHAT IS THE PURPOSE OF THE STUDY?

This studys purpose is to explore the experiences of administrators and teachers when establishing child-centered learning in three Utah County Charter School kindergartens.

WHY AM I BEING INVITED TO PARTICIPATE?

You are invited because your school describes itself as child-centered.

I obtained your contact details from the governing board of the school you are employed at or from the administration at your school. Three teachers and one administrator from each of three schools will be invited to participate (for a total of 12 participants)

WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY?

The study involves audio recording one-on-one semi-structured interviews with each participant, classroom observation of one teacher at each school, and collecting some documents. Questions in interviews, observations and document requests will focus on administrator and teacher experience with child-centered strategies, materials and lesson plans. It is expected that the interview will last about an hour. It is expected that complying with document requests will take about 15 minutes.

CAN I WITHDRAW FROM THIS STUDY EVEN AFTER HAVING AGREED TO PARTICIPATE?

Participating in this study is voluntary and you are under no obligation to consent to participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

The potential benefits of participating include getting a chance to share your valuable experiences as a teacher in a unique kindergarten program, potentially helping other kindergarten programs improve or prepare to make changes to their programs and adding to the education communitys understanding of how child-centeredness works in real life.

ARE THERE ANY NEGATIVE CONSEQUENCES FOR ME IF I PARTICIPATE IN THE RESEARCH PROJECT?

When sharing personal experiences, feelings of vulnerability or discomfort may occur. Though efforts will be made to keep all responses anonymous, it may be possible for others to identify you as a participant. The researcher will not intentionally ask questions that will cause feelings of vulnerability or discomfort. If you are uncomfortable for any reason, however, you are welcome to discontinue participation or request a different question.

WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?

Your name will not be recorded anywhere, and no one will be able to connect you to the answers you give. Your answers will be given a code number, or a pseudonym and you will be referred to in this way in the data, any publications or other research reporting methods such as conference proceedings.

Your answers may be reviewed by people responsible for making sure that research is done properly, including the researcher, the mentor professor over the researcher, the professional transcriber and members of the Research Ethics Review Committee. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

Data gathered in this study will be reported anonymously and may be used in the writing of a dissertation, a research report, a journal article and/or conference proceedings. Individual participants will not be identified in any publication or use of the information.

HOW WILL THE RESEARCHER(S). PROTECT THE SECURITY OF DATA?

Hard copies of your answers will be stored by the researcher for a period of five years in a locked filing cabinet in the researchers home for future research or academic purposes; electronic information will be stored on a password-protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. After a period of five years, hard copies will be shredded, and electronic copies will be permanently deleted from the hard drive of the computer through the use of a relevant software programme.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

No.

HAS THE STUDY RECEIVED ETHICS APPROVAL

This study has received written approval from the Research Ethics Review Committee of the CEDU ERC, Unisa. A copy of the approval letter can be obtained from the researcher if you so wish.

HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS OF THE RESEARCH?

If you would like to be informed of the final research findings, please contact Emily Jorgensen on 801 812 1128 or email 67072151@mylife.unisa.ac.za or jorgensen.emily@gmail.com. The findings are accessible for five years.

Should you require any further information or want to contact the researcher about any aspect of this study, please contact Emily Jorgensen, 67072151@mylife.unisa.ac.za (school email): jorgensen.emily@gmail.com (personal email): or 801-812-1128 (home phone]

Should you have concerns about the way in which the research has been conducted, you may contact Dr. Ramashego Shila Mphahlele, emphahrs@unisa.ac.za, 27-012-429-4941.

Thank you for taking time to read this information sheet and for participating in this study.

Thank you.

_____

Emily Jorgensen

....

CONSENT TO PARTICIPATE IN THIS STUDY (Return slip).

I, _____ (participant name): confirm that the person(s). asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had been explained to me). and understood the study presented in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that this study's findings will be processed into a research report, journal publications, conference proceedings, book chapter(s): scholarly or research book(s): but my participation will be kept confidential unless otherwise specified.

I have received a signed copy of the informed consent agreement."

Participant Name & Surname (please print). _____

_____ _____

Participant Signature Date

Researchers Name & Surname (please print). <u>Mrs Emily Jorgensen</u>

_____ <u>16 June 2022</u>

Researchers signature Date

APPENDIX D: PARENTAL CONSENT LETTER

A LETTER REQUESTING PARENTAL CONSENT FOR LEARNERS WHO WILL BE PART OF CLASSROOM OBSERVATION

Dear Parent

Your _____<son/daughter/child> is invited to participate in a study entitled: Experiences of Administrators and Teachers in Establishing Child-Centred Learning in Three Utah County Charter School Kindergartens.

I am undertaking this study as part of my doctoral research at the University of South Africa. The purpose of the study is to explore the experiences of administrators and teachers when establishing child-centered learning in three Utah County Charter School kindergartens. The possible benefits of the study are to make administrators and teachers aware of kindergarten programs that are striving to be child-centered when establishing child-centered kindergarten programs. I am asking permission to include your child in this study because one of my data collection strategies is classroom observations and your child will be in the classroom when I observe how teachers are implementing child-centered learning. I expect to have 70 other children participating in the study only when I conduct classroom observations.

If you allow your child to participate, I shall request him/her to be in the classroom during the observations that will last 30 minutes. Kindly note that I will be observing the teacher and recording observations with notes. Names of children will not be recorded in my notes.

Any information that is obtained in connection with this study and can be identified with your child will remain confidential and will only be disclosed with your permission. His/her responses will not be linked to his/her name or your name or the schools name in any written or verbal report based on this study. Such a report will be used for research purposes only.

There are no foreseeable risks to your child by participating in the study. Your child will receive no direct benefit from participating in the study; however, the possible benefits to education are awareness of kindergarten programs that are striving to be child-centered for your childs administrators and teachers to use when establishing child-centered kindergarten programs. Neither your child nor you will receive any type of payment for participating in this study.

Your childs participation in this study is voluntary. Your child may decline to participate or to withdraw from participation at any time. Withdrawal or refusal to participate will not affect him/her in any way. Similarly, you can agree to allow your child to be in the study now and change your mind later without any penalty.

The study will take place during regular classroom activities with the prior approval of the school and your childs teacher. However, if you do not want your child to participate, the teacher will arrange an alternative activity that will be communicated to all parents by the teacher.

In addition to your permission, your child must agree to participate in the study and you and your child will also be asked to sign the assent form which accompanies this letter. If your child does

not wish to participate in the study, he or she will not be included and there will be no penalty. The information gathered from the study and your childs participation in the study will be stored securely on a password locked computer in my locked office for five years after the study. Thereafter, records will be erased.

The benefits of this study are providing awareness to administrators and teachers on kindergarten programs that are striving to be child-centered to use when establishing child-centered kindergarten programs.

Potential risks are very minimal and may include feelings of discomfort or disturbance to routine. The teacher will be advised to prepare the learners for the session and introduce me to the learners informally before the session.

There will be no reimbursement or any incentives for participation in the research.

If you have questions about this study please ask me or my study supervisor, Dr Ramashego Shila Mphahlele, Department of Early Childhood Education, College of Education, University of South Africa. My contact number is 801 812 1128 and my e-mail is 67072151@mylife.unisa.ac.za. The e-mail of my supervisor is Emphahrs@unisa.ac.za. Permission for the study has already been given by the Governing Board of Franklin Discovery Academy and the Ethics Committee of the College of Education, UNISA.

You are making a decision about allowing your child to participate in this study. Your signature below indicates that you have read the information provided above and have decided to allow him or her to participate in the study. You may keep a copy of this letter.

Name of child: _____

Sincerely,

Mrs Emily Jorgensen _____ _____
Researchers name (print). Researchers signature Date:

_____ _____ _____
Parent/guardians name (print). Parent/guardians signature: Date:

APPENDIX E: CONFIDENTIALITY AGREEMENT

CONFIDENTIALITY AGREEMENT

This agreement is between:

Mrs Emily Jorgensen (the researcher].

and

the participant

for

the research study:

Experiences of Administrators and Teachers in Establishing Child-Centred Learning in Three Utah County Charter School Kindergartens

As the researcher, I agree to:

1. keep all the research information shared with me confidential.
2. protect all participants privacy and ensure their anonymity.
3. not record participants names anywhere that will lead to their identification and that no one apart from the researcher will know about their participation in the project.
4. keep all the research information secure while it is in my possession.
5. share anonymous data only with people responsible for making sure that the research is done properly, i.e. an external coder and/or members of the Research Ethics Committee.
6. use anonymous data only for research purposes such as a research report, journal articles and conference proceedings.

Researcher:

Mrs Emily Jorgensen _____ _____

(print name). (signature). (date].

Participant:

_____ _____ _____

(print name). (signature). (date].

APPENDIX F: DOCUMENT ANALYSIS GUIDE (ADMINISTRATOR)

Select documents based on the following criteria:

- mentions key words like child-centred, developmentally appropriate, or other philosophical/pedagogical position
- Documents regarding schedule, routine, organization of the kindergarten day or classroom
- Classroom budget items or needs that are unique to kindergarten
- Information given to parents with children entering the kindergarten program.
- Documents pertaining to teacher training in child-centered techniques or philosophy
- Please remove all names from documents before handing them over. Thank you.

Documents may be handed over physically or electronically to 67072151@mylife.unisa.ac.za

Document analysis guide (Teacher).

Select documents based on the following criteria:

- mentions key words like child-centred, developmentally appropriate, or other philosophical/pedagogical positions
- Lesson plans that are typical of the kindergarten program
- Lesson plans for the day(s). the site was observed (if applicable].
- Example of an "ideal" child-centred lesson plan used in the past that you are satisfied with
- Documents regarding schedule, routine, organization of the kindergarten day or classroom
- Classroom supplies or budget items
- Information given to parents with children entering the kindergarten program.
- Please remove any names from the documents before giving them to the researcher.

Documents may be handed over physically or electronically to 67072151@mylife.unisa.ac.za

Appendix F: Observation schedule

Site: _____ Date: _____

The observation schedule is going to be used during classroom observations:

Activity for observation	Rationale for observation	Questions to guide observation	Comments – what was observed?

Routines or policies that support child-centeredness	Why these activities matter for child-centeredness:	-what child-directed or child-chosen activities are observed?	
Examples of routines: • Freeplay, child-directed activities or choice-time built into the day • Hands-on or play-based activities part of the lesson plans **Examples of policies:** • Discipline measures that respect childrens nature • Space, organization and furniture that allows for natural movement	-autonomy and listening to learners voice is an important aspect of child-centredness -enabling activities to reflect childrens interests and allowing children the freedom to process learning through their own games and social interactions is an element of child-centredness -the literature suggests child-centred classrooms have materials and furniture that allow for play-based learning and freedom of movement -a relationship between teacher and learners that is respectful of the voice of each	-is free play or choice time built into the days schedule? If so, how? -what materials are available to the children to facilitate play-based learning? -what is the nature of teacher/learner interactions?	

APPENDIX G: INTERVIEW SCHEDULE FOR ADMINISTRATORS

- How would you describe your kindergarten program?
- In what ways is your kindergarten program child-centred, if at all?
- What responsibilities do you as an administrator have in supporting child-centred learning in kindergarten?
- If you were here when your program began or changed to be a child-centred program, can you describe what that was like?
- In your experience, how is a child-centred kindergarten program established?
- What resources do you feel are necessary for a child-centred kindergarten?
- How do the teachers in your kindergarten program support child-centred learning?

APPENDIX H: INTERVIEW SCHEDULE FOR TEACHERS

- How would you describe your kindergarten program?
- In what ways is your kindergarten program child-centred, if at all?
- What responsibilities do you as a teacher have in supporting child-centred learning in your classroom?
- If you were here when your program began or changed to be a child-centred program, can you describe what that was like?
- In your experience, how is a child-centred kindergarten program established?
- What resources do you feel are necessary for a child-centred kindergarten?
- How does administration at your school support child-centred learning?

APPENDIX I: LESSON PLAN FOR HARVEST/APPLE WEEK

[Note: This lesson plan is meant for all the kindergarten teachers to use with their class, so the "you" refers to the teacher in charge of the class that will lead the activities. This is the lesson plan verbatim:]

Guided Reading - Apples/Harvest - 2021 - Day 2 - All Groups

While you are still on the rug in the library, you are going to play an Apple Crunch circle time game. Have the kids sit in a circle and pass the can to the first kid. They pull a stick out and have to say the letter name and/or sound. To make it challenging for the higher [level] kids, ask them to say a word that starts with the letter/sound. If they get it right (you can help them). they keep the stick. If they pull a crunch card (with a worm). they have to say "CRUNCH" and everyone has to put their sticks back. Play this for about 7 minutes.

Head back to the tables and do the Letter I Poem. Circle all of the letter Is. Medium [students] and High [students] should look for sight words: a, I, see, the. If there is time, they should illustrate with a picture that starts with the Letter I.

APPENDIX J: DAILY SCHEDULES OF ALL THREE SITES

Site A Daily Schedule (Teacher A1 – each teacher has these same classes but in a different order)
9:15 STEM/Wellness (alternate days)
10:00 Welcome (calendar, announcements, read aloud, teachers choice)
10:45 Art
11:30 Music/ASL (Alternate days)
12:15 Lunch/Recess
1:00 R&R
1:45 Foundations (small group literacy and math instruction)
2:30 Computers
3:15 Dismiss

Site B Daily Schedule
8:45 free play
9:15 welcome (calendar, announcements, teachers choice)
9:45 Reading
9:30 Recess
10:15 Writing
10:50 Lunch
11:20 Recess
11:55 PE, Music, Art, Yoga, depending on the day
12:45 Rest/Story
1:00 Snack
1:20 Computers
2:00 Math, Science
3:15 Dismiss

	Site C Daily Schedule

8:20-8:30	Students arrive, hang up coats, take off shoes, wash hands, walk the line
8:30-10:10 9:30-10:10	Independent Work Time Small group handwriting practice
10:15-10:35 10:10-1050	Line Time (direct instruction – teacher's choice). ½ of full-day students on tablets
10:40-11	Outdoor recess
11:00	All-day students to daily specialty class:E, Library, coding or outdoor immersion Half-day students either go home or go to extra tutoring
11:30-12:20	Outdoor recess and lunch
12:20	Afternoon half- day students arrive
12:30-2:10 1:30-2:00	Independent Work Time Small group handwriting practice
2:15-2:35 2:10-2:45	Line Time (student who did not participate in the first one). Other ½ of full-day students on tablets
2:40-3:00	Outdoor recess
3:00-3:15	Go home

APPENDIX K: Turnitin Report

Turnitin Originality Report

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ID: 2120703551
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Submitted: 1

Thesis--Final By Emily Jorgensen

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APPENDIX L: Confirmation of Professional Editing

Blue Diamonds Professional Editing Services (Pty) Ltd

Polishing **your** brilliance

Email: jacquibaumgardt@gmail.com

Website: www.jaybe9.wixsite.com/bluediamondsediting

13 June 2023

Declaration of editing

Experiences of Administrators and Teachers Espousing Child-Centred Learning in Three Utah County Charter Kindergartens

By

Emily Jorgensen

I declare that I have edited and proofread this thesis. My involvement was restricted to language usage and spelling, completeness and consistency and referencing style. I did no structural re-writing of the content.

I am qualified to have done such editing, being in possession of a Bachelor's degree with a major in English, having taught English to matriculation, and having a Certificate in Copy Editing from the University of Cape Town. I have edited more than 400 Masters and Doctoral theses, as well as articles, books and reports.

As the copy editor, I am not responsible for detecting, or removing, passages in the document that closely resemble other texts and could thus be viewed as plagiarism. I am not accountable for any changes made to this document by the author or any other party subsequent to the date of this declaration.

Sincerely,

Dr J Baumgardt
UNISA: D. Ed. Education Management
University of Cape Town: Certificate in Copy Editing
University of Cape Town: Certificate in Corporate Coaching

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