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A Phenomenological Study of the Implementation of Developmentally Appropriate Practices of Highly-Skilled Teachers in School-based, Early Education Settings

By

Julie R. Ritter

This Dissertation is Submitted in Partial Fulfillment
of the Requirements for
the Educational Doctorate Degree
in Educational Leadership

Minnesota State University, Mankato

Mankato, Minnesota

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This dissertation has been examined	l and approved.
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Abstract

High-quality instruction, especially for at-risk children, is what matters in early education (Brown, 2010; Chien et al., 2010; Goldstein et al, 2013; Howes et al., 2008; Reynolds et al., 2014). Developmentally appropriate practice (DAP) is identified in research as a feature of high-quality instruction and best practice in early education (Squires, Pribble, Chen, & Pomés, 2013). Using transcendental phenomenology, this study identified the beliefs and practices of early education teachers in Minnesota school-based PreK-4 programs and their alignment to DAP principles, guidelines, and teaching strategies as defined by the National Association for the Education of Young Children (2009). By investigating the lived experiences of nine, highly-skilled early childhood teachers of prek-4 students, the research explored their beliefs and practices, specifically looking at teacher selection and implementation of instructional strategies in relation to DAP. It further explored the elements which contribute to teachers' success and/or barriers to implementation of DAP. Data was gathered through interviews of the participants. Data analysis and report of the findings was done through a process called transcendental phenomenological reduction (Moustakas, 1994). This process resulted in the identification of themes that were summarized in a textural and structural description of the teachers' experiences. The findings indicated that the teachers have strong beliefs of DAP and are confident in their ability to provide DAP aligned instructional practices. The teachers reported that barriers such as time, assessment, and meeting the differentiated learning needs of students, impact their ability to implement DAP. They reported that supportive supervisors, colleagues, having an open-mindset, and reflective

practices serve as drivers of successful DAP implementation. The ability to balance the expectations of the setting while maintaining flexibility to meet the learning needs of students is key to successful DAP implementation.

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CHAPTER I

Introduction

Background of the Problem

Early childhood education is a complex system of fragmented policies, uncoordinated funding streams and differing values and ideologies about models of service and classroom practices (Duncan & Magnuson, 2013; Kagan & Kauerz, 2012). Education funding policy decisions are largely driven by the need for early education opportunities at both the federal and state levels to address issues related to the achievement gap and access to quality early learning experiences (Duncan & Magnuson, 2013). Most of the movement to expand funding and access for early learning has been driven by the states, including Minnesota (Barnett, Carolan, Squires, Brown, & Horowitz, 2014; Hustedt & Barnett, 2011). Two bodies of research have provided the impetus for the growing investments in early education through funding policy: gains in academic achievement and school readiness and the economic and human capital benefits of early education.

Evidence of economic and human capital benefits can be found in model early education programs which provide comprehensive services to children such as the Perry Preschool project, located in Ypsilanti, Michigan, the Abecedarian Program of North Carolina and the Chicago Child-Parent Centers. Studies of these programs indicate lasting economic and human capital benefits (Barnett & Masse, 2007; Belfield, Nores, Barnett, & Schweinhard, 2006; Reynolds et al., 2014). In addition, the growing body of empirical research which has found positive effects on cognitive skills and gains in

school readiness also provides evidence to support investments in early education (Duncan & Magnuson, 2013; Goldstein, Warde, & Peluso, 2013).

A primary purpose of early education is school readiness (Daugherty, Fuligni, Howes, Karoly, & Lara-Cinisomo, 2009). According to Goldstein et al., (2013), the current academic demands of kindergarten combined with the changing culture of kindergarten and calls for accountability from publicly funded early learning programs, create the need for pre-k programs that can address school readiness. Whether the focus is human capital benefits, school readiness or achievement gap reduction, the common element of these programs is the requirement of high-quality structure and process features. Only through high-quality experiences can the human and economic capital benefits as well as positive results in socio-emotional skills, language and literacy, math, and cognitive development gains be attained (Reynolds et al., 2014). This is especially true and significant for children who enter early education with risk factors (Brown, 2010).

Current studies of state-funded pre-k programs demonstrate the positive impacts of high-quality programs on children's cognitive development and readiness for school with higher quality programs showing the most significant benefits for children (Duncan & Magnuson, 2013; Howes et al., 2008). Pre-k is associated with increased reading and math skills at kindergarten entry, and research has shown that preschool attendance can reduce the impact of adverse environmental influences such as low socioeconomic status and parents who provide less cognitive stimulating activities (Tucker-Drob, 2012). The research further demonstrates that publicly funded, school-based programs may be of

higher quality than their non-public counterparts and provide the best results for disadvantaged children (Magnuson, Ruhm, & Waldfogel, 2005). However, identifying quality and constructing measures of quality can be difficult, especially with the variety of policy initiatives impacting school-based pre-k program implementation.

Barbarin et al., (2006) in an analysis of program quality in state-funded pre-k programs, identified that high-quality program features were focused on processes such as time management, quality of instruction and feedback, behavior management and providing learning activities and interactions that were engaging. High-quality classrooms had teachers who offered encouragement and comfort, used time efficiently, prompted higher order thinking and creative problem-solving. Teachers integrated content through discussion and provided feedback. The classrooms offered rich linguistic opportunities and developmentally appropriate learning practices and instruction. There was an identified level of enthusiasm and respect indicating that high-quality, effective instruction also takes into consideration students' prior knowledge, culture, and development (Alford, Rollins, Padrón, & Waxman, 2016).

Other research indicates the impact of high process quality features on children's gains in multiple assessment areas. Burchinal et al. (2008) in a study of 240 pre-k programs found that instructional quality is related to positive interactions, the scaffolding of learning, coherent instruction and formative feedback. These indicators of quality significantly impacted gains in language, academic, and social performance of children through kindergarten. Mashburn et al. (2008), in an extensive study of classroom quality which included 2,430 children in 671 classrooms in 11 states, found

instructional interactions strongly predicted academic and language skills and teacher's emotional interactions strongly predicted social skills. Burchinal, Vandergrift, Pianta, and Mashburn (2010) in a threshold analysis of quality and outcomes found that teacherchild interactions were a strong predictor of social competence. In a study of 2,751 children, Chien et al. (2010), concluded that with limited classroom time, quality instruction with teachers is what children, especially at-risk children need to be successful. In sum, quality and excellence are present when early education programs provide equitable experiences for all children with a focus on closing the achievement gap (Copple & Bredekamp, 2009).

To provide quality instruction, Mooney (2013) proposed that early childhood educators know the foundations of their work. Much of western early childhood pedagogical beliefs and practices have been influenced by the constructivist views of child development presented by Dewey, Piaget, Vygotsky, and Erickson (McMullen et al., 2006). In 1987, the framework of developmentally appropriate practice (DAP), presented in the book *Developmentally Appropriate Practice in Early Childhood Programs Serving Children Birth through Age 8, Expanded Edition*, edited by Sue Bredekamp and published by the National Association for the Education of Young Children (NAEYC) drew largely on the development theories of Piaget. The document provided guidance to the field of early education by identifying developmentally appropriate practice as a framework which combined two concepts; what is age appropriate and individually appropriate to guide practice in the classroom. Guidance on

curriculum planning, adult and children interactions, home and program relations, and the importance of play-based environments were emphasized.

Critics of DAP noted that the 1987 document provided a limited understanding of Piaget's developmental theories and considerations of culture were missing. They noted that the position statement was largely for white, middle-class children who were developing normally and failed to recognize other ethnic groups (Fowell & Lawton, 1992; Graue, Ryan, Nocera, Northey, & Wilinski, 2017). Reflecting on this scrutiny of the DAP framework, Bredekamp along with Copple presented a revised edition of DAP. NAEYC published the book, *Developmentally Appropriate Practice in Early Childhood Programs, Revised Edition* in 1997. This version contained a new position statement on developmentally appropriate practice that added the dimension of "teacher as decision-maker" in the classroom and provided a cultural perspective. Included was a focus on the research of Vygotsky with the addition of the concept of scaffolding. This edition also suggested that both child-initiated and teacher-initiated activities were acceptable, and play is still an important component of a child's social-emotional, and cognitive development (Fowler, 2016).

Taking advantage of the new body of research on brain development, growing calls for accountability, especially in public-school based programs, with a growing focus on academic standards, and the widening achievement gap, the position statement of developmentally appropriate practice was revised again in 2009 (Copple & Bredekamp, 2009). The 2009 revision, published by the NAEYC in the book, *Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth through*

Age 8, Third Edition, maintained the three core considerations of DAP; "knowing about child development and learning" (p. 9), "knowing what is individually appropriate" (p. 9), and "knowing what is culturally important" (p. 10) and added a definition of what it means to be an "excellent teacher" (Copple & Bredekamp, 2009). This definition was added to encourage teachers as they work to align intentional practice to meet learning goals with the developmental needs of children and their engagement in the educational process through play-based environments, a variety of learning formats, and teaching strategies. It acknowledged the growing demands on teachers to address and balance the challenges of the standards accountability movement, seen as a means to provide quality in settings to close the achievement gap and to ensure equitable experiences for children.

Developmentally Appropriate Practice (DAP), defines the level of child choice and engagement in their learning and is in contrast to a traditional academic model which is based on teacher-directed instruction (McMullen et al., 2006). Developmentally Appropriate Practice, as defined by Bredekamp in 1987 and revised by Bredekamp and Copple in 1997 and endorsed by the National Association for the Education of Young Children (NAEYC) has gained wide acceptance as the standard for instruction in early childhood education settings and is often viewed as best practice in the early childhood classroom (McMullen et al., 2006).

Research confirms that identifying a child's developmental level is an essential component of planning for learning success and a consistent feature of high-quality, pre-k environments is the implementation of DAP (Guddemi et al., 2014). Through the implementation of the DAP framework as presented in the work of Bredekamp and

Copple (1997) and Copple and Bredekamp (2009), other research and scholarly articles confirm that high-quality classrooms, instruction, and effective, responsive teaching show evidence of alignment to DAP principles and guidelines. The research aligns high-quality process features with DAP processes related to classroom practice, materials, activities, and effective teaching (Burchinal et al., 2010; Howes et al., 2008; Howes et al., 2013; Longstreth, Bardy, & Kay, 2013; Pianta, Downer, & Hamre, 2016; Zinsser, Denha, Curby, & Sheward, 2015). The research also aligns DAP with positive outcomes for students either directly or indirectly through the support of executive function skills (Curby et al., 2009; Hur, Buettner, & Jeon, 2014; Marcon, 1999; Williford, Whittaker, Vitiello, & Downer, 2013; Vitiello, Booren, Downer, & Willford, 2012).

One must also consider the beliefs early childhood teachers have as this may impact instruction and classroom quality (Abry, Latham, Bassok, & LoCasale-Crouch, 2014). Research documents that the decisions teachers make about instruction are influenced by their beliefs (Charlesworth, Hart, Burts, & Hernandez, 1991; Hatcher, Nuner, & Paulsel, 2012; Stipek & Byler, 1997). Research of teachers' beliefs about DAP and their practice, also evident in research, has provided mixed results of beliefs aligned to practice. Some research demonstrates a high correlation of teacher's strong beliefs about DAP and practice (Stipek & Byler, 1997). Other research demonstrates a moderate correlation between a teacher's beliefs about DAP and practice (Charlesworth et al., 1991; Vartuli, 1999). Some research has found no correlation between teacher's strong beliefs about DAP and practice (Charlesworth et al., 1993; Wilcox-Herzog, 2002).

Barriers to implementation of DAP. Although some research demonstrates a high correlation of DAP beliefs to practice, the mixed research results of teacher's DAP beliefs to practice indicates that although teachers have strong beliefs about DAP, to some extent there is disconnect between their beliefs and practice. Barriers to implementation of DAP practices may exist which lead to moderate or no correlation of DAP beliefs to practice. The research of Wen, Elicker, and McMullen (2011) highlights the difficulty teachers experience as they attempt to implement developmentally appropriate practices. The complexity of DAP was noted by Copple and Bredekamp in the 2009 edition of developmentally appropriate practice and is also indicated in research (Graue, 2008; Brown & Lan, 2013). This, along with other factors such as standards-based programs, definitions of school readiness, school leadership, and parent influence may impact the teacher's ability to implement DAP. There is also the possibility that teachers may lack the knowledge and skill necessary to implement DAP with fidelity (Howes et al., 2013; Hamre, 2014).

Another indication of the challenges with implementation of DAP, yet it's wide acceptance as an important framework, is demonstrated in research which found that teachers know the language of DAP and may use it to hide their non-DAP cultural practices, curriculum, and instruction (Brown, Weber, & Yoon, 2015). This may indicate that teachers know DAP to be an important construct of the early education classroom and given the historical significance of DAP, may use DAP through the lens of white, middle-class culture focusing on the principles of early editions of DAP. The lens of white, middle-class culture may fail to implement all DAP principles with considerations

of culture and the intentional, excellent teacher who considers pedagogy and content.

This lens may also lead to low-quality instruction for students of other racial groups and those with risk factors.

The impact of the No Child Left Behind Act. The No Child Left Behind Act of 2001, influenced the early childhood classroom as well, leading to an increased focus on the development of academic skills (Abry et al., 2014). Researchers have found that even with the increased focus on academic skills, both preschool and kindergarten teachers' rate academic skills as least important to school readiness rating self-regulatory and interpersonal skills as most important (Abry et al., 2014). Research to measure the influence of DAP on teacher practice found that teachers will rank items they perceive as DAP such as social-emotional skills over items which sound academic, such as phonemic awareness (Koutsoftas, Dubasik, & DiDonato, 2017). Although teachers rate the learning of academic skills behind self-regulatory and interpersonal skills, the pressure to focus on academics is high (Lin, Lawrence, & Gorrell, 2003).

Standards-based early education programs are part of the school-based early education program option (Brown, 2010). Standards were developed to align with the K-12 accountability movement and address quality and equity to boost academic outcomes for children especially those at risk. Legislation and quality rating systems require a focus on standards-based instruction (Minn. Stat. 124 D. 15, 2018). *The Early Childhood Indicators of Progress* (Minnesota Department of Education, 2017) are Minnesota's early learning standards. These standards represent all development domains, which, when

incorporated into a quality school-based early learning program, provide a foundation for instruction which encompasses both academic and social skills development needs.

However, research notes that the tension between DAP and standards-based instruction can be high (Graue et al., 2017). Many in the early education field believe that standards, which are viewed as having a focus on academic outcomes, are in contrast to DAP, which is viewed as having a focus on the process of learning. Others such as Brown, Feger, and Mowry (2015) propose that academic rigor, through the implementation of standards is possible within developmentally appropriate instruction. The challenge faced by early childhood teachers to align standards-based accountability with developmentally appropriate practices is great (Brown, 2010). Graue et al. (2017) suggest that even when the standards support DAP views, accountability takes precedence.

A program's goal to promote readiness for school is also a factor (Daugherty et al., 2009). Definitions of school readiness are often viewed as synonymous with academic content (Graue et al., 2017). Abry et al. (2014) concluded that teachers who place a high value on academics may leave students unprepared for a successful transition to kindergarten by not giving attention to the social and self-regulation needs necessary for a successful adjustment to kindergarten. Some early childhood educators are concerned that the desire to see measurable gains in cognitive skills will be detrimental to the development of social skills and creativity (Barbarin et al., 2006).

In summary, the types of learning experiences children receive are important to a child's readiness for school (Daugherty et al., 2009). Gains are larger for children

enrolled in programs that provide high-quality instruction (Howes et al., 2008). To provide the level of high-quality instruction needed to ensure readiness for school, researchers find that a multi-dimensional approach is best (Brown, 2010). Instruction must consider the age-appropriateness of the practice or strategy, whether it is research-based and if the practice or strategy will benefit learning and development across all developmental domains (Brown, 2010). In addition, the importance of providing the foundations of self-regulation and social-emotional skills cannot be understated (Evans & Rosenbaum, 2008). DAP may provide the ability to mitigate these issues and challenges, especially that of academic content in the early childhood setting (Macron, 1999).

The extent to which an early childhood teacher is able to balance academic content, the emphasis on standards-based instruction to ensure school readiness and consistently provide developmentally appropriate, high-quality instruction for children is a contribution to the research in need of exploration (Wen et al., 2011). This is especially important when considering the importance of high-quality instruction to underserved students and to close the opportunity and achievement gap. This research should include the connection of teacher beliefs to the experiences and environments that teachers offer (Daugherty et al., 2009). Abry et al. (2014) stated that teacher beliefs and how they impact teaching practices and behaviors need to be examined further. As Pianta et al. (2016) noted; teachers and developmentally aligned curriculum and practice combined with teacher capacity are ingredients of quality instruction in need of more research.

Problem Statement

It is observed by researchers that the majority of children enrolled in preschool programs do not have access to the process and structural quality features that provide the level of high-quality experiences necessary to fully prepare them for kindergarten and close the achievement gap (Barnett et al., 2017; Chien et al., 2010; Duncan & Magnuson, 2013). This is especially true for children who are most at-risk for not being prepared for school (Brown, 2010; Goldstein et al., 2013; Reynolds et al., 2014). Belief in the importance of and adherence to implementing the full spectrum of elements which define high-quality instruction by pre-k teachers is in need of further research (Duncan & Magnuson, 2013). Developmentally appropriate practice (DAP) is identified as a feature of highly-effective instruction and best practice in the early childhood education setting (Alford et al., 2016; Guddemi et al., 2014; Howes et al., 2008). Research demonstrates that teachers endorse DAP beliefs but their practice does not provide evidence of DAP beliefs (Charlesworth et al., 1993; Wilcox-Herzog, 2002). Teachers seem to understand and implement the social-emotional components of DAP but may not have the capacity (knowledge or skills) necessary to implement the pedagogy, content, and cultural principles of DAP (Howes et al., 2013; McCarty, Abbott-Shim, & Lambert, 2001).

To provide high-quality learning environments and instruction which promotes positive outcomes for students and to attain the outcomes needed to close the achievement gap, effective, intentional pre-k teachers must be able to include developmentally appropriate practices as part of their instructional repertoire (Alford et al., 2016; Huffman & Speer, 2000; Macron, 1999). However, it takes a highly skilled

teacher to navigate the complex balance of DAP, standards, definitions of school readiness and other pressures to provide an environment for learning that supports the whole child (Hamre, 2014; Howes et al., 2013).

The extent to which pre-k teachers are able to implement a balanced approach which considers academic content, adherence to standards and definitions of school readiness within the context of the DAP framework may also influence their practice. As one part of determining the quality of Minnesota's public school-based early education programs and pre-k teachers' ability to provide equitable learning experiences for all students, it is necessary to investigate perceptions of early childhood education teachers regarding the breadth and depth of their beliefs and instructional practices, especially as they relate to DAP.

Purpose of the Research

The purpose of this research investigated the beliefs and practices of early education teachers in Minnesota, school-based, early education programs and their alignment to developmentally appropriate practice (DAP) principles and guidelines as defined by the National Association for the Education of Young Children. The research sought to identify the elements which contribute to teachers' success and/or barriers to implement DAP as well as the impacts on instructional quality and outcomes of students. This, to inform leadership's response to DAP and classroom quality and support teachers as they navigate instructional decisions within the context of standards-based accountability, and a student outcome driven environment.

The research was conducted drawing data from the lived experiences of early childhood educators teaching 4-year-old preschoolers (PreK-4) in public school programs. Teachers were identified by their supervisors as providing high-quality instruction as determined through teacher evaluation. Teachers were from public school early childhood settings, representing urban and suburban school districts.

The focus of the research was public school pre-k systems which are closely connected to recent, large investments in pre-k. These programs have seen increased scrutiny and demands for accountability through institutional monitoring.

Research Questions

This research sought to learn;

- 1. What are the beliefs of PreK-4 teachers regarding the use of developmentally appropriate practices within their classrooms?
- 2. What instructional strategies do PreK-4 teachers use within their classrooms?
- 3. What factors do PreK-4 teachers consider as they determine their daily instructional strategies?
- 4. How do the instructional practices selected by PreK-4 teachers align with their beliefs of developmentally appropriate practices?

Information provided by these questions determined if the language of DAP was evident in the beliefs and practices of early childhood teachers and if all five DAP principles, particularly those of DAP pedagogy, content, and cultural practices were present. It also sought to understand the extent to which teachers can implement their

DAP beliefs in an era of standards-based instruction and accountability for school readiness and impacts on classroom quality and student outcomes.

Significance of the Research

DAP can fundamentally change the early childhood classroom by reducing the stress of standards-based educational environments (Brown & Lan, 2013; Macron, 1999). This is particularly important for at-risk students who may come to the classroom with limited experience with social and academic content. As suggested by Macron (1999), the ability to mitigate the "how" of content may be possible through developmentally appropriate practices. Implementing DAP with fidelity will increase the likelihood that children will receive high-quality learning experiences in preschool.

High-quality instruction, especially for at-risk children, is what matters in early education (Brown, 2010; Chien et al., 2010; Goldstein et al., 2013; Howes et al., 2008; Reynolds et al., 2014). To inform leaders in the field of early education, improve teacher practice, attain high-quality instruction and provide the tools and knowledge to implement culturally responsive developmentally appropriate practices within the context of standards-based classrooms, the current level of DAP implementation must be determined. The factors which influence teachers as they make instructional decisions is also an important consideration. Early childhood teachers, leaders of early education programs and ultimately the children will benefit from this knowledge.

Limitations

The research was limited to the lived experiences of PreK-4 teachers in public school settings in Minnesota. Findings may not be generalizable beyond this setting.

Factors which may limit transferability to other settings, including other public school settings within Minnesota, may be local control features such as assessment, curriculum, definitions of school readiness, levels of implementation of Minnesota's early learning standards, *The Early Childhood Indicators of Progress* (Minnesota Department of Education, 2017) and local initiatives which inform local practices such as PreK-3rd grade alignment.

Other factors that limit the transferability of the findings include the interview questions. They were structured to identify barriers and drivers of DAP implementation that may only apply to the specific school-based settings of the interview participants. Another limitation of the study is the variety of teacher evaluation tools used to determine the participant's level of skill. The variety of tools combined with the accuracy of the ratings may have influenced the criteria selection process of the participants. An additional factor is the variety of program options that deliver education to prek-4 students in Minnesota school-based settings and are represented by the interview participants, is a unique to feature of Minnesota school districts.

Definition of Key Terms

At-risk students. At-risk students are those who are either not experiencing success in school or have the potential to not experience success in school. A key characteristic of at-risk students is low academic achievement. They are disproportionately students of color and low socioeconomic status (Donnelly, 1987).

Charlotte Danielson Framework. The Charlotte Danielson Framework as developed and described in *Enhancing Professional Practice: A Framework for Teaching*

(Danielson, 2007), provides a framework for teacher evaluation in prek-12 systems. Through empirical and theoretical research, four domains of teaching responsibilities are identified: Planning and Preparation, The Classroom Environment, Instruction, and Professional Responsibilities. These domains provide a comprehensive definition of what skills are needed by teachers, within their professional practice, to meet the learning needs of students. The framework further defines teacher practice by breaking down the domains into components and elements. These areas are evaluated by determining a level of performance, based on observation and using the terms: "unsatisfactory", "basic", "proficient", and "distinguished".

Classroom Assessment Scoring System (CLASS). The Classroom Assessment Scoring System (CLASS), developed by Pianta, La Paro and Hamre (2008) is an observational tool used to assess classroom quality. It is designed for use in the preschool environment and routinely used as a means to provide teachers with feedback regarding their instructional practices. CLASS is a valid, reliable instrument, based on information gathered from both theoretical and empirical research. CLASS measures the level of classroom quality by observing teacher and student interactions in three main domains: Emotional Support, Classroom Organization, and Instructional Support. These domains are further divided into dimensions to better define the domain. CLASS is widely used in early education and care settings and can be cross-walked with the Charlotte Danielson Framework when used as a tool for teacher evaluation. The scoring system uses the words "low", "mid", and "high" to provide a score which demonstrates the extent to which a measure of the dimension is visible in the classroom.

Conscious Discipline. Conscious Discipline (Bailey, 2015) is a trauma-informed, research-based program developed by Dr. Becky Bailey for social and emotional learning. The focus is on creating safe environments and connections with children. The behavior management strategies and classroom structures teachers implement are founded on brain research.

Developmentally appropriate practice. Developmentally Appropriate Practice (DAP) is a term used to describe instructional practices which incorporate a theory of practice known as constructivism. Constructivism is based on the theories of multiple child development experts but is largely based on the work of Piaget. The National Association for the Education of Young Children (NAEYC) has defined Developmentally Appropriate Practice as those practices which are grounded in research and focus on three core considerations; knowing the development stages of children to determine appropriate experiences for children's learning, knowing each child and their specific learning needs based on interactions and observations of the child, knowing the child's family and cultural values and expectations to provide respectful, meaningful experiences. In sum best practice in early education is not based on assumptions but on what is known and gained through research. This definition of DAP is widely accepted by the field of early education and care as the standard for quality instruction and environments in the early childhood setting and has influenced the field (Copple & Bredekamp, 2009).

Developmentally inappropriate practice. Developmentally Inappropriate Practice (DIP) are those practices not viewed as DAP. A reliance on teacher-directed

instruction is often viewed as DIP by the field. Although more recent iterations of NAEYC's definitions of DAP have allowed for teacher-directed instruction as a means to meet teacher directed goals for learning (Copple & Bredekamp, 2009).

High-quality and low-quality features of early education. The following definitions of high and low-quality features are based on process quality features defined by research and identified as having positive outcomes for children (Hamre, 2014). Also included is a definition of high-quality structural features.

High-quality process features are dependent on teachers who meet high standards for instruction through emotional support, classroom organization, and instructional support. These include teachers; who have positive relationships with students, respond to children's needs, balance teacher-directed and child-directed activities, have clear and consistent expectations for behavior, have clear and consistent classroom routines, engage children in meaningful activities, provide a variety of instructional methods and materials, promote thinking skills and make connections to the children's lives, expands learning by providing feedback that encourages deeper thinking, engages in frequent dialogue to extend language skills. Other high-quality process features are evident when teachers: offer encouragement, use time efficiently, provide higher order thinking and creative problem-solving, integrate content through discussions and feedback, offer rich linguistic opportunities and provide developmentally appropriate learning and instruction delivered with enthusiasm and respect (Barbarin et al., 2006; Mashburn et al., 2008).

Low-quality process features are evident when teachers provide sub-standard instruction in the areas of emotional support, classroom organization, and instructional

support. These include teachers: who are distant from the children, become frustrated with issues and challenges, leaving these unresolved, don't recognize and respond to children's cues for support, don't consider children's perspectives and teacher-directed activities are the norms, often react to behaviors versus managing behaviors, have routines that are not clear or consistent, or don't exist, don't engage with children and don't provide meaningful or engaging activities that interest children, learning opportunities don't exist or are based on rote learning, children are given little or no feedback and if it is present, it is given to correct and not expand learning, conversations with children are not valued, and there is minimal talking. Howes et al. (2008), indicates that low-quality instruction is found in classrooms which are based on whole-group activities, rote instruction, where routines and classroom management are not clear, and where instruction lacks focus and little feedback is provided to students.

High-quality structural features include: child to staff ratios of 1:10 with group sizes no larger than 20; teachers with a bachelor degree with specialized training in early childhood education, duration of day typically 6 hours, 5 days a week and 180 days a year, curriculum and assessment tools aligned to early learning standards (Barnett, Friedman-Krauss, Weisenfeld, Horowitz, Kasmin, Squires, 2017; Pelatti, Dynia, Logan, Justice, & Kaderavek, 2016; Pianta, Downer, & Hamre, 2016).

Marzano Teacher Evaluation Model. The Marzano Teacher Evaluation Model as described in the *Marzano Center Teacher Observation Protocol for the 2014 Marzano Teacher Evaluation Model* (Marzano, R. J., Carbaugh, B., Rutherford, A., & Toth, M. D., 2013) is a research-based model, based on an "aggregation" of research on effective

teaching. The model provides rating in four domains: classroom strategies and behaviors, planning and preparing, reflecting on teaching, and collegiality and professionalism.

Educators receive ratings on individual elements: innovating, applying, developing, beginning, not using.

Minnesota Reading Corps. Minnesota Reading Corps, is affiliated with Americorps and provides evidence-based, data-driven, literacy interventions implemented by trained tutors who are supported by trained coaches and mentors (Minnesota Reading Corps, 2019).

PreK-4. A term used in public-school, preschool settings to define preschool programs for children who are receiving services one year prior to starting kindergarten. These programs are for children who are four-years-old by September 1 and will be ageligible to attend kindergarten the following school year.

Process features. Process features of pre-k programs are those that define a child's experiences and interactions with teachers and with the instructional content (Howes et al., 2008). Barbarin et al. (2006) identified that process features are related to time management and activities, instruction and feedback, behavior management, and teacher-child interactions.

Research-based practice. Research-based practice or evidence-based practice refers to instructional strategies that have been informed by objective evidence (The Glossary of Education Reform, 2014).

School readiness. School readiness is a complex term but is often a measure of a child's preparation for K-12 (Daugherty et al., 2009). The term school readiness and the

skills which define readiness can be linked to the establishment of the six National Education Goals in 1991 (National Goals Panel, 1991). Duncan and Magnuson (2013), in a meta-analysis of empirical research found that school readiness is often defined as a mixture of cognitive and non-cognitive skills: cognitive skills related to academic skills such as literacy, numeracy, and secondary skills such as attention and emotion control and non-cognitive skills typically related to personality traits such as conscientiousness, openness, stability and extraversion.

The NAEYC in a position statement on readiness (1995), stated that due to the variability of a child's development and life experiences, the only ethical way to define a child's school readiness is by their chronological age. The Minnesota Department of Education (MDE) for the purposes of the Minnesota School Readiness Study (2012), has developed the following definition of school readiness:

School readiness is defined as the skills, knowledge, behaviors, and accomplishments that children should know and be able to do as they enter kindergarten in the following areas of child development: physical development; the arts; personal and social development; language and literacy; and mathematical thinking (p. 3).

SEEDS of Early Literacy. SEEDS of Early Literacy focuses on the "Big 5" literacy skills: language, phonological, print, alphabet, and vocabulary. SEEDS provides fun and meaningful ways for teachers to develop the "Big 5" literacy skills. SEEDS of Early Literacy is part of a professional development system called SEEDS of Learning (Horst, 2017).

Structural features. Structural features of pre-k programs are aspects that can be regulated and are intended to promote high-quality classrooms (Howes et al., 2008).

States will often turn to structural features as a means to manage quality (LoCasale-Crouch et al., 2007). These features are also often promoted by professional organizations as quality measures. Examples of structural quality features include child-to-staff ratios, number of hours of service, teacher qualifications, teacher compensation, program location, and professional development requirements.

Teaching Strategies, GOLD®. Referred to by teachers as TS GOLD®, it is an observation-based assessment tool grounded in research and aligned to *Minnesota's Early Childhood Indicators of Progress* (2017).

Underserved students. Sharroky Hollie (2012) states that underserved students are those students who are not receiving the best service possible in schools. These students can have many descriptors and vary by context, however, most teachers think of students of different races, cultures, ethnicities, languages, socio-economic status, special education, and gifted students.

Chapter II

Review of the Literature

The purpose of this chapter is to review the research regarding effective early childhood educational practices. This review will center on the foundations of early childhood teachers' beliefs about instructional practices in the early education classroom, how early education has been largely influenced by the framework of developmentally appropriate practice (Bredekamp,1987; Bredekamp & Copple, 1997; Copple & Bredekamp, 2009) and the impact of developmentally appropriate practice on classroom quality. The review of the literature will conclude with the impact of features such as teacher beliefs, developmentally appropriate practice (DAP), and classroom quality on outcomes for children (Daugherty et al., 2009).

Foundations of Early Childhood Teacher Pedagogical Beliefs and Practice

The relationship between early childhood teacher beliefs to practice is complex (Murray, 2015; Walter & Lippard, 2016). Research indicates that early childhood teacher beliefs are fundamental to practice, as teachers use their beliefs about how children learn, as a filter for making decisions about instructional practice (Charlesworth et al., 1991; Stipek & Byler, 1997; Hatcher et al., 2012). Therefore, an understanding of the foundations of early childhood teacher practice is essential to identifying the belief systems educators employ as they make instructional decisions (Murray, 2015).

Murray (2015) identifies three approaches to early education practice: teacherdirected, open framework, and child-centered. The child-centered approach has provided the basis for Western-based early childhood teacher preparation and practice and is often invoked to dismiss the place of teacher-directed approaches in the early childhood classroom (Langford, 2010). The foundational theories of child development along with more current theories of intentional and responsive teaching provide a context to inform research into the pedagogical frameworks employed by early childhood teachers (Hedges & Cullen, 2012).

The following section of this literature review provides an overview of the theorists whose work has fundamentally impacted the pedagogical beliefs and practices of early educators. These theorists are considered foundational because their work gives an understanding of the development of children that hasn't diminished or been discredited by more recent research (Mooney, 2013). These theorists appear frequently in the early childhood education literature in reference to child-centered practices and are identified as Dewey, Piaget, Vygotsky, and Erickson (McMullen et al., 2006).

Theories of Early Childhood Development and Learning

Theories of child development shape teacher's beliefs about early education and instructional strategies to support child development (McMullen et al., 2006). It is important for early childhood educators to know the theoretical foundations of their beliefs and practice and their role in the development of children in order to provide quality instruction (Mooney, 2013). The role of the adult in a child's learning has been influenced by theorists such as Dewey, Vygotsky, and Erickson but Piaget's constructivist view of child development along with the adult's role as guide provides the context for a modern view of early instruction (Murray, 2015).

Stages of cognitive development. The work of Piaget's stages of cognitive development has influenced preschool settings since the 1970's (Mooney, 2013). Piaget studied the universals of development and identified four stages of development; sensorimotor (birth to two years old), preoperational (three to seven years old), concrete operational (seven to eleven or twelve years old), formal operational (eleven to twelve years old through adulthood) (Beloglovsky & Daly, 2015). These stages imply that there is a requisite order to development that must be in place before a child can learn.

Development, a sequence of factors that is directional and systematic, precedes learning, the process of acquiring knowledge, ability, and skill through experiences that lead to change. To summarize; development drives learning (Fowler, 2016).

Piaget provides a constructivist view of learning, believing that children construct knowledge. A child moves through stages of equilibrium and disequilibrium, moving them to higher and more complex stages of cognitive development. Children then construct knowledge by gathering information through interactions with their environment and learn best when doing the work themselves, creating their own understanding (Beloglovsky & Daly, 2015). This is preferred to giving children the information through teacher-directed instruction. Therefore the best curriculum strategy is to keep children curious, wondering, and problem-solving. This is attained when teachers provide an environment rich with tools that allow the child to construct their learning. The preferred way to achieve this learning environment is through play. (Fowler, 2016). Piaget advocated for uninterrupted periods of play where children can be observed and information documented through observation. The information obtained

through observation provides the means by which teachers can create environments suitable for children's learning. Piaget's theories of cognitive development provide the basis for the project approach, emergent curriculum, differentiated instruction and multiple intelligences (Mooney, 2015).

Relationship-based pedagogy. Vygotsky studied the social and cultural influences on development. His socio-cultural or social constructivist theory of development states that learning is constructed through interactions (Murray, 2015). He believed that learning and cognitive development are social processes that occur through everyday experiences. These experiences, which happen within the context of relationships and are informed by a child's culture, family, community, and socioeconomic status, provide the information children need to later develop knowledge through formal instruction. This learning makes development possible (Fowler, 2016).

Zone of Proximal Development (ZPD) is a relationship-based pedagogy which defines Vygotsky's work. This is demonstrated when children's experiences are within their "zone"; activities that are challenging but can be attained (Hedges & Cullen, 2012). ZPD is the distance between the most difficult task a child can do alone and one they can do with help (Mooney, 2013). Vygotsky believed that a child on the edge of learning a new concept or skill could benefit from support provided by a teacher or peer. Scaffolding is the name given to the support a teacher or peer gives a child to reach a new concept or skill. These zones are authentic, relevant to daily life, and available within the everyday experiences of children, often through play.

Like Piaget, Vygotsky viewed play as a source of learning and development.

Cognitive development is influenced by social interactions and play provides a vehicle for these interactions. Play supports a child's cognitive development by providing opportunities to practice cognitive control, executive function, self-regulation, social skills, and mental flexibility and language. Language is important to sustain play and influences cognitive development as learning is a shared and interactive experience (Mooney, 2013). Therefore, teachers should encourage peer interactions and conversations.

Vygotsky's influence on early childhood pedagogy is not only observed through play-based pedagogies but in the work of Reggio-Emelia (Mooney, 2013). Vygotsky believed that children's interactions with their environment are important to development and that the environment can be used as a pedagogical tool (Murray, 2015). The teacher's role then is to provide an environment with the experiences and tools that allow the child to function within their ZPD (Fowler, 2016). This focus on emerging abilities requires that observation is used as a means to identify the ZPD of individual children. A summary statement of Vygotsky's views on the teacher's role regarding pedagogy is that the only useful instruction is that which moves just ahead of development (Fowler, 2016). Vygotsky's work has influenced the definitions of the intentional, effective early childhood classroom teacher (Epstein, 2014).

Psychosocial development. In 1963, Erickson provided the foundations to emotional social development by introducing the eight stages of Psychosocial Development. Key milestones within early childhood include: developing trust,

autonomy, and self-initiative. Erickson's theory of development proposed that actions and interactions develop patterns that influence a child the rest of their life. Children must master tasks in order to be successful in later developmental stages and there are windows of opportunity to master the tasks (Beloglovsky & Daly, 2015). These windows of opportunity are especially important in early childhood as they provide the foundation for future development and if not successfully negotiated can lead to challenges at later stages of development. The tasks are completed and key milestones reached through real work and accomplishment that have meaning within the child's cultural setting. Real accomplishment helps a child establish their identity and uniqueness. Teachers influence the mastery of tasks and milestones by providing clear limits and boundaries which allow children the ability to focus on learning inner control (Mooney, 2013).

Learn by doing. Dewey believed that children learn by doing and real-life material and experiences should provide the basis for purposeful curriculum. Learning experiences should be child-centered, shaped through planned environments and include interactions with the real community. The whole child should be considered with experiences that are based on children's interests, collaboration, and problem-solving. Knowledge comes through doing and learning is derived through meaningful work and conversation. Four interests lead to learning: communication, inquiry, construction, and artistic expression. The teacher's role is to create meaningful environments. (Mooney, 2013).

The theories of development and learning as presented by Piaget, Vygotsky, Erickson, and Dewey, seen as foundational to child-centered pedagogy, have influenced the thinking and teaching in teacher preparation programs (Langford, 2010). In this way of thinking, pedagogy first considers the needs and interests of children while also considering the developmental characteristics of the child. Teachers then use this knowledge to construct learning experiences that facilitate the child's learning, often through play, which allows children to be active participants in the learning process (Langford, 2010). These ideals form the context for child-centered pedagogy and practice. Developmentally appropriate practice (DAP) is the embodiment of child-centered practice and has dominated western pedagogical ideology (Langford, 2010). Further, DAP has become the definition of high-quality instruction and best practice in early education because it encompasses the work of these foundational theorists and presents it as a child-centered approach (Squires, Pribble, Chen, & Pomés, 2013).

Developmentally Appropriate Practice

One of the most influential frameworks on the field of early education curriculum and instructional practice has been the framework of developmentally appropriate practice (DAP) (Han & Neurath-Pritchett, 2010; Squires et al., 2013). DAP was first outlined in a document developed by Bredekamp in 1987 for the National Association for the Education of Young Children (NAEYC). The framework was revised in 1997 by Bredekamp and Copple and revised again in 2009. The DAP framework provides a set of guidelines which define the level of child choice and engagement in their learning and provides a foundation to guide best practice within early childhood programs (Copple, & Bredekamp, 2009).

Historical perspectives and theoretical framework of DAP. Developmentally appropriate practice (DAP) falls within a category of general models of early childhood education based on child development theory and research. Examples of other early childhood education models include Montessori, Reggio Emilia, and Waldorf. (Squires et al., 2013). DAP as a philosophy indicates that teachers need to know and meet children at their developmental level. DAP as a general framework aligns norms of child development and culture with practice. These three elements; practice, development, and culture form the foundation for instructional decisions in the early childhood classroom (Graue et al., 2017). The definition and focus of DAP have changed over the years in acknowledgement of new research and theories of practice. (Fowler, 2016).

First edition. In July 1984, the National Association for the Education of Young Children's (NAEYC) Governing Board created a commission whose purpose was to create a position statement on appropriate education for 4 and 5-year-olds. The position statement was adopted in April 1986 and was also adopted by the Association for Childhood Education International (Bredekamp, 1987). The statement provided a response to the increased focus on the instruction of academic skills and misconceptions about early education brought about by the accountability in public education movement (Fowler, 2016). Authors such as David Elkind, in Miseducation (1987) called attention to the growing concern that the trend toward formal, academic instruction in the early years was in contrast to what the research and theories of child development told practitioners about the learning needs of young children.

Also at this time, the number of early childhood programs was increasing in response to the demands for child care. Children were participating in programs at younger ages, including infants and toddlers. In addition, the number of public schools providing preschool programs was increasing (Bredekamp, 1987). The quality of experiences these children were receiving was at risk and the field of early education embodied in the NAEYC believed it had a professional responsibility to ensure that standards of high-quality early childhood programs were established, provided safe and nurturing environments that promoted the development of young children, and were responsive to families (Bredekamp, 1987).

It was determined that although quality programming was the result of many factors, a major influence was the ability of education to apply principles of child development to program practice. These principles provided a framework which was termed developmentally appropriate practice (DAP). In 1987, NAEYC published the book *Developmentally Appropriate Practice in Early Childhood Programs Serving Children Birth through Age 8, Expanded Edition*, edited by Sue Bredekamp. The book included the NAEYC's position statements on developmentally appropriate care for infants and toddlers as well as appropriate and inappropriate practices for 3, 4, and 5-year-olds.

In this version, DAP was primarily based on the developmental theories of Piaget.

Bredekamp (1987) suggested that early education should be child-centered and address a child's individual development needs. Instruction should be focused on a teacher's knowledge of development and of the needs of the individual child (Fowler, 2016; Graue

et. al, 2017). The position statement and book provided the definition of developmentally appropriate practice and identified that developmental appropriateness is a blending of two concepts; age appropriateness and individual appropriateness. Blending these concepts is attained by adhering to practices which support development. The documents further provided guidance on curriculum planning, adult and child interactions, home and program relations, and stressed the importance of a play-based learning environment (Bredekamp, 1987).

Bredekamp's application of Piaget to the early childhood environment was progressive thinking for the time and provided a vision for early childhood education (Fowler, 2016). Prior to 1987, the field of early childhood education was influenced by many theories of early instruction, socio-cultural theory, critical theory, and post-modernism with disagreements about best practice (Fowler, 2016). Bredekamp's position on developmentally appropriate practice was itself controversial with some thinking the child-directed activities labeled as "appropriate" versus the teacher-directed activities labeled as "inappropriate" an over-simplification of the complex early childhood classroom. (Fowler, 2016). Also controversial was the use of the language "either/or", implying that either the practice was appropriate or it was inappropriate. Other critics said the position statement was for white, middle-class children who were developing normally and accused DAP of marginalizing other ethnic groups (Graue, et al., 2017). Intense scrutiny followed the publication of these documents.

Fowell and Lawton (1992), drawing attention to the charts in the book that indicated examples of appropriate and inappropriate practices for 4 and 5-year-old

children, asserted that the position was based on an interpretation of Piaget's developmental theory and focused too heavily on child-directed and informal learning. The expectation that children, if exposed to a stimulating environment would construct their own learning was just a variation of Piaget's theory and that children could benefit from structured learning. They believed there was a benefit to teacher planned instruction of concepts and skills and that these if organized and arranged in the structure of the day, with thought to proper sequencing, would provide a readiness for learning that would facilitate future learning. The authors then went on to demonstrate the appropriateness of practices deemed inappropriate according to the NAEYC.

In her rebuttal to Fowell and Lawton (1992), Bredekamp (1993) claimed that the authors provided a narrow interpretation of the position statement and had provided a miss-representation of the definition of developmentally appropriate practice. She stated that the intention of the position statement was to encourage teaching practices that were less rigid and traditional toward a more "open" curriculum. She concurred that the position statement oversimplified the complexities of the early education experience but was written for the audience of preschool teachers. She reflected on the timeliness of the Fowell and Lawton (1992) article as beginning in 1993, NAEYC was planning a revision of the document, providing for a more accurate definition of developmentally appropriate practice.

Second edition. In 1997, NAEYC published the book, Developmentally

Appropriate Practice in Early Childhood Programs, Revised Edition, edited by

Bredekamp and Copple. In the revised edition, Bredekamp and Copple (1997), kept the

core ideals of developmentally appropriate practice which stated that professionals make decisions about the education of children based on; "what is known about child development and learning" (p. 9) and "what is known about the strengths, interests, and needs of each individual child" (p. 9) and added a third element; "knowledge of the social and cultural contexts in which children live" (p. 9-10). In summary, practice needs to be based on knowledge of development, that development varies with each child, and that the social and cultural context of children's lives must be considered.

Several key additions were made to this iteration (Bredekamp & Copple, 1997). It contained new position statements on developmentally appropriate practice written after years of research reviews, written critiques, forums, conference sessions, and professional meetings. The new edition added the dimension of "teacher as decision-maker" in the classroom and provided a cultural perspective (Graue et. al, 2017). It also provided a more balanced approach to teaching strategies adding that both child and teacher initiated actions were acceptable. This more balanced approach was attained by adding the learning theories of Vygotsky and Bronfenbrenner (Fowler, 2016). Principles of child development with a focus on Vygotsky's research on play as an important feature in a child's social, emotional, and cognitive development were also added.

Other Vygotskian concepts reflected in this revision included that of scaffolding and zones of proximal development (ZPD). The idea that a child is motivated to learn what is just within reach and that through scaffolding provided by adults and peers, the child can attain the new skill was new thinking. This concept of guided participation and adult-assisted learning to guide children toward more complex skills was to acknowledge

that educator's decisions about activities are important to the learning process (Fowler, 2016).

Also new was the attempt to move the field past the controversial language of "either/or" toward a more acceptable "both/and" (Bredekamp & Copple, 1997, p. 23). This, to inform the field that it is possible to have two approaches that seem incompatible but work more effectively when they are combined. As an example, the editors used this scenario; the Piagetian idea that children construct their own understanding of concepts with the Vygotskian idea that they benefit from instruction by more competent peers and adults (p. 23).

Through their work with colleagues using the early education model of Reggio Emilia, Bredekamp and Copple (1997) also introduced the concept of the teacher as a decision-maker. This brought to the forefront the importance of the cultural context and values present in the children's learning environment. This is demonstrated when teachers employ instructional strategies based on cultural values which seem developmentally inappropriate but may be appropriate within the context of the culture.

Bredekamp and Copple (1997) identified that education, development, and other processes are ongoing and that day-to-day classroom decision are complex and based on many factors. Research, society and cultural contexts are also always changing, so NAEYC's position statements on developmentally appropriate practice must be revised to remain a relevant framework for early childhood professionals. New research on brain development, a growing focus on standards, and the achievement gap prepared the way for the 2009 iteration of the position statement on developmentally appropriate practice.

Third edition. The decision to revise the 1997 position statement on DAP was in acknowledgement of the growing body of early childhood research which provided new information about learning and practice, the growing influence of public schools in early education, and the need to address the achievement gap (Copple & Bredekamp, 2009). Also needed were statements about the concepts and components of quality and what it means to provide excellent instruction and early education environments.

In 2009, NAEYC published the book, *Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth through Age 8, Third Edition*, edited by Copple and Bredekamp. This edition kept the three core considerations of DAP: "knowing about child development and learning" (p. 9), "knowing what is individually appropriate" (p. 9), and "knowing what is culturally important" (p. 10), and provided a new position statement on the framework of developmentally appropriate practice. New to this version was the addition of a definition of what it means to be an "excellent teacher" (Copple & Bredekamp, 2009). This was added as a means to address the growing challenges brought about by the standards and accountability movement, especially present within the public school sector. Quality and excellence were defined as being present when early education programs provide an equitable experience for all children with a focus on closing the achievement gap.

The concept of the "excellent teacher" is aligned with the concept of intentional practices about instruction in the early childhood environment. It acknowledges that both child-guided; those experiences that acknowledge a child's interests and activities and adult-guided; those experiences that reflect teacher goals are acceptable (Fowler, 2016).

The idea that both teacher and child are actively engaged in the educational process is present in the work of Ann Epstein, which Copple and Bredekamp (2009) drew into the scope of their work in this edition. The early childhood professional is intentional when they plan curriculum to achieve goals, consider the classroom environment, provide a variety of teaching strategies, plan individual learning experiences, scaffold learning, employ various learning formats such as large group, small groups, and centers, use assessment of development and learning to guide planning, and interact with families (Copple & Bredekamp, 2009).

Copple and Bredekamp (2009) further defined the responsive teacher as one who is mindful of a child's learning needs and can make decisions about instruction based on the skills to be addressed. If the child will learn the skill through child-guided activities then the teacher uses a set of strategies that will ensure success for the child as they construct their own learning. If the skills require an adult-guided approach, then strategies aligned to teacher-directed instruction will be used. This concept provides for a balance between learning and development and teacher informed decisions about practice.

In addition to being intentional and purposeful in their practice, this edition asserts that early childhood professionals must hold themselves accountable to student outcomes (Copple & Bredekamp, 2009). This is defined as being an effective teacher. Accountability aligned to student outcomes was the acknowledgement of new research which identified the level of "robust" content that could be taught to children in engaging and developmentally appropriate ways. The document also called on educators to

commitment to the whole child, the value of play, and to be responsive to the needs of individual children, taking into consideration their culture, diversity, and relationships with families.

To assist early childhood educators as they implement DAP and to connect what is known about child development and the application of child development research to high-quality instruction, supportive learning environments, and student outcomes, Copple and Bredekamp's 2009 edition of *Developmentally Appropriate Practice in Early Childhood Programs Serving Children Birth through Age 8, Expanded Edition* presented "principles of child development and learning that inform practice" (p. 10-14) and "guidelines for developmentally appropriate practice" (p. 16-23). The principles provide a bridge from child development theory to early education pedagogy by stating foundational concepts of child development, presenting evidence of how these concepts are connected to learning, and then how early learning experiences, especially those implemented through play further influence development.

The guidelines for DAP are an extensive list of considerations meant to influence the decisions early childhood professionals make in five key areas; creating a caring community of learners, teaching to enhance development and learning, planning curriculum to achieve important goals, assessing children's development and learning, and establishing reciprocal relationships with families (Copple & Bredekamp, 2009, p. 16-23).

Together, the principles and guidelines of developmentally appropriate practice provide a framework for guiding teachers as they implement instructional practices aligned to DAP beliefs.

The document preface contains a statement which summarizes the editors' beliefs about DAP and what DAP can do for children when implemented with fidelity by early childhood teachers.

Seeing children joyfully, physically, and intellectually engaged in meaningful learning about their world and everyone and everything in it is the truest measure of our success as early childhood educators. It is through developmentally appropriate practice that we create a safe, nurturing, and a supportive place for young children to experience those unique joys of childhood (p. x).

Research of Teacher Beliefs and Practices Aligned to DAP

"Good early childhood teachers are purposeful in the decisions they make about their practices." (Copple & Bredekamp, 2009, p. ix). It has been documented through research that the decisions teachers make about practices are influenced by their beliefs (Charlesworth, et al., 1991; Stipek & Byler, 1997; Hatcher et al., 2012). Yet the relationship of early childhood teacher beliefs to practice is complex (Murray, 2015; Walter & Lippard, 2016). Beliefs and practices associated with DAP can be especially complex. Brown and Lan (2013) in a qualitative meta-synthesis of 12 peer-reviewed studies of DAP concluded that DAP research is difficult due to the vague concept of DAP. Teachers struggle to conceptualize DAP and further struggle to implement it.

Instruments aligned to DAP. Since the inception of the first edition of DAP in 1987, researchers have developed instruments aligned to the DAP framework with the purpose of providing information about teachers' beliefs and implementation of practices aligned to DAP (Burts, et al, 2000; Charlesworth et al., 1991; Charlesworth et al., 1993; Han & Neuharth-Pritchett, 2010; McMullen et al., 2006; Styler & Bipek, 1997; Wen et al., 2011). The instruments, typically involving self-report of beliefs and practices using questionnaire methodology, measured the congruency between teacher beliefs and practice and provided a working definition of DAP. The research has provided mixed results with indications that although teachers may align their beliefs with developmentally appropriate practice, their actual practice does not reflect this belief.

Landmark studies. This is demonstrated in the results of landmark studies of teacher beliefs and practices aligned with DAP. Charlesworth et al. (1991), using an instrument developed to measure self-report of teachers' DAP beliefs and practices called the Teacher's Questionnaire, found in their study of 113 kindergarten teachers, a moderate correlation between DAP beliefs and developmentally appropriate practices. Interestingly, a stronger correlation was found between developmentally inappropriate beliefs and inappropriate practices (DIP) meaning that teachers who rated DIP beliefs as most important also aligned their practices to these beliefs. In contrast, Charlesworth et al., in a 1993 study of 204 kindergarten teachers, found no correlation between DAP beliefs and practice. Consistent with the first study, however, was the finding that teachers who placed a high value on DIP beliefs also had DIP practices.

Wilcox-Herzog (2002) in a study of 47 early childhood teachers recruited from Midwest private, not-for-profit, child care ministries, Head Start and Montessori programs found no relationship between teacher beliefs and practices. Many of the teachers were trained in early childhood, had majored in early childhood, and had teaching certifications. Self-report of beliefs was measured using an instrument developed by the researcher. Teachers were videotaped to determine observed measures of sensitivity to children. The researcher concluded that the lack of relationship may reflect reality, be an indication of the inability to accurately measure teachers' understanding of DAP or be the result of external factors such as the beliefs of colleagues, administrators, and parents.

A 2004 study by Wilcox-Herzog and Ward found opposing results. The study of 71 early childhood teachers of center-based early childhood programs, found that beliefs were a strong predictor of intentions. Beliefs and intentions were significantly positively correlated. Intentions were measured by asking the teachers how often they think teachers should engage in certain behaviors on a 5-point Likert scale.

Other landmark studies have found results that range from a significant correlation between teachers' beliefs of DAP and aligned practice to no correlation. In a study of teacher beliefs and practices conducted by Stipek and Byler (1997) of 60 preschool to first-grade teachers, using a self-report beliefs survey and an observation tool for report of practices, found a significant correlation between teacher beliefs and practice. The correlation was especially significant for preschool and kindergarten

teachers. They identified a continuum of practice where teachers either tend toward child-centered practices associated with DAP or basic-skills practices.

A study of the continuum of beliefs and how beliefs relate to practice was done by Vartuli, (1999). Vartuli found a moderate correlation between self-reported beliefs and observed practice. This study looked at self-reported beliefs and practices using the Teacher Beliefs Scale (TBS) (Charlesworth et al., 1993) and observed practice using a videotaped based protocol developed by the researcher. The researcher concluded the moderate correlation was likely due to teachers who fundamentally believe in DAP but struggle to transfer it to actual practice.

A study by Wen et al. (2011) found that self-report beliefs, as determined by the TBS (Charlesworth et al., 1993) and observed practices were only weakly correlated. Self-report beliefs indicated strong endorsement of DAP but this was not observed. The researchers found the most frequent instruction was teacher-directed. They also found that the more strongly teachers endorsed teacher-directed learning, the less they encouraged children's initiative and exploration and provided scaffolding. The researchers concluded that, due to the widely accepted framework of DAP as the standard for early education, teachers may know they should use DAP but struggle to implement it.

In summary, the mixed research results of teacher beliefs to practice, provide evidence that although developmentally appropriate practice is accepted as a framework for the delivery of early childhood education by early childhood teachers, there is a disconnect between their beliefs and practice. It especially highlights the difficulty

teachers experience as they attempt to align beliefs of DAP with actual practice (Wen et al., 2011).

Enacting the concept of developmentally appropriate practice in a classroom is complex...given that complexity, it is maybe no wonder that despite NAEYC's decades-long advocacy of such practice, what is and is not developmentally appropriate is still subject to misinterpretation, misconceptions, and misrepresentation. (Copple & Bredekamp, 2009, p. 47).

The complexity of implementing DAP practices, as demonstrated in the DAP beliefs to practice research, makes it important for teachers and administrators of early education to know what developmentally appropriate practice looks like in the early childhood environment. The next section of this review of the literature will explore developmentally appropriate practices within the context of the quality of early childhood environments and student outcomes research.

Developmentally Appropriate Practice in the Early Childhood Environment

The learning opportunities teachers provide through the framework of developmentally appropriate practice, whether through guided play, child-directed activity indoors and out, hands-on-activities, peer interactions, one-on-one activities with teachers, small group activities, guided explorations, child-guided centers, and other process features vary greatly. The extent to which these provide a high-quality experience for children and provide indicators of teacher quality and effectiveness and positive outcomes for children has been the focus of current research (Alford, Rollins, Padrón & Waxman, 2016; Brown & Lan, 2013; Hur et al., 2014).

Classroom environment and instructional quality. Providing quality pre-k instruction lies in a combination of curriculum, lesson plans and activities that are age-appropriate (Duncan & Magnuson, 2013). Quality is also defined by a child's experiences and interactions with teachers and with the instructional content (Howes et al., 2008). Developmentally Appropriate Practice (DAP) guidelines, established by the National Association for the Education of Young Children (2009), are often used by programs to define process quality in the early childhood classroom. Research and peer-reviewed scholarly articles on high-quality classrooms, instruction and effective, responsive teaching show evidence of alignment to the DAP guidelines; creating a caring community of learners, teaching to enhance development and learning, planning curriculum to achieve important goals, assessing children's development and learning, establishing reciprocal relationships with families (Copple & Bredekamp, 2009, p. 16-23).

Creating a caring community of learners. "In developmentally appropriate practice, practitioners create and foster a community of learners that support all children to develop and learn." (Copple & Bredekamp, 2009, p. 16). Evidence of this DAP guideline was found in the research of classroom and instructional quality (Burchinal et al., 2010; Howes et al., 2008; Longstreth et al., 2013; Pianta et al., 2016; Zinsser et al., 2015). The research supports the DAP characteristics of classrooms that foster teacher-student interactions, feedback, engagement in conversation, responsive, respectful and age-appropriate behavior guidance as indicators of high-quality emotional support, essential to the creation of a positive classroom climate (Zinsser et al., 2015).

Howes et al. (2008) using data from the national Center for Early Development and Learning Multi-State Study of PreK and the State-Wide Early Education Programs Study looked at the student-teacher relationships of 2800 children in 701 classrooms and the impact on emerging academics using the Classroom Assessment Scoring System (CLASS) and Early Childhood Environment Rating Scale-revised (ECERS-R). The researchers aligned high-quality with DAP processes related to classroom practice, materials, activities, and effective teaching and teacher-child relationships. The research indicated that gains in academic and social skills are primarily attributed to the classroom instructional climate. They found that effective teaching is attained through a positive emotional climate and that effective teachers engage children, encourage communication, and are responsive and respectful. The study also found that the majority of classrooms do not provide high-quality process features. Using the Early Childhood Environmental Rating Scale – Revised (ECERS-R), only 8% of the classrooms in the study were in the good to excellent range. Low instructional climate scores, as determined by CLASS, were also the norm.

Studying the climate of early childhood classrooms, Howes et al. (2013) looked at instructional climate, teacher instructional strategies, and child-teacher relationships. The study of 118, dominantly Latino children and their teachers found that quality of feedback is especially important to support learning and development. Quality of feedback considers the ability of the teacher to encourage participation and verbal interactions to deepen learning. Teachers who provide quality feedback also know the

children well, are skilled observers, and can integrate learning goals with instructional strategies.

Pianta et al. (2016), in a scholarly article about early education classrooms confirmed these research findings. They reported that research evidence supports teacher-student interactions as key to classroom quality. Teacher behaviors, language, emotional warmth and tone and how they conduct and manage classrooms indicates quality. Teachers who focus on understanding concepts, give feedback, extend skills, and engage in conversation support student learning.

Longstreth et al. (2013), in a study of discipline policies which can impact classroom climate, conducted a two-part study looking at discipline policies that promoted social and academic success. Using information gained from a literature review of 48 sources, a 28 high-quality-item checklist was created. A key feature of high-quality early childhood discipline policies was developmentally appropriate behavior expectations. The checklist was used to conduct an analysis of 65 Arizona, child care facilities. They found that early childhood discipline policies that promoted developmentally appropriate practices provided high-quality environments, however, the average score of key features found in the facilities was 10.2 of 28 items indicating that many of the facilities provided low-quality experiences.

Teaching to enhance development and learning. "A child's relationships and interactions with adults are critical determinants of development and learning...developmentally appropriate teaching practices provide an optimal balance of adult-guided and child-guided experiences." (Copple & Bredekamp, 2009, p. 17-18).

This guideline defines the pedagogy of the early childhood classroom and is characterized by such practices as scaffolding children's learning, using a variety of instructional strategies to attain goals, and using multiple learning formats. The research of high-quality classroom environments and instructional quality is also evident here.

Burchinal et al. (2008) in a study of 240 pre-k programs found that instructional quality is related to positive interactions, scaffolding of learning, coherent instruction, and formative feedback. Howes et al, (2008) arrived at a similar conclusion finding that effective teachers provide direct experiences that scaffold skills for children at risk. In contrast, the researchers found that little feedback was provided to students when instruction was largely whole-group directed activities and rote instruction. These practices were indicative of low quality instruction.

Planning curriculum to achieve important goals. "The curriculum consists of knowledge, skills, abilities, and understandings children are to acquire and the plans for the learning experiences through which those gains will occur" (Copple & Bredekamp, 2009, p. 20). This guideline addresses the content and goals for learning that are provided in the early childhood classroom. It encourages effective teachers to know the standards to be attained, define learning goals, and have a deep knowledge of the curriculum yet using it as a framework for coherence, maintaining flexibility to meet the learning needs of students. The research of high-quality learning environments supports this guideline as well.

Howes et al. (2008) reported that effective teachers use specific instructional content. Pianta et al. (2016) goes further and reports that effective teachers don't just

follow curriculum or use rote learning but provide instructional activities that are wellorganized, have content, and interact with questions that promote reasoning. Effective
teachers take advantage of teachable moments to promote real-time learning. The authors
propose that the achievement gap can be closed through teacher-child interactions
combined with developmentally appropriate curriculum.

The research related to the guidelines of "assessing children's development and learning" and "establishing reciprocal relationships with families" is not as comprehensive, therefore will not be addressed. However, the research identified in this literature review, does provide evidence that the practices outlined in the guidelines of DAP are in alignment with the qualities found in high-quality early childhood classroom environments and in the instructional quality provided by effective, responsive, early childhood teachers. The research further connects high-quality experiences, both those identified as DAP practices and those with DAP alignment, to positive outcomes for children.

Student outcomes. While research aligning high-quality early childhood environments and effective, responsive teaching to developmentally appropriate practices is evident, the alignment of the DAP framework to positive student outcomes is less clear. Some of the research provides a link of positive student outcomes to developmentally appropriate practices (Alford, et al., 2016; Huffman & Speer, 2000), while other research provides a link to positive outcomes through a focus on child-centered beliefs and practice (Curby et al., 2009; Marcon, 1999). The third body of research finds an indirect link of positive outcomes to DAP practices through DAP and

child-centered practices that promote the development of self-regulation (Hur et al., 2014; Williford et al., 2013; Vitiello et al., 2012).

Positive student outcomes aligned to DAP. Two studies were found that specifically link DAP to improved student academic outcomes. A study of 130 mostly African American and Hispanic children in Head Start through first grade conducted in 2000 by Huffman and Speer found that achievement was significantly higher in more DAP classrooms for letter and word identification and applied programs. Children were assessed using the Woodcock-Johnson Tests of Achievement. Levels of DAP were assessed using the Assessment Profile for Early Childhood Programs: Research Version (Abbott-Shim, & Sibling, 1992). The researchers suggested that DAP can improve the achievement of children in urban settings.

A study conducted by Alford et al. (2016), determined that DAP pedagogy and positive learning outcomes are linked. The researchers observed 450 students in pre-k through second grade and 91 teachers in a public school setting. Observations included noting child-centered and teacher-directed approaches, teacher instructional beliefs, classroom environment and the impact on student behavior and activities. Three statistically significant findings were reported. Students taught by teachers with higher developmentally appropriate instructional practices (DAIP) scores were more likely to be on task, were more likely to be answering questions and exploring freely. These behaviors contributed to positive learning outcomes. Students taught by teachers with lower DAIP were more distracted and not engaged in activities.

Positive outcomes aligned with child-centered practices. A larger body of research focused on child-centered beliefs and practices and links to improved developmental and academic outcomes. Child-centered beliefs and instructional practices are a central tenet of DAP (Copple, & Bredekamp, 2009). Other studies further compare the academic gains of teacher-directed versus child-directed instruction.

Literature which aligns DAP belief practices to student outcomes often cite the research of Marcon (1999). In this landmark study, Marcon found that children in classrooms whose teachers used child-initiated methods had greater gains in basic skills than children who were in academic-directed classrooms. The study followed 193 prekindergarten and Head Start teachers of 4-year-olds in 123 public schools for three years to determine their preschool model. Using cluster analysis, teachers were placed into three groups: Child-initiated; where teachers implemented a model based on Piaget's theories of child development, academically directed; where teachers implemented a model based on direct instruction of skills, and middle-of-the-road classrooms; where teachers attempted to combine the other two approaches. The child outcomes of 721 children, were measured based on teacher report, using instruments already utilized by the teachers. The Vineland Adaptive Behavior Scales (Marcon, 1999) was used to measure the children's social-emotional skills development and the school's Early Childhood Progress Report was used to measure mastery of academic skills.

Marcon (1999) found that although children made gains across all three methods, the gains in both academic skills and social-emotional skills were statistically significant for children in child-initiated classrooms. Further, children had gains in classrooms

where teachers adhered to a coherent method of instruction whether child-initiated or direct instruction. The middle-of-the-road model, although producing gains was not as effective as the other two approaches.

As this study was prior to the full implementation of the 1997 version of DAP (Bredekamp & Copple, 1997) which incorporates Vygotsky's zone of proximal development, Marcon notes that none of the classrooms was using this approach and recommended the inclusion of Vygotskian theories as a way to further promote positive outcomes for children. She concluded that the method of preschool instruction does matter and that developmentally appropriate practices, as part of an "array" of instructional practices can mitigate the "how" of academic instruction for children.

The research of Curby, et al. (2009) also found positive outcomes while exploring the academic gains of students served in classrooms with constructivist views.

Observations of 692 teachers were conducted using the Instructional Support domain of the Classroom Assessment Scoring System (CLASS), specifically to link profiles of quality pre-k to academic growth and social competence. The researchers defined instructional support as high-quality instruction consistent with a constructivist approach. This type of instruction supports feedback, expands learning and understanding through hands-on methods rather than rote learning, builds on knowledge students already know and makes connections to the real world. The researchers found that children who had the highest academic gains were in classrooms that provided the highest level of concept development consistent with constructivist views. These children showed gains that were 2.6 points greater than children in the lowest quality environments as determined by

scores on the Woodcock-Johnson-III Tests of Achievement and the Peabody Picture Vocabulary Test. This resulted in an effect size of .19 to .21 for gains in higher quality classrooms.

A final study linking concepts of DAP to students outcomes found that both child-centered and teacher-directed activities provided positive outcomes and academic gains for children. deHaan, Elbers, and Leseman (2014) in a study to determine children's academic gains based on teacher-directed and child-directed activities followed 92 children in preschool and kindergarten. The daily activities of 16 classrooms were coded every 10 seconds. Composite aggregated scores combined the activity with the initiator; child or teacher. Categories of activities emerged; teacher-managed language and literacy, teacher managed math, child-managed language, and literacy, child-managed math.

Preschool children who experienced a greater number of teacher-managed activities had larger gains in language, literacy, and math. Kindergarten children only had increases in math for teacher-managed activities. Math, language and literacy gains were all influenced positively by child-initiated activities. The researchers found that teacher-managed activities were mostly whole group and recommended that academic content is embedded in a mix of teacher and child-managed activities. This concept is in alignment with Copple and Bredekamp's (2009) definition of the intentional teacher who maintains flexibility to meet student needs.

Positive outcomes with indirect links to DAP. Several studies found increased, positive academic and development outcomes for children in DAP and child-centered

classrooms however the link to these practices was not clear. The researchers determined that the positive outcomes were present due to the role of DAP and child-centered practices to enhance self-regulation and executive function skills.

Hur et al. (2014) studied 444 preschool children from 103 teachers to explore teacher's child-centered beliefs and child's academic achievement and role of child's self-regulation. The teacher's child-centered beliefs were measured using the Modernity Scale (Schaefer & Edgerton, 1985), which measures child-centered versus adult-centered beliefs. Academic achievement was measured using the Peabody Picture Vocabulary Test, Phonological Awareness Literacy Screening for Preschool and Woodcock-Johnson III. The results of these achievement measures were "regressed" on teachers' child-centered beliefs.

The researchers found the beliefs were not directly associated with literacy and math outcomes but indirectly through child self-regulation. Teachers with child-centered beliefs supported child self-regulation. Although the study found no significant direct association of child-centered beliefs and academic achievement, child-centered beliefs were positively and significantly associated with behavior self-regulation and self-regulation was positively and significantly associated with literacy and math outcomes. Teachers further reported conflict between their beliefs and the academic achievement focus of school readiness so were unable to promote free choice, diverse learning experiences, and child initiative.

Other studies link the concept of self-regulation, provided through positive interactions with teachers who are providing child-directed activities to cognitive gains.

Williford et al. (2013), in a study of 341 preschoolers, through observation, assessment, and teacher interactions reported that positive engagement with teachers related to gains in executive function. Active engagement with tasks led to gains in emotional regulation and engaging positively with teachers and peers led to gains in task orientation. These findings were discussed within the context of Vygotsky's developmental theory and importance of play to the development of self-regulation. The researchers concluded that positive task engagement leads to persistence in classroom activities and learning that is linked to the development of school readiness skills.

In a similar study conducted by Vitiello et al. (2012), 283 economically and linguistically diverse preschool children in 84 classrooms were observed. Researchers examined the activity settings of children and the degree of positive and negative engagement with teachers, peers, and tasks as they related to teacher-directed or child-initiated tasks. They found that the children's engagement with tasks and peers was higher and more positive during free choice then with teacher directed activities.

Positive outcomes with no or questionable links to DAP. Some researchers have found either no or questionable links of DAP and child-centered beliefs to positive child academic and developmental outcomes. Two peer-reviewed studies were found to have conducted a meta-analysis of the DAP practice to student outcomes research with these conclusions.

An early analysis of the effects of DAP practices done in 2005 by Van Horn, Karlin, Ramey, Aldrige, and Snyder found no evidence of consistent effects of DAP for cognitive or academic outcomes. The researchers reviewed 17 empirical studies which compared the outcomes of DAP and DIP practices on cognitive and academic outcomes. Fifteen of the seventeen studies were prior to 1997, one study from 2000 and one from 2003. Van Horn et al. (2005), found a mix of results from no effects to mixed results to positive. The researchers were critical of the studies noting that the research overall is limited and lacked adequate statistical models.

Brown and Lan (2013), conducted a qualitative meta-synthesis of 12 peer-reviewed qualitative studies original to the U.S. in which the influence of DAP on cognitive development was researched. These studies ranged from 1997 to 2011 with seven studies conducted in 2008-2011 and five studies conducted from 2000-2007 and one in 1997. They, like Horn, et al. (2005), noted the gaps in the DAP research finding that quantitative studies have mixed results and there are few qualitative studies. The analysis found that DAP practices do positively influence cognitive development but the results were unclear about how this impacts student outcomes. The researchers attribute this to the available data which doesn't provide a clear link of DAP to academic outcomes. Brown and Lan further connect with the struggles of DAP as a "vague" concept stating that teachers struggle to implement DAP. They conclude that "a refined conception" of DAP is needed to improve the consistency of both qualitative and quantitative research to identify teacher and administrative practice and links to aspects of child development.

The struggle to implement developmentally appropriate practice. The research indicates that DAP as an indicator of high-quality practices which support positive student outcomes in the early childhood environment has merit. Whether the

research demonstrates a direct link between DAP and positive student outcomes or an indirect link through the development of self-regulation and executive function skills, the importance of high-quality environments, classroom practices, and instruction to support student outcomes is documented in the literature (Brown, 2010; Chien et al., 2010; Goldstein et al., 2013; Howes et al., 2008; Reynolds et al., 2014). However, the research also indicates that early childhood teachers struggle to implement DAP practices with the fidelity necessary to provide high-quality environments to support positive student outcomes (Alford et al., 2016; Howes et al., 2008). There is evidence that the teachers' inability or struggle to implement the DAP framework leads to the proliferation of inappropriate practices which further contributes to lower quality classrooms even though they may have strong DAP beliefs.

In an early study of classroom quality in Head Start, McCarty, Abbott-Shim, and Lambert (2001), did research to look at self-report beliefs and practices and their relation to classroom quality. The TBS (Burt, 1991) was used to create two categories of teachers; those with DAP beliefs and practices and those with DIP beliefs and practices. Classrooms were divided into high, average, and low-quality classrooms. The study found that DAP beliefs and activities were statistically non-significant for classroom quality but there was a statistical significance for DIP and low quality. Teachers differing quality classrooms had similar DAP beliefs and practices however the low-quality group favored DIP beliefs and practices. The researchers concluded that teachers can identify DAP beliefs but struggle to discriminate them from inappropriate practices which contributes to lower quality classrooms.

Another possible reason for the struggle is found in the literature which highlights the complexities of the DAP framework. Graue (2008) compares it to "teaching without a plan" (p. 444), stating that although DAP is founded in the theories of child development and widely accepted as best practice for early learning, it doesn't provide instructional ideas for DAP. The vague conception of DAP is also a conclusion of the work of Brown and Lan (2013).

Lack of knowledge and instructional skills may also be a factor. Howes et al. (2013) in their study of classroom effectiveness concluded that teachers can provide a high-quality emotional climate but lack the skills to support learning and development. Hamre (2014), in a scholarly article, wrote that the teachers of most early childhood classrooms lack the depth of development knowledge, instructional and interaction strategies, and content knowledge to provide an effective early childhood classroom experience.

Hamre (2014) describes the responsive teacher as being highly engaged, able to identify the needs of students and responds in ways that support social and academic development. The responsive teacher provides high-quality instructional support, promotes higher order thinking skills, provides feedback, scaffolds language development and uses play to promote cognitive development. These strategies are in alignment with Copple and Bredekamp's definition of DAP and provides examples of the first tenant; "DAP is grounded both in the research of child development and learning and in the knowledge base regarding education effectiveness in early care and education"

(Copple & Bredekamp, 2009, p. 16) and in the definition of the effective teacher who is "intentional in all aspects of their role" (Copple & Bredekamp, 2009, p. 34).

Although early childhood teachers struggle to implement DAP, evidence was found that they are implementing pieces of the DAP framework (Howes et al., 2013). This evidence is primarily found within the emotional climate research. Teachers are implementing strategies which promote a high-quality emotional climate but fail to implement the pedagogy and content guidelines of DAP that support cognitive development.

The ability to provide the practices necessary to promote a positive emotional climate may be explained by a study of teacher's instructional practices conducted by Koutsoftas, Dubasi, and Dionato (2017). Using Q-sort methodology as an alternative to teacher questionnaire and observation methods to reduce self-report bias, the research was done to establish what instructional practices are least and most endorsed by preschool teachers. The 2009, NAEYC version of DAP was used to identify 80 classroom practices for the Q-sort. Educators were asked to rank order the items. The study found that the use of practices most closely associated with DAP, especially those in the classroom climate domain was ranked highest, while practices more closely aligned to direct instruction were ranked lowest.

Classroom climate practices were endorsed more often than social-emotional items and language and literacy while practices that sounded academic or were implied to be direct instruction ranked lower. As an example; a skill such as phonemic awareness, which is a skill that can be embedded in play-based activities and learned by

preschoolers, was ranked one of the lowest items. Items ranked the highest included; express warmth and affection interacts at eye level, provide materials to encourage conversation, organize classroom with clear differentiation, listen to children, hug or pat children when upset, and have a meaningful conversation.

The struggle to implement DAP beliefs and practices in the early childhood classroom is a common theme in the research literature (Brown & Lan 2013; Graue, 2008). Aspects of DAP, specifically those related to the first guideline; creating a caring community of learners, to promote social-emotional skill development (Copple & Bredekamp, 2009), is a guideline that appears easier for teachers to conceptualize and implement. However, implementing all of the DAP framework as presented by Copple & Bredekamp (2009), with fidelity, is key to obtaining the high-quality environment and positive outcomes necessary to impact student outcomes.

Goldstein, in a 1997 article addressing the challenges of DAP in early childhood education, provides a quote that summarizes the intersection of high-quality, effective teaching with the DAP framework;

Teachers engaged in developmentally appropriate practice attempt to create a meaningful, challenging, responsive, and stimulating educational environment for all students, regardless of their locations on the developmental continua. Children are given opportunities to learn through direct experience and hands-on explorations, and to engage in the types of problem-finding and problem-solving that lead to growth and development. (p. 4).

Influences on the Implementation of DAP Beliefs and Practices

Research of teacher DAP beliefs and practice has included gathering information about the influences on the teachers' ability to implement their beliefs. Stipek and Byler (1997) reported that teachers are not able to implement DAP due to parental expectations and the focus on basic skills. Other studies have found that the school or program philosophy, supervisors, parents, workload, teacher's level of experience, the educational context of the instruction and teacher-child ratios impact the ability to implement beliefs (McMullen & Alt, 2002; Wilcox-Herzog, 2002; Vartuli, 1999). Wen et al., (2011) found that the teacher's level of education, certification, and professional development may play a role (Wen et al., 2011).

Influences on the implementation of DAP beliefs and practices which rest outside the teacher's knowledge or ability will be explored in the next section of this literature review.

The standards and accountability movement. Generally, DAP practice is child-directed, hands-on learning with a focus on the importance of play (Graue, 2008). In contrast, standards-based instruction, often viewed as didactic, is seen as knowledge-driven through drill and practice and in contrast to DAP (Pyle & Luce-Kapler, 2014). The research indicates that the standards movement has impacted the implementation of DAP.

Standards were intended to be an extension of DAP and reflect high-quality and what children should know and be able to do as result of being in a DAP environment (Graue, et al., 2017). Graue, et al. (2017) reports that standards, first seen as a guide to

ensure quality, have become accountability measures for public pre-k. A focus on academic outcomes for children has had the effect of narrowing the early childhood curriculum. This has resulted in standards-based practice now providing the base for teacher planning instead of DAP, which aligns practice to norms of child development and culture. Standards in early childhood, meant to guide instruction are now competing with accountability and developmental thinking is not as strong as K-12 accountability. The authors stress the importance of decisions made by administrators and teachers to make sure learning for 4-year-olds is appropriate and suggest that even when standards support child-centered practices, accountability is still favored over the developmentally based practice.

Brown et al. (2015), in a scholarly article to address DAP and academic rigor with a focus on the possibility of preparing a child for the academic rigor of elementary in a DAP early childhood classroom, agree with Graue, et al. (2017) but emphasized that academics are part of DAP. They agree that academic rigor is viewed as the assurance of instructional quality in the elementary and secondary world but propose that academic rigor is present in the DAP classroom and is found in intentional, strategic, instruction and integrated into exploration and play. Academics is just one part of the DAP classroom environment which also considers the cultural, social, emotional, and cognitive development needs of the child. Children can achieve academic goals while the needs of the whole child are addressed in a developmentally appropriate setting. They conclude by stating that to provide academically rigorous DAP, teachers must be intentional and

provide safe places to explore, allowing children to revisit knowledge and skills so it becomes firm.

To demonstrate how a teacher may perceive the DAP versus standards debate within the classroom two research studies were found. Goldstein (2007) conducted a qualitative study of two kindergarten teachers to study teacher practice within the context of state and national standards. The teachers, from a mid-sized city in Texas, were required to follow instructional planning guides aligned to state standards. Data were collected through three weeks of observation and interview. Interviews covered curriculum, instructional decisions, beliefs about children's learning, challenges they face, changes to kindergarten. The researcher purposefully didn't use the words developmentally appropriate practice or standards however the teachers volunteered that they became educators with beliefs that child-centered, play-based approaches are best practice and had experience creating DAP kindergarten classrooms.

Goldstein (2007) found that the teachers felt a sense of urgency to cover all the material, and that parent expectations, prescribed curriculum, and first-grade teacher expectations require them to "negotiate" DAP with standards, structured lesson plans, mandated curriculum or using their own knowledge to choose strategies. This focus led them to eliminate practices that were emergent skill focused or based on children's interests. Both teachers felt they could teach the standards through DAP experiences. They used a range of strategies to meet standards, differentiated instruction and made modifications for children. They had the support of the principal not to follow the prescribed planning guide and supplemented the district-mandated materials with their

own. The results of the study suggest that more research is needed on the balance of DAP and standards.

Erickson (2016), in a review of the literature to understand DAP practice and literacy standards in kindergarten instruction, found that DAP is missing in the skill-based kindergarten classroom. She reported that if learning experiences aren't in line with the child's developmental level, learning needs or culture, then feelings of inadequacy, anxiety, and confusion will occur. She also reported that a skilled kindergarten teacher can balance child-centered and skill-based approaches but that more research is needed on DAP and the implementation of standards.

An example of the standards versus DAP debate was also present in an analysis of pre-k policy in New Jersey and Wisconsin. The analysis provided by Graue et al. (2017) was a multi-site, comparative case study which sought to understand how policy is administered. The primary research question sought to determine if early learning standards are moving early childhood education curriculum toward academic instruction. District leaders, state staff, teachers were interviewed and artifacts were reviewed from rural, midsize, and urban districts. Classroom quality was rated using CLASS and children were followed from preschool to kindergarten. The authors found misalignment between DAP and expectations of school readiness which is often defined as academic skills and concepts. The authors found that Wisconsin, a local control state, had a more social skill focus while New Jersey, a highly regulated early childhood state implemented a developmentally compromised curriculum.

Beliefs and definitions of school readiness. Beliefs about the elements of school readiness influence the structure and process features of programs resulting in variation in belief systems related to pre-k instruction and school readiness (Daugherty et al., 2009). The consequences of variation in beliefs about what defines school readiness is found in several research studies.

Teachers need a comprehensive and consistent definition and expectations of school readiness in order to assess it with validity (Mashburn & Henry, 2004). Mashburn and Henry's research found that teachers' ratings of a child's readiness skills were related to the teacher's education level. Preschool teachers with lower education tended to rate a child's school readiness higher than an actual skills assessment while teachers with more education tended to rate a child's readiness more closely to the skills assessment. They acknowledge that not included in the research is an identification of teacher bias and the teacher's own definition of school readiness.

Another study found that the age of the teacher may influence beliefs of school readiness. A study by Lin et al. (2003) revealed that younger teachers rate academic skills higher than older teachers. They also found differences between preschool and kindergarten teachers with pre-k teachers rating problem-solving as key to school readiness and kindergarten teachers reporting appropriate school behavior as key to school readiness.

Abry et al. (2014) using data from the Early Childhood Longitudinal-Birth Cohort born in 2001, asked teachers to rate the importance of 12 skills in the areas of academic, self-regulatory and interpersonal skills. The research identified misalignment between

the readiness skills beliefs of pre-k and kindergarten teachers finding that pre-k teachers often align with social-emotional skills as an indicator of readiness while kindergarten teachers focus on the acquisition of academic skills as an indicator of school readiness.

Other research has focused on the conflict created when teachers attempt to use developmentally appropriate practices within the standards-based environment to promote readiness. In a 2014 study of 103 teachers, Hur et al. (2014) found that teachers report conflict between an emphasis on cognitive achievement and school readiness with their efforts to provide free choice and diverse learning opportunities. Graue et al. (2017), found similar reports, with teachers stating that their beliefs of DAP and definition of school readiness did not align. Teachers reported that school readiness meant that the academics of kindergarten were pushed down to pre-k with a focus on academic skills, concepts, and achievement.

Brown and Pickard (2014), conducted research on programs that had an empiricist view of school readiness. An empiricist view means that the ability of the child to be ready for school lies beyond the child. In these classrooms, teachers were expected to teach specific knowledge and skills to cover state pre-k standards. Teachers in the study did not let the academic expectations or the standards define their teaching but considered the developmental needs of the children, providing differentiated instruction with scaffolding. The researchers also found that high, average, and low quality classrooms have teachers whose ability to balance standards-based outcomes, curriculum, and DAP differ, leading to the conclusion that to be an effective teacher who uses DAP in a high-

stakes context, teachers must be able to balance the needs of children with the curriculum.

Teacher education. Studies have researched the link between teacher education levels, certification, and years of experience on developmentally appropriate beliefs and practices. Han and Neuharth-Prichett (2010) in a study of teacher beliefs based on education level found that the level of education does impact beliefs with higher education levels more strongly endorsing DAP then lower education levels. Early research found that teachers certified in early education were more likely to report DAP beliefs (McMullen & Alat, 2002; Vartulli, 1999). Teachers with certification showed a higher quality of observed practices (Wilcox-Herzog, 2002). Another study compared years of service and teacher training. This study found that teachers in high and average quality classrooms had fewer years of experience and higher levels of training and education than teachers in low-quality classrooms (McCarty et al., 2001).

McKenzie (2013), looked at the relationship of National Board Certification to use of DAP. A survey of 246 non-certified and 135 certified early childhood teachers found that although both groups report using DAP, National Board Certified teachers use DAP more. The author summarizes that effective teachers use experiential, expressive, holist, authentic, reflective, social, cognitive, challenging, constructivist, collaborative, democratic, student-centered, and developmental practices more than non-certified teachers.

Professional development. Research has found that professional development can influence the link between beliefs and practice toward DAP, especially for those who

have teacher-directed beliefs and observed teacher-directed learning (Wen et al., 2011). Brown et al. (2015) implemented a qualitative study in a large, diverse, urban district serving at-risk 4-year- olds, to determine the impact of a professional development course to help teachers develop cultural perspective. The year-long course, based on DAP as a base for instruction practice across all developmental domains addressed the social and cultural contexts of children. Teachers were interviewed for their depth of knowledge of DAP and Culturally Responsive Practice (CRP). Most teachers reported that they could balance DAP and standards. At the end of the course, teachers were found to have a greater understanding of how the curriculum was impacting instructional decisions that were not DAP or CRP. The researchers found that teachers used the language of DAP to "hide" instructional decisions that were not DAP or CRP. The authors suggest that CRP can help teachers bring more DAP practices into the classroom.

Summary and Conclusion

The research explored in this literature review indicates that teachers have beliefs aligned to the DAP framework as presented by Copple and Bredekamp (2009). This framework, grounded in the theories of early childhood development provides a foundation for providing a high-quality, effective learning environment. The research also indicates that high-quality classrooms, instruction and positive outcomes for students can be attained by implementing DAP. However, to provide high-quality learning environments and instruction, promote positive outcomes for students, and to attain the outcomes needed to close the achievement gap, effective, intentional preschool teachers must be able to implement developmentally appropriate practices with fidelity.

To promote high-quality learning environments through the DAP framework, researchers have provided concepts in need of further research. One of the suggested concepts is to further research teacher beliefs and connections to practice. Some have stated that there are few studies that research teacher beliefs and the connection to experiences and environments that the teachers offer (Daugherty et al., 2009). Abry et al. (2014) stated that teacher beliefs and how they impact teaching practices and behaviors need to be examined further. Others have suggested that future studies focus on the link between child-centered beliefs and practices and their dependence on the educational context and how teachers' conflicting perspectives may impact their practices.

Professional development needs to include reflective practice so teachers can revisit their beliefs on how children learn and their role in the learning process (Hur et al., 2014).

Future research should continue to look at the link between child-centered beliefs and practices and the influence on the classroom and learning when teacher's beliefs and practice do not align (Hur et al., 2014).

Some researchers have suggested studies that would clarify the DAP framework. Brown and Lan (2013) stated that a more clearly defined conception of DAP that allows teachers and researchers to more easily identify practices as being appropriate or not would benefit the field. Epstein (2009) believed a more specific approach to defining what DAP practices look like in the early childhood classroom would benefit the field.

A common theme in this literature review has been teacher's inability and/or challenges to implement DAP (Brown & Lan 2013; Graue, 2008). The research indicates that teachers strongly endorse DAP beliefs yet their beliefs don't align with their practice

(Graue, 2008; Wilcox-Herzog, 2002). This is the case unless they have beliefs which are defined as developmentally inappropriate. When beliefs of DIP are aligned to practice, research indicates it leads to low-quality classroom environments, low-quality instruction, and poor outcomes for students (Howes et al., 2008; Longstreth et al., 2013; McCarty et al., 2001).

The challenges teachers face as they implement DAP in classrooms has not been researched to the extent necessary to make changes to increase the quality of preschool classrooms. It is important to further study the reason behind teachers' successes and/or barriers to implementing the DAP framework.

This research study explored the beliefs and practices of early education teachers and alignment to the DAP framework. It investigated successes and barriers to full DAP implementation in preschool settings.

CHAPTER III

Methodology

Research identifies developmentally appropriate practice (DAP) as a feature of highly-effective early childhood instruction and best practice in the early childhood education setting (Alford et al., 2016; Brown & Lan, 2013; Hur et al., 2014). Research further demonstrates that teachers believe developmentally appropriate practice is an important feature of early childhood instruction. (Wen et al., 2011). The beliefs of teachers have been shown to impact instructional decisions and practice. The research indicates that teachers filter their decisions about instruction through their beliefs about how children learn (Charlesworth et al., 1991; Hatcher et al., 2012, Murray, 2015, Stipek & Byler, 1997). Despite strong beliefs in DAP, teachers struggle to implement it in their classrooms (Brown & Lan, 2013; Graue, 2008). This presents challenges to achieving high-quality instruction.

To provide high-quality instruction which promotes positive outcomes for students and to attain the outcomes needed to close the achievement gap, effective, intentional pre-k teachers must be able to implement DAP as part of an array of instructional strategies (Erickson, 2016). Researchers report that it takes a highly-skilled teacher to navigate the complex balance of DAP, standards, definitions of school readiness and other pressures to provide an environment for learning that utilizes the full spectrum of DAP principles, guidelines, and strategies (Hamre, 2014; Howes et al., 2013). The level to which early childhood teachers are able to implement developmentally appropriate practices while navigating pressures of curriculum, calls for

school readiness, and accountability is in need of further research (Erickson, 2016; Pianta et al., 2016; Wen et al., 2011).

The purpose of the study was to identify the beliefs and practices of early education teachers in Minnesota school-based PreK-4 programs and their alignment to developmentally appropriate practice (DAP) principles, guidelines and teaching strategies as defined by the National Association for the Education of Young Children (2009). By investigating the lived experiences of highly-skilled teachers who are identified as "proficient" or "distinguished" as defined by Charlotte Danielson's Enhancing Professional Practice: A Framework for Teaching (2007), "high" as defined by the Classroom Assessment Scoring System (CLASS) (2008), or "innovating" as defined by The Marzano Teacher Evaluation Model (2013), this research explored the beliefs and practices of early education teachers, specifically looking at teacher selection and implementation of instructional strategies in relation to developmentally appropriate practice. It further explored the elements that contribute to teachers' success and/or barriers to implementation of DAP.

Qualitative Research and Phenomenology

The research design for this study was a phenomenological approach.

Phenomenology lies with the body of qualitative research methods. It seeks to explore the lived experiences of individuals who share a common concept or phenomenon with the goal of developing a description of the experience (Creswell, 2013). Phenomenology then is interested in how individuals experience the phenomenon and their relationship to it. Vagle (2018) continues by stating that phenomenology is interested in "trying to slow

down and open up how things are experienced" (Vagle, 2018, p. 23). Edmund Husserl, considered the principle founder of phenomenology, described it as the study, not of the individual but of how a phenomenon is appearing or lived. Individuals help the researcher by allowing them access to the phenomenon in the world (Vagle, 2018). The final result of the phenomenological inquiry is to define the essence of the phenomenon or the essential nature of the phenomenon (Moustakas, 1994).

There are defining features of phenomenology identified by Creswell (2013) and based on the work of Moustakas and van Manen. First is the identification of a phenomenon, experienced by a group of individuals. These individuals have both subjective and objective experiences related to the phenomenon with data obtained typically through interviewing the individuals. Prior to data collection and analysis the researcher must bracket themselves by acknowledging their own personal experiences with the phenomenon. Data analysis follows a set of procedures which takes the statements obtained from the participants and identifies themes or units of meaning. The end result is a description of the phenomenon which defines the essence of the experience.

Although phenomenology is defined by these features, the process to achieve the essence of a phenomenon can take many forms. Giorgi's descriptive phenomenology, Max van Manen's interpretive or pedagogical approach, Dahlberg, Dahlberg, and Nystrom's reflective lifeworld research approach, and Edmund Husserl's transcendental phenomenology are some examples (Vagle, 2018). Transcendental phenomenology, with

data collection and analysis procedures described in depth by Moustakas (1994), provided the methodology for this study.

Characteristics of transcendental phenomenology. Based on the work of Husserl, transcendental phenomenology focuses on the discovery of and description of the experiences of the study participants and provides a systematic methodology for results. The conceptual framework of transcendental phenomenology requires the implementation of the following unique concepts: intentionality, intuition, and intersubjectivity as a means to achieve a transcended point of reference, leaving the researcher open to arrive at the true essence of a phenomenon. Additionally it uses transcendental phenomenological reduction and imaginative variation as a means of data analysis. The end result is an "intentional" composite of the textural and structural description that describe the essence of the phenomenon (Moustakas, 1994).

Intentionality or "intentionality of conscious" (Moustakas, 1994, p. 28) seeks to identify the various dimensions of the phenomenon. It not only requires that the phenomenon be identified, or the "objectifying quality" but that the feelings that the phenomenon invokes also be identified, called the "non-objectifying quality". This is achieved by providing opportunities to explore both the textural, or the "what" of the experience and structural, or the "how" dimensions of a phenomenon. Intentionality is used in the process to synthesize the textural and structural descriptions to obtain the final essence of the experience.

Moustakas (1994) states that before the researcher can be open to understand the experiences of others and become "accessible" to the insights and perceptions or others,

the researcher must through transcendence, become aware of their own consciousness, setting aside all pre-judgements, and be ready to see the phenomenon as if it were new. Intuition is the reflective process which occurs prior to bracketing oneself from the phenomenon. It requires that the researcher move beyond what may be seen intuitively so the researcher is open to see the real phenomenon.

Intersubjectivity requires the researcher to fully identify their consciousness, or subjective perception of the phenomenon. This leaves the researcher open to experience the "Other" (Moustakas, 1994, p. 37). The other, is the experience or phenomenon that becomes part of the researcher's consciousness beyond their own subjective perceptions of the phenomenon.

The first step in transcendental phenomenological data collection and analysis is bracketing or epoche. Epoche is a concept used by Husserl, and means to "refrain from judgment, to abstain from or stay away from the everyday, ordinary way of perceiving things" (Moustakas, 1994, p. 33). In epoche or bracketing the researcher sets aside their own understandings, experiences, and judgments about the phenomenon and remains open to what may be discovered. Creswell (2014) also identifies the role of the researcher, termed reflexivity, as an important consideration. The biases, values, background, experiences of the researcher are to be identified as these may influence the interpretation of the data.

Data are collected from individuals who have experienced the phenomenon and is typically done through interviews. Data analysis begins with transcendental phenomenological reduction and imaginative variation in a process called horizonalizing.

Horizonalizing, or identifying each new horizon or idea, reduces the data to significant statements and then combines them into themes called invariant constituents. Following data analysis, the researcher prepares a textural and structural description. The textural description describes the "what" of the experience and the structural description describes the "how" of the experience. The textural and structural descriptions together form the essence of the experience. (Creswell, 2013; Moustakas, 1994).

Rationale. Transcendental phenomenology was the most appropriate method for this research because the means used to establish epoche as well as the methods of data analysis ensured objectivity, reliability, and trustworthiness. The study's purpose was to explore the beliefs and practices of highly-skilled teachers in school-based preschool programs. Beliefs and practices are variables that are not easily measured and can be subject to researcher bias. A phenomenological research methodology presents an opportunity to gather information from those who are most closely associated with the experience. Their common, shared experiences along with using the methods of data analysis indicative of transcendental phenomenology afforded the greatest likelihood of maintaining objectivity in the research while identifying the essence of the participant's experiences. In addition, methods to establish epoche in transcendental phenomenology assisted the researcher in bracketing out her own experiences, perceptions, assumptions, and feelings associated with the phenomenon.

Another factor identified by Creswell (2013) which highlights a reason for employing a qualitative, phenomenological approach to this study is the ability to "empower individuals to share their stories, hear their voices" (Creswell, 2013 p. 48).

This study provided a voice to those closest to the experience: the teachers. Their voices are often not considered in the conversation of features of early education instruction which contribute to providing high-quality early learning experiences for children, especially those who may be marginalized or experiencing risk factors.

Subjects

This research explored the beliefs and practices of early childhood educators teaching 4-year-old preschoolers (PreK-4) in public-school programs in Minnesota.

Moustakas (1994) and Creswell (2013) recommend a minimum of three to ten subjects for data collection through interviews in transcendental phenomenology therefore nine early childhood educators were selected for interviews.

The research further explored the alignment of their beliefs and practices to developmentally appropriate practice (DAP) and sought to identify successes and barriers to DAP implementation. The focus was on school-based, PreK-4 teachers as they are closely connected to recent, large investments in pre-k funding in Minnesota and have seen increased demands for accountability through institutional monitoring and adherence to quality rating systems.

There were two criteria important to the participants of this research, that they be highly-skilled and that they teach in classrooms with diverse student populations. The research of Hamre (2014) identifies that it takes a highly-skilled teacher to navigate the complexity of the early childhood classroom. In addition, the exploration of the lived experiences of highly-skilled teachers is important to this study because there is value in learning from those who are succeeding in the classroom and providing high-quality

experiences for all students. The value is seen, when the skills, processes, decision-making, and implementation process are identified and then shared with educational leaders, whose responsibility is to provide quality learning for all children. The information can also be used to create systems and institutional climates that support all early educators.

There is also value in identifying skills that can be shared with early educators who are identified as providing low-quality learning for children. Identifying themes and lessons from the experiences of teachers who are providing high-quality instruction through implementation of DAP, resulting in positive outcomes for students is information which can be used to coach and mentor other teachers. In addition, the ability to identify barriers to implementing DAP beliefs and practices can help the field further address issues of quality.

Identifying teachers with diverse student populations was important to the study to ensure that the DAP features of cultural considerations and individual learning needs of all children were explored. In order to address these aspects of DAP, it was important to seek participants who taught in classrooms with diverse student populations so as to see if the cultural and diverse learning needs of students were met through implementation of DAP.

The participant selection process was criterion sampling. The first step was to identify programs that have a diverse student population, increasing the likelihood that teachers will have diverse classrooms. Therefore school districts who serve diverse student populations with greater than 40% students of color were identified.

Program quality assurances were also considered. To ensure a minimum level of quality is already attained by programs, participants from 4-Star Parent Aware-rated or Parent Aware exempt programs were sought. Parent Aware is Minnesota's quality rating system (QRIS) for early education programs. Programs who receive state funding to provide early education must maintain a 4-star rating or be exempt such as Voluntary PreK programs. This rating ensures that programs are using state-approved curriculum and assessment tools as well as assurances of continued professional development opportunities for teachers.

Highly-skilled teachers were the next criterion to be addressed. This study interviewed teachers who are highly-skilled, therefore programs that are using an identified, valid, reliable teacher evaluation tool will be identified. Three such tools used in the field are Charlotte Danielson's *Enhancing Professional Practice: A Framework for Teaching* (2007), the *Classroom Assessment Scoring System* (CLASS) (Pianta, LaParo, & Hamre, 2008) and *The Marzano Teacher Evaluation Model* (2013).

The first three criteria (i.e., diverse student population, 4-Star Parent Aware-rated, and teacher evaluation processes) were established through contact with early childhood program administrators. Once these were established, a list of potential school districts from whom eligible participants could be identified, was created. Contact was made with the school district or program administrator to receive permission to conduct the study and a request made for names of possible study participants. Contact with potential interview participants was made via email invitation (Appendix A). When an invitation

to participate was accepted, informed consent (Appendix B) was obtained and an appointment to conduct the interview set.

Data collection occurred from a variety of school district sites, so information regarding the demographic and geographic locations was also collected from information publicly available through the Minnesota Department of Education.

Limitations. The work of Duncan and Magnuson (2013) and Kagan and Kauerz (2012) identify that early education is complex, consisting of fragmented policies, uncoordinated funding streams, differing values about service models and classroom practices. Therefore the ability to generalize the results of this research beyond the Minnesota, public-school settings from which the interview participants reside is limited. In addition, unique, local control features may also limit transferability as they may influence the ability of early education teachers to implement their beliefs and make instructional decisions. Local control features include items such as: local definitions of school readiness, levels of implementation of Minnesota's early learning standards, *The Early Childhood Indicators of Progress* (2017), locally implemented curriculum and assessment, and local initiatives which inform local practice such as PreK-to-grade 3 alignment.

Other factors that limit the transferability of the findings include the interview questions. They were structured to identify barriers and drivers of DAP implementation that may only apply to the specific school-based settings of the interview participants.

Another limitation of the study is the variety of teacher evaluation tools used to determine the participant's level of skill. The variety of tools combined with the accuracy of the

ratings may have influenced the criteria selection process of the participants. An additional factor is the variety of program options that deliver education to prek-4 students in Minnesota school-based settings and are represented by the interview participants, is a unique to feature of Minnesota school districts.

A final reason for the limitations of phenomenological research in general is provided by Moustakas (1994) who states that the essence of a phenomenon as developed through the synthesis of the textural and structural components is specific to a place and time.

Data Collection Procedures

Data will be collected using procedures consistent with transcendental phenomenological research based on the work of Moustakas (1994) and phenomenological research by Creswell (2013). These include interviews with between three to ten interview participants, designing an interview protocol, determining an interview location, and obtaining consent.

Based on the available population of potential participants through criterion sampling and the recommendation of Moustaka (1994) and Creswell (2013) that interviews should be conducted with between three to ten participants with a target number of interview participants is six. In-depth, in-person interviews were conducted with nine participants after consent was obtained (Appendix B). Using an open-ended focused approach with a printed interview protocol providing room for interviewer notes (Appendix C), interviews took place at a location mutually agreed upon by the participant and researcher. Interviews, expected to last from 60 to 90 minutes, were recorded using

two digital recording devices purchased specifically for the purpose of this research. Two devices were used so that one could be used as a back-up. The devices were stand-alone with built in microphones typically used for recording interviews. The recorded interviews were transcribed by a professional transcription service Verbalink, who provided verbatim transcriptions of the interviews. To validate the data, the accuracy of the transcription was obtained through member-checking. The finished transcripts were shared with participants to determine accuracy and provide an opportunity for comment. The comments provided by the interview participants were included in the final transcription used for data analysis. Anonymity was maintained through the use of aliases. For this research, fictional school district names, general locations such as urban, suburban, or rural, and fictional names of participants were used. Upon completion of the study data including recordings and transcripts of interviews and interviewer notes were stored at Minnesota State University, Mankato, Edina, Minnesota campus.

Interview question development and the interview protocol were developed based on interview criteria established by Creswell (2013) and Moustakas (1994). The printed protocol featured open-ended questions with space for comments and notes. Open-ended questions were used so participants could fully share their experiences with the phenomenon. One-on-one interviewing was used as a means of ensuring that each participant had a unique opportunity to share their experiences. Interviews were digitally recorded using two digital recording devises purchased specially for this research, and

included the taking of field notes as suggested by Creswell (2014) as a means of maintaining reflexivity.

Based on Moustakas (1994) guidelines, the interview protocol was composed of questions that identified the textural and structural components of the phenomenon. The textural component was to identify what the participant experienced or to confirm the existence of the phenomenon. The structural component was to identify the context and situations of the phenomenon. Together the textural and structural components form the essence of the phenomenon.

Textural Questions:

- 1. What instructional strategies do PreK-4 teachers use within their classrooms?
- 2. What factors do PreK-4 teachers consider as they determine their daily instructional strategies?

Structural Question:

- 1. What are the beliefs of PreK-4 teachers regarding the use of developmentally appropriate practices within their classrooms?
- 2. How do the instructional practices selected by PreK-4 teachers align with their beliefs of developmentally appropriate practices?

In addition to the interview questions to identify the textural and structural components, demographic questions were developed, based on surveys created for research of teacher beliefs and practices, and were used to gather additional information about the interview participants related to education, certifications, licensure, number of years in the field, and classroom demographics (Appendix C).

Role of the Researcher. The value of high-quality early education to meet the needs of all children and provide opportunities to close the achievement gap is documented in the literature. Defining high-quality instruction in the past has been a subjective endeavor, however with recent research from Pianta, Hamre, Curby, and others, the elements of what defines high-quality in early education have been made clearer. With this knowledge and with calls for accountability in early education, the formal evaluation of teachers in school-based, preschool programs to meet Teacher Development and Evaluation (TDE) requirements has become routine. This has resulted in conversations and comparisons among early education administrators regarding the depth of teacher's abilities to provide high-quality instruction and implementation of developmentally appropriate practices.

As both a teacher and administrator with 29 years in the field of early education, I have extensive experience coaching and evaluating teachers across many settings such as Head Start classrooms, child-care, and public-school, preschool settings. Through evaluations, observations, and conversations, I have found that early childhood teachers use the language of DAP to describe their beliefs about early childhood instruction and often use it as an indicator of their ability to provide high-quality instruction. This demonstrates to me that DAP has greatly influenced the field of early education and how teachers approach the instruction of young children. I have also found that early childhood teachers use the language of DAP to support their decisions about instruction. Although they express strong beliefs of DAP, I don't observe the same level of implementation of DAP practices. This has seemed true for teachers along the entire

spectrum of evaluation ratings and especially true for those who are providing low-quality instruction. To provide the level of high-quality, culturally responsive instruction needed to promote positive outcomes for all children and to close the achievement gap within the context of play-based environments, how teachers implement DAP in early childhood education settings is in need of study.

Influenced by Hamre's (2014) research which demonstrates that it takes a highly-skilled educator to navigate the complexity of early education classrooms and knowing that as a program administrator my primary responsibility is to ensure every child receives a high-quality early learning experience, I am compelled to more fully understand the role of the teacher within the classroom, especially as it aligns with developmentally appropriate practices. Undertaking research which provides teachers an opportunity to share their experiences and stories is a means to achieve understanding.

Data Analysis

Data analysis was conducted using steps outlined by Moustakas (1994) and Creswell (2013). For transcendental phenomenological research, Moustakas (1994) provides a systematic procedure for analysis of interview data to reduce the data to the essence of the phenomenon. These steps include: epoche, transcendental phenomenological reduction, imaginative variation, and synthesis. A worksheet was created to organize the data analysis process (Appendix D).

The first step in transcendental phenomenological reduction is epoche: that is to set aside one's own perceptions of a phenomenon in order to study the lived experiences of the study participants and to see the phenomenon in a new way. (Moustakas, 1994).

Epoche or bracketing was achieved in transcendental phenomenology through a series of reflective steps and prepared the researcher to be fully open and to listen to the study participants without assumptions and presuppositions.

Next, the textural description, to describe the "what" of the experience in clear detail, was achieved through transcendental phenomenological reduction. Phenomenological reduction is a prescribed process involving horizonalizing; the clustering of horizonalized statements into units which are further clustered into categories or themes. Horizonalizing, which means to capture each new horizon or idea, requires careful consideration of the data, recognizing that each statement and quote may be important to the description of the experience. This was accomplished by identifying invariant or essential constituents which are those statements relevant and unique to the experience. Next the horizonalized statements or invariant constituents were clustered into themes and labeled and repetitive statements removed. A textural description was developed for each theme using quotes and stories from the transcribed interviews. At this point in the data analysis, validation of the textural description was accomplished by comparing the themes against the transcript record and member-checking of the description. Comments from the study participants were considered in the editing of the final textural description.

The structural description, to describe the "how" of the experience was completed after phenomenological reduction using information from the textural descriptions and using a process called imaginative variation to determine the structural themes. The structural description considered the context, conditions, and setting of the phenomenon

and factors which may influence it (Moustakas, 1994). Using intuition, imaginative variation consisted of systematically considering the structures that explained the phenomenon. It also considered the universality of the structures and considers features such as time, place, relationships, and feelings related to the phenomenon. This process identified invariant or essential constituents that are clustered into themes. A structural description using stories and quotes is written for each theme and is based on the textural description and results of imaginative variation.

The final step in the data analysis process was called intentionality and uses intersubjectivity to create a "synthesis" of the textural and structural descriptions to provide the essence of the phenomenon common to all the study participants. The final statement used text and tables to provide a complete picture of the phenomenon.

Moustakas (1994) suggests writing a "creative close" to describe the essence of the study. This close can include the value of the study to the researcher and future studies or directions of the researcher.

Trustworthiness, authenticity, and validity. A researcher can ensure study trustworthiness, authenticity, and validity by adhering to verified data collection and analysis techniques such as those outlined by Moustakas (1994) and Creswell (2013). Member-checking at two stages of the analysis process was utilized. First, the transcriptions of the interviews were made available to the interview participants for assurances of accuracy and comment. Comments from the interview participants were included in the transcriptions used for data analysis. In addition, themes were returned to the interview participants for verification and comment (Appendix E). Themes were

edited as necessary to ensure the textural and structural components of the experience were the true phenomenon experienced by the participants. Validity was obtained by using thick, rich texts including the use of stories and direct quotes from the study participants.

CHAPTER IV

Findings

Purpose and Research Questions

The purpose of the study was to identify the beliefs and practices of early education teachers in Minnesota school-based PreK-4 programs and their alignment to developmentally appropriate practice (DAP) principles, guidelines, and teaching strategies as defined by the National Association for the Education of Young Children (2009). This research explored the beliefs and practices of highly-skilled early education teachers by looking at teacher selection and implementation of instruction strategies in relation to developmentally appropriate practice. It further explored the elements that contribute to teacher's success and/or barriers to implementation of DAP.

Research has identified that the majority of children in preschool programs do not have access to the process and structural quality features needed to provide the level of high-quality experiences necessary to fully prepare them for kindergarten and close the achievement gap (Barnett et al., 2007; Chien et al., 2010; Duncan & Magnuson, 2013). To provide high-quality learning environments and instruction, intentional pre-k teachers must be able to include developmentally appropriate practices as part of their instruction repertoire (Alford et al., 2016; Huffman & Speer, 2000; Macron, 1999).

Hamre (2014) and Howes et al. (2013), identified that it takes a highly-skilled teacher to navigate the complex balance of DAP, standards, definitions of school readiness and other pressures to provide an environment for learning that supports the whole child. Therefore, an exploration of the beliefs and practices of highly-skilled early

education teachers is necessary to determine if high-quality experiences, aligned to DAP principles, exist for young children in Minnesota's school-based early education settings. Further, by exploring the implementation of DAP practices, it is possible to identify best practices that can inform the field of early education to expand and enhance the outcomes for children helping to ensure equitable learning experiences for all children in Minnesota's school-based programs.

The research was driven by these primary research questions:

- 1. What instructional strategies do PreK-4 teachers use within their classrooms?
- 2. What factors do PreK-4 teachers consider as they determine their daily instruction strategies?
- 3. What are the beliefs of PreK-4 teachers regarding the use of developmentally appropriate practices within their classroom?
- 4. How do the instruction practices selected by PreK-4 teachers aligned with their beliefs of developmentally appropriate practices?

In addition, interview questions were used to identify the barriers teachers face as they implement their daily instructional strategies and strategies aligned to developmentally appropriate practice as well as what contributes to their success as a highly-skilled early education teacher.

The experience of being a highly-skilled early childhood teacher in a school-based setting, implementing DAP, was explored using a phenomenological research method called transcendental phenomenology. Using transcendental phenomenological data analysis to investigate this phenomenon provided insight into the extent to which

teachers can implement DAP while navigating the challenges of the school-based early education setting.

Epoche - My Experiences with Developmentally Appropriate Practice

Epoche or bracketing, a concept used by the phenomenologist Husserl and defined by Moustakas (1994), is the first step in a transcendental phenomenological study. To achieve epoche, the researcher sets aside their own understanding, experiences, and judgments about the phenomenon to be studied in order to remain open to what may be discovered. This is done through intersubjectivity, the act of fully identifying any subjective perceptions about the phenomenon. The result is that the phenomenon is "bracketed" and kept free of the biases, values, and experiences of the researcher. The researcher must define and fully disclose their past experiences with the phenomenon. They must further explore how these past experiences may have shaped the interpretation of the findings, conclusions, and interpretations of the phenomenon (Moustakas, 1994). To define epoche for this study, I begin with a description of my first encounters with developmentally appropriate practice, how it informed my work and analysis of observations of teachers, and conclude with my vision of what developmentally appropriate practice means for the field of education.

Developmentally appropriate practice has been part of my experience in early education since the early 1990's. The term developmentally appropriate practice, along with the extensive definition provided by the National Association for the Education of Young Children, provided a context for my work and the work of my colleagues in early

education. It also became a guide to promote appropriate early childhood education learning experiences.

In the early 1990's, early childhood education was experiencing the push down of kindergarten, academic content. Early education, provided by Minnesota school districts, was relatively new and the push-down of content and the testing of children as described by David Elkind in his book, "The Hurried Child" (1989) to determine "readiness" for kindergarten was a reality. There was an urgency to identify and protect the learning of young children. DAP, as defined by the NAEYC (1988), became the language we used to uphold the ideals of whole child education with learning experiences crafted, based on our knowledge of development and where children are on their developmental journey, to meet their needs through play.

I also found through the observation and coaching of early childhood teachers, that there is sometimes a lack of understanding of the concept of developmentally appropriate practice. Teachers often define it by what they do; "I provide a play-based environment because children learn through play" or define it by what they don't do; "I don't do worksheets". DAP is a complex term and some teachers don't fully grasp the breadth and depth of developmentally appropriate practice. This has led to poor quality learning environments, with some teachers, knowing that DAP is an important component of quality learning for children but using the language of DAP to cover-up poor quality instruction. This often includes instruction based on a theme rather than information about the child's learning needs, leading to a lack of differentiated instruction.

The field has strived to be recognized as a legitimate field of education, worthy of the same recognition as its K-12 partners. It would benefit the K-12 world to understand DAP and have early childhood educators provide concrete evidence of their work. Early childhood teachers need to be able to articulate what they do in their classrooms so others better understand the environment of the early childhood classroom. An attitude of "reaching up" to K-12 would provide an awareness of high-quality educational experiences.

My bias is that some teachers, even though they use the term developmentally appropriate practice, do not fully understand what it means, nor implement instructional strategies aligned to DAP. It is my hope that by interviewing teachers who have been identified as highly-skilled, I will hear the principles of DAP used as they describe their instruction, and will hear evidence of DAP within the descriptions of their beliefs and their ability to align beliefs to practice.

I believe that DAP when implemented with fidelity can be a tool used to help close the achievement gap. I also believe it is a framework not just for early education but for K-12 education. In its' simplest form, developmentally appropriate practice is knowing where children are at (formative assessment), knowing a child's culture and family (culturally responsive instruction), and knowing child development (pedagogy informed by brain development and whole child thinking aligned to practice). Then, as an intentional teacher, using this information to "bend" curriculum to meet the needs of each student. This is a recipe for appropriate instruction for all.

Selection of Participants

Moustakas (1994) and Creswell (2013) recommend a minimum of three to ten subjects for data collection through interviews for a transcendental phenomenological study. A target of six early childhood educators was identified for this study. Participants were identified through criterion sampling.

There were two criteria important to this research, that they be highly-skilled and that they teach in classrooms with diverse student populations, therefore the first criterion to be addressed was to find school districts with diverse student populations. This was to ensure that the DAP features of cultural considerations and the individual learning needs of all children could be explored. Using information available from the Minnesota Department of Education's Minnesota Report Card, available on their website, excluding the Minneapolis and St. Paul school districts, I was able to identify six metro area school districts that met the threshold of student populations with at least 40% students of color.

Once identified, an email was sent to the early education program administrators to ask for participation. Six school districts were invited to participate and four accepted the invitation. The second criterion was that the district use an identified valid, reliable, teacher evaluation tool and if the program leaders could identify teachers who were highly-skilled based on evaluation results. All four school districts stated they met these criteria. An email, approved by the Institutional Review Board (Appendix A) was prepared, along with the consent to participate form (Appendix B) that could be forwarded to possible candidates. Teachers were asked to respond to the email via my Mankato State University email address, if they were interested in participating in the

research. Eleven participants from all four school districts responded and nine were selected for interviews. Table 1 provides a summary of participants and selection criteria.

Table 1
Summary of Interview Participant Selection Criteria

Participant	School District	% Diversity ^a	Evaluation Tool	Rating
Amy	Cedar Lake	64	CLASS	High
Kim	Fish Lake	50	Danielson	Distinguished
Sue	Fish Lake	50	Danielson	Distinguished
Ann	Cedar Lake	64	CLASS	High
Lisa	Fish Lake	50	Danielson	Distinguished
Emma	Fish Lake	50	Danielson	Distinguished
Kari	Cynthia Lake	57	Danielson	Distinguished
Amanda	Fish Lake	50	Danielson	Distinguished
Tessa	Pleasant Lake	47	Marzano	Innovating

^aPercent diversity refers to the percent of students in the district who are students of color. Retrieved from Minnesota Department of Education, Minnesota Report Card. http://rc.education.state.mn.us/#mySchool/p--3

Data Collection Procedures

Data was collected using procedures consistent with transcendental phenomenological research based on the work of Moustakas (1994). Through criterion sampling, nine participants were identified to participate in in-depth, in-person interviews. These interviews were conducted using an interview protocol approved by the Institutional Review Board (Appendix C). Interviews were conducted from May 17, 2019

through June 13, 2019. Interviews were held at three different locations, based on the preference of the participant. Two interviews were held at the program sites of the participants and seven were held at my office located at Crystal Lake Education Center in Lakeville, Minnesota. Interviews lasted from 40 to 70 minutes. The interviews were recorded using two recording devices. The first device was a stand-alone device. The recordings on this device will be stored for three years as per Institutional Review Board requirements. The second device was a recording app on a personal phone device. This recording was used as the primary recording and used to prepare the transcriptions. The recordings of the interviews on the phone device were deleted upon completion of data analysis.

The recordings of the interviews were uploaded to a professional transcription service June 16, 2019. Transcriptions were completed by June 21, 2019 and immediately shared with the interview participants as the first point of member-checking. Participants were invited to provide comment either via email or phone conversation. One participant was contacted with follow-up questions. A second participant provided comment through email. The other seven participants commented that the transcript captured their thoughts well and had no further comment.

Data reliability was obtained through member-checking at two points.

Transcriptions were checked by participants for accuracy. Following data analysis and the identification of main themes, themes were sent via email to the participants for comment on August 24, 2019. Six of the nine participants responded to the email.

Participants reported that the themes reflected their experience and felt confident they could support moving forward with the themes.

Description of Participants

Demographic information was collected on the participants through designated questions on the interview protocol (Appendix C). This information was used to identify experiences related to early education, their education, years of service, related experiences, and licensure. A summary of the participant information was prepared in anticipation of possible use for the discussion of the study. The participant summary also established such things as their role, setting, experiences, education, the structural features of their setting and demographic description of their student populations. Table 2 provides a summary of participant information relevant to the findings of the study. Aliases consisting of fictional names and fictional school districts were assigned prior to data analysis.

The nine participants interviewed for this study were all currently working in public school-based settings and fell into three categories. The first group of teachers were currently teaching PreK-4 year olds in a traditional preschool setting. The second group taught PreK-4 students in an alternative setting such as family literacy setting or Early Childhood Family Education (ECFE). The third group had recent experiences teaching PreK-4 year olds but it was not their current primary assignment however they were serving as mentors or coaches to preschool teachers.

Table 2
Summary of Participant Teaching Experiences

Participant	Program	Location	Students	Dosage
Amy	Preschool	Elementary	PreK-4	2.5 hours 4 to 5 days/week
Kim	Preschool	Center	PreK-4	2.5 hours 5 days/week
Sue	Preschool	Center	PreK-4	2.5 hours 3 days/week
Ann	Preschool	Elementary	PreK-4	2.5 hours 5 days/week
Lisa	Family Literacy	Center	PreK-4	2 hours 3 days/week
Emma	Preschool	Elementary	PreK-3 and PreK-4	2 hours 2 days/week
Kari	Preschool	District-wide	Teacher Coach	2.5 hours 2 to 5 days/week
Amanda	Preschool	Elementary	PreK-3 and 4	2.5 hours 2 days/week
Tessa	ECFE	Center	Toddlers to age 5	1.5 hours 1 day/week

Overall, these three groups represented the variety of programs available in Minnesota school-based settings for PreK-4 year old children and therefore is representative of the programs that serve these students. All three groups, due to the requirements of the funding streams, are required to follow the same statutory obligations to curriculum, assessment, alignment to the Early Childhood Indicators of Progress, teacher evaluation, and Parent Aware requirements.

Data Analysis Procedures

The process for data analysis followed guidelines established for transcendental phenomenological reduction as described by Moustakas (1994). This process concludes with the creation of a textural description which identifies that "what" of the experience and a structural description that identifies the "how" of the experience. Together, the textural and structural descriptions are combined to create a description called the "essence" of the experience. The essence is the total experience of all the research questions related to the problem statement and includes personal reflections to provide meaning.

Data reliability was obtained through member-checking at two points.

Transcriptions were checked by participants. Following data analysis and the identification of main themes, themes were sent via email to the participants for comment. Six of the nine participants responded to the email. Participants found that the themes reflected their experience and felt confident moving forward with the themes.

The first step in the data analysis process was to establish epoche. This was done by taking time to reflect on my own experiences with the phenomenon as well as taking notes throughout the data analysis process. The time provided the opportunity to gather values, judgments, and biases through a reflective, prescribed process as I attempted to keep the data analysis portion objective.

The verbatim transcripts were then read in their entirety twice without taking notes. This was followed by a third reading of the transcripts while listening to the audio recordings, jotting notes in the margins, as well as personal reflections. This process

allowed for a better understanding of the emotions, energy, and attachment to the participants teaching and their students.

In preparation for consolidating the gathered data, a data analysis worksheet was created that was composed of three columns: A column for textural invariant constituents, a column for structural invariant constituents, and a column for personal reflections (Appendix D).

The first step, called data analysis step one, included reading through the transcripts by interview participant and research question and identifying each textural invariant constituent. This process, called horizonalizing, is the act of capturing each new horizon or idea. In this step, key thoughts, words, ideas, phrases, and comments from each participant were highlighted and hand written with a summarizing statement or idea in the margins of the transcript. These were then transferred to the textural invariant constituent column of the data analysis worksheet. This step resulted in 332 textural invariant constituents.

Step two of the data analysis process, was again by interview question and participant and involved identifying evidence of the textural invariant constituents. This was accomplished by typing all the textural invariant constituents into the data analysis worksheet and identifying key quotes and comments of participants that described the textural invariant constituents. These were also included in the worksheet. While working through this process, I began to identify the structural invariant constituents through a process called imaginative variation which allows the researcher to creatively determine what items may impact the textural invariant constituents. Structural invariant

constituents can take the form of contexts, settings, time, places, relationships, and feelings. This step resulted in 96 structural invariant constituents. I continued to add personal notes and reflections to the worksheet.

Step three and four were focused on theme reduction. The first phase was done by interview question and by each individual participant. The textural invariant constituents were grouped together with repetitive and overlapping statements deleted. Themes began to emerge and these were noted. 225 textural themes were identified in steps three and four. Structural invariant constituents and personal reflections continued to be identified. This was followed by another round of theme reduction in step five. This time the participants were grouped together, by research question. Both textural and structural themes were further reduced resulting in 27 textural themes and 29 structural themes.

Step six was the final textural and structural theme reduction by research question. Both textural and structural themes were reduced by research question to produce the main textural themes of which there were 22, and the main structural themes of which there were 10. A final theme reduction step was taken to identify the main themes that describe the composite of the textural themes and structural themes. This step included considering all the themes identified by research question as a whole and deleting repetitive and overlapping themes. This final reduction resulted in five composite textural themes and two composite structural themes and finally, the essence of the phenomenon. From this, a summary page was created and was shared with the interview participants via email for member-checking (Appendix E).

To compile the textural narrative, the composite themes identified in the final theme reduction step were layered with notes, and horizons, using examples and verbatim quotes from the participants. The narrative was first outlined by interview question then reduced to include just the composite textural themes. The structural narrative combined examples and quotes from participants with the descriptions, notes, horizons, and invariant constituents, identified in the data analysis process. Thick, rich text using verbatim quotes and examples from the interviews were used throughout to address reliability and validity of the themes. It is noted that the textural and structural narratives have some identical themes however, each presents a different perspective of the theme. Finally, the composite textural themes and the composite structural themes were layered with personal reflections, as allowed by transcendental phenomenological reduction, to create a universal description of the phenomenon called the essence (Moustakas, 1994).

Composite Textural Narrative

The purpose of the textural narrative is to provide a description of the "what" of the experience. In this research, the "what" of the phenomenon is defined by the implementation of DAP aligned practices. What do teachers of PreK-4 students do to plan and deliver developmentally appropriate aligned instruction and what are their DAP aligned practices. The textural narrative was identified through transcendental data analysis to include the following themes.

Theme one: routines, structures, and schedules provides the context or framework for instruction. Theme two: the intentional teacher is where the process of the delivery of developmentally appropriate practice aligned instruction begins and teachers use

Table 3
Summary of the Textural Themes

Textural Theme	Textural Horizons
Routines, schedules, and structures	The importance of routines Intentional planning
The intentional teacher	Embedded learning Differentiation Scaffolding Assessment Curriculum Fun
Meeting children "where they are at"	Getting to know them Connecting with families Using children's interests Cultural and language considerations "Just-right" learning to promote success Flexibility to adapt to children's needs
Play	Length of time Preparing the environment for play Embedded learning in play
Relationship	Connecting with children Connection with families

intentional practices to ensure DAP is delivered. Theme three: meeting children "where they are at" is an important driver of instruction. Theme four: play, is where learning happens in the classroom. Theme five: relationships, provides the environment, safe space, and climate to make all the other themes successful. The textural narrative will describe "what" the teachers do." Table 3 provides a summary of the textural themes.

Theme one: routines, schedules, and structure. This theme was evident in the descriptions the teachers gave regarding the use of time to include learning activities related to music and movement, large motor activities, their small and large group, the instruction provided for literacy, use of transitions, play, providing centers of learning, and the intentional planning of their time through lesson plans and outcomes for learning that define what happens during these routines. Although only six of the nine participants gave descriptions of their routines, this theme provided a context for the other themes, as all learning and DAP aligned instruction is described to happen within the scope of classroom routines and schedules.

The importance of routines. Teachers such as Amy, Sue, and Amanda described the importance of routines, structure, and schedules referring to elements in the day such as small group time, rotating stations, play time, large group, snack, literacy, and self-directed play time. Sue stated, "We do follow a specific routine and schedule every day so that everybody knows what to expect when they come in the classroom." Amanda described the importance of consistency of routine. "I am pretty strict on my schedule. I just know how important that consistency is for them and that they look forward to that routine to know what happens."

Amy, Amanda, and Kim, reported that it's important to inform children about the schedule of the day when they arrive. Kim commented that this happens at large group. "We really start our day as a large group talking about our day. So, we have a daily schedule that we go through, and really making time to hear what is important to them."

Amanda reported that this introduction to the day and review of the schedule also provides time to implement Conscious Discipline (Bailey, 2015) strategies.

Intentional planning. Within the routines and structures of the classroom, teachers commented that everything is intentionally planned. Emma talked about centers of art, math, and writing, sensory, dramatic play, blocks, books in every section, books in the library, large group time, conversations, free choice and explorations, and motor. She reported that everything is embedded. "I've intentionally set up things around the classroom that are based on whatever the theme might be." Tessa also talked about intentional planning for the classroom. "How can I be intentional about it...here's a bucket of Legos and its' math because here's what you can do with it."

Teachers attempt to make wise use of the time with the children, embedding learning into routine events such as transitions and snack. Transitions are planned and differentiated as described by Emma. "I have picture cards, too, for those kids that I know that are gonna have a little bit more challenging time with the transition." Routine events such as snack are a time for learning. Emma and Amanda shared how they use snack for activities such as alliteration games, discussing a message or question of the day, reading a book or for having discussion. Emma described learning during snack. "I have alliteration cards or rhyme cards. So, that's their ticket. When they're done, each child will throw away their stuff, and then, they hand me their ticket, and then, we sing "Alliteration Game"."

All nine teachers, such as Amy commented on time. "It's a lot to cram into twoand-a-half hours." Kim, who has the children everyday expressed the "luxury" of having the students every day, especially to provide differentiation. She commented, "We don't have to rotate through every single one of those (centers) on a daily basis."

Theme two: the intentional teacher. This theme can best be described by a phrase used by several participants, "I know what's best" and is aligned to developmentally appropriate practices that describe the intentional teacher. All nine participants described intentional practices aligned to differentiated instruction, scaffolding, embedded learning, purposeful planning and instruction to adapt to and meet the learning needs of students. In addition, use of curriculum, research-based practices, assessment, and standards were also mentioned as important to the intentional planning and implementation of learning activities. Teachers such as Lisa described how this is achieved in the classroom. "It's all purposefully thought out, what's happening in the classroom. There's a goal and development in everything." Amy described how she "weaves" learning in to the day's activities. "I try to be sure that any academics I need to see, that I'm planning that in and weaving it into the structure of the day...I'm weaving it into a game most of the time." Several teachers commented on the importance of having a plan. Lisa stated, "I feel like in my years of teaching, I've learned that it's important to have a lesson plan going into the day. I'm a huge believer in that. Here's what I'm going to do, this is my goal."

Embedded learning. Sue, Amy, Tessa, and Amanda talked about embedded and engaging academic and referenced the ability to provide academics in a way that is fun, engaging, and makes sense for children. Sue described how she embeds academic skills such as literacy and math into stories, singing and movement. Sue also described being

intentional to ensure certain experiences are available and then guiding the children who need the experiences to that activity. Kim embeds learning into her centers and different spaces in the classroom.

I want someone to walk into the classroom and be able to see the theme and not have to ask me what we might be learning about. The books are the same theme. The posters that we're using during our circle time are the same thing. There's words posted that we're learning so that someone would be able to know our vocabulary right away. Yeah, it's important to have the classroom laid out.

Differentiation. Amanda strives to find activities that meet everyone's different levels and provided examples of how she differentiates instruction.

I've found with doing my stations this year that I can play the same games with them no matter what level they're at... maybe this group is a little bit lower, so we do it all as one. This group might be higher, so they can be more independent.

Kim described how she achieves differentiation by offering an activity she wants children to do such as writing in a journal but allowing different ways to do it such as using pictures instead of letters. Ann shared this example of differentiation in reference to a circle time challenge.

If that's what he needs to be successful, we're gonna meet him where that child is at...maybe they need to sit in a chair. Maybe they need a fidget toy. Maybe they need to be standing and jumping on a trampoline. We have to definitely make all of these considerations. How can we successfully get through a circle time?

Scaffolding. Ann provided examples of how she supports the scaffolding of learning during play by having staff be in proximity, available to provide support, mirroring behaviors, interacting with the children and building in what the need to learn in the moment. "You sit down and you can really play. And I mean like building whatever they're needing to learn, and meeting them where they're at." Teachers commented that in order to promote success we need to meet children's needs. Kari stated that using culturally responsive practices such as call and response, being real with kids, addressing things as they come up as well as allowing for independence are ways to promote success through scaffolding.

Assessment. Assessment was mentioned by all nine of the interview participants as a factor in intentional planning. All participants stated that their district uses Teaching Strategies, GOLD® (TS GOLD®) as their assessment tool. Amy reported on the impact of assessment on planning considerations. "We use Teaching Strategies, GOLD®. So, I have to hit a lot of objectives over time...So, I'll plan activities into small group and large group time that relate to that where I can jot down observations." Ann confirmed how this drives instruction. "Using that tool (TS GOLD®) definitely drives my instruction. Because the only way I can get through the assessment tool is by having my small groups that are directly related to my assessment tool." Ann reported that it is through assessment that she know where her kids are at. "So I know right where my kids should be at with the blue. It's how I drive my instruction. It's how I know I'm developmentally appropriate."

Standards. The Minnesota Early Childhood Indicators of Progress (ECIPs) were mentioned by five of the participants as important to intentional instruction. Lisa described the importance of the ECIPs to planning and how it guides planning. "A big thing is the Indicators of Progress...just to make sure that you're doing something in all those different areas of development." Ann identified that standards drive the work and that the ECIPs are aligned to TS Gold. "The ECIPs, there it is. I know I work from that, I know that that is right where they should be."

Curriculum. Curriculum was talked about by all nine participants as important to intentional instruction through the use of district required curriculum such as Creative Curriculum (Dodge, et al., 2015) or as defined by other curricular activities such as play, learning centers, and developing kindergarten readiness skills. Kari stated that teachers may have to use up to six different curriculum to provide instruction in all domain areas. Kim described spaces for centers, blocks, writing, sensory, books, math, manipulatives, easel art; both teacher and child directed, animals, and fine motor aligned to curriculum. Sue and others identified kindergarten readiness skills as driving curriculum use however, looks to the ECIPs to provide the foundation of this information. Ann, Kim, Tessa, Amanda, and Lisa, although commenting on the standards-based use of curriculum and requirement to use the district-determined curriculum agreed with all nine participants who referenced the importance of flexibility with the use of curriculum. Kim described, "I follow the curriculum that we're given as a district, but I like to really use the children's interest within that as well." Lisa described the process. "You kind of pull it apart and take what parts you want to use and what parts you think aren't going to go so

well." Tessa commented on what this looks like as a program. "Being able to see that all of us doing the same curriculum ...look at how each of us have adapted it to our own classrooms."

Fun. All nine participants commented on the importance of fun. The idea of crafting the curriculum in a manner that keeps the learning fun was an important part of being an intentional teacher. Lisa stated, "Just making sure that they're having fun. I think that's ultimately the goal. I want them to leave me being excited for kindergarten and thinking that school is fun." Emma described trying to make learning fun and to have children learn without realizing they are learning. "That's kind of always one of my big goals. I want the kids to love school, and to have the parents see that their kids love school and start to value that education." Tessa connected the idea of fun learning with the importance of social skills and academics.

I feel it's important that they have fun...the most important thing for them at school is gaining friendships and learning those social aspects in school, and just having fun and playing. That if they're doing all of that then that's great, I can throw in the academic pieces.

Theme three: meeting children where they are at. Whether planning or implementing instruction, this theme was the dominate theme for teachers implementing developmentally appropriate practices and was found throughout the interviews of all nine participants. Many of the participants mentioned this theme by referring to "kids dictate this" or "where they are at" to describe how they implement developmentally appropriate practices and plan for instruction. This theme was characterized by strategies

such as learning children's interests, contenting with children's family, culture, and language, and having fun with learning. Ann described, "My goal is to start with what I know and learned is academically appropriate for them. And then really just practicing, making it into a fun game, doing it over and over. So meeting them where they're at."

Getting to know them. Teachers learn where the children are at through observation and connecting with the children. Emma takes notes on the children.

Amanda makes things fun for them by bringing in their interests and things they enjoy.

I have to think about what levels they're at and try to figure out what they're interested in to see how I can make stuff fun for them and kind of bring in their interests and things that they enjoy. So, I have to get to know them first before I can really get deep into some of the things we're doing.

All the teachers talked about getting to know the children through their play.

Connecting with families. Several teachers including Kim and Emma talked about connecting with the families as part of getting to know students. This involves finding out what is working at home and then bringing it into the classroom to help struggling students. Emma shared this example.

I just have a child who hasn't fallen in love (with school)...I really try extra hard to connect with that child. And so, I'll ask parents questions like, "What do they do at home?" I found out that she loved Pretty Ponies so, I brought in Pretty Ponies and books and it really made a huge difference. So, I really try to get to know those kids.

Using children's interests. The drive to know and understand children's interests to determine instruction was mentioned by all nine participants. Kim uses children's interests and ideas to prepare the classroom. "That's one of my first, points of interest is to find out what maybe they're interested in... I like to incorporate their interests, because then I can keep their interest in what we're doing." Kim goes further by engaging the children in setting up the classroom, using their ideas. "I have the children help me a lot of the time with some of that set up. They always have great ideas...I don't like to set it up if they're not going to be successful in it." Lisa reports that as the year progresses you start to know what "their sparks are."

Cultural and language considerations. Meeting the learning needs of English language learners presents challenges for teachers as the meet children where they are. Emma described a strategy for ensuring students feel connected by including books of all the different languages represented in her room, in the book area. Lisa commented on what this has meant for her instruction. "I really had to change the way I taught...it just was a different way of teaching, and I think it made me be a better teacher." Connecting with families is especially important to the teachers who commented on the importance of cultural considerations for meeting children's needs. Lisa explained, "It's such a fearful thing for a lot of these families that aren't from this country. Just really wanting them to know that I'm there to help them, and that I'm there to partner with them."

"Just-right" learning to promote success. "Just-right learning" for children was mentioned by several teachers including Kim and Amanda. Both noted that children need to be successful and as teachers it's important to figure that out. Amanda noted that

this will vary from year to year, by maturity level, by age and socioeconomic status. It's about what is developmentally appropriate at the time. Kim explained, "Giving them opportunities to grow, but not giving them tasks and activities that are too hard for them...I want to push you just a little bit further because of your interest in it."

The idea of "just-right" learning was evident in descriptions of routine activities such as small group. Amy provided an example of this for her small group activities. "If I'm planning a math activity and I know that my lowest group is struggling counting to five, we might do a grade game that has five on it whereas my highest group – they're adding and subtracting."

Emma recalled a time when she brought "the learning" to a child. She explained that if she recognizes that a child is only playing with certain items like trucks, yet she knows they need to be doing fine motor activities, she will bring the learning to the child. She explained how she accomplished this by using their area of interest.

We are gonna be at the grocery store today and we need to fill this truck up — "what shall we fill it up with?" And I'll be like, "Oh, can you write that down?" And we'll make this note, so, I try to bring the learning to that child.

Flexibility to adapt to children's needs. Flexibility is key to "meeting children where they are at." Whether flexibility is achieved through culturally responsive practice, or the ability to "read the room" and respond or simply responding to the needs of individual children, the importance of flexibility was evident. Lisa, Kim and Ann all provided examples of the ability to be flexible. To know when something isn't working and make immediate adjustments. Lisa explained,

If this isn't working today (the lesson plan), I need to be flexible." I can't just go, "Well, this is my plan, and this is what we're going to do. You need to have that ability to kind of read the room and to read how the kids are, and to be able to say, "Is there another way I can get to what my goal was for today?" I think that's a big thing, is just being flexible and just making sure you're meeting the kids' needs.

Kim described flexibility as the ability to take learning at the children's pace. "I really try to take it at the pace that they're wanting to go." Amanda commented that having flexibility to move at the pace of the children is about having freedom. "I'm lucky that I work in a place that has a lot of freedom in how fast I move."

Theme four: play. The importance of play as part of the instructional practices of the teachers and as part of their descriptions of practices aligned with DAP was present in all nine of the participant interviews. Five participants noted that it's not just about play but allowing for dedicated extended periods of time to play. Kari described dedication to play as extended periods of play in centers offering a variety of activities while adults are interacting, modeling, and inviting. Amanda stated the importance to the development of social skills. "Play is so important and just trying to figure out the social aspects of how to communicate with another student or how to solve social problems."

Length of time in play. The length of play, whether called free play, playtime, or structured play ranged from 40 minutes to 75 minutes. Amy stated, "It's hard to make sure that it's 40 minutes long, but we try our best to make sure that that happens...that's the core." Kim plans for 60-75 minutes of play time stating that it is valuable time for the children. She described why an extended period of play time is important. "Having at

least 60 minutes of the day to be just for play time. I feel it's developmentally appropriate so they can get into that play and really enrich it."

Preparing the environment for play. Preparing the learning environment for play is an important part of the teacher's role. During play children are typically allowed to choose the areas in which they play although small group time is often held concurrent with play. Ann described areas for play such as the dramatic play area, the circle rug area, listening center, sensory table. Sue described it as providing a "framework" for them to explore. "We create a framework for them to explore. If you choose what you put in the sensory table and then you interact with them while they're in the sensory table to kind of guide them as they explore." Tessa went further and stated that play time is more than just letting the children go, but requires diligence to set-up the room and attend to the children. "I like to be involved with them and helping them to get the most out of it, asking them questions and setting up the room to encourage them to play and to learn." Kim commented on room for play is an important part of their classroom space indicating that dramatic play specifically, is the biggest space in her classroom. This ensures there is lots of room for children to be together engaging in different "jobs" that are offered.

Embedded learning in play. Emma provided examples of how the classroom is intentionally prepared with embedded learning in the play stating that it's "not just play" which is great for children, but explained that this also makes the job "hard" and that explaining it to parents "can be difficult." Lisa shared this example of embedded learning in play.

I very purposefully set up the environment so it's not just, "Oh, there are blocks there, and there's a kitchen set there." It's like, "Here's my story," and if we're doing The Little Mouse, the Red Ripe Strawberry, there are bears that you're building. You're building a den with the blocks, and there are strawberries in the kitchen set, and you're putting all this from the story and all this vocabulary that you're working on throughout the room where they're playing.

Quality intentional design in play involves embedded content throughout the classroom and ensuring staff are available to scaffold, differentiate, support interactions, mirror behaviors, and build on the content the children need to learn.

Theme five: relationship. Relationships were described as connecting with students, having reciprocal conversations to greet children, and connecting with families. The purpose of relationships is to create an emotionally safe space for learning and was identified by eight of the nine participants.

Connecting with children. Greetings were identified as an important part of building relationship. Teachers Kim, Emma, and Sue use Conscious Discipline (Bailey, 2015) techniques to greet students and to create community in the classroom. Students are greeted by the teacher or another student and can choose their preferred greeting whether by positive touch which was described as a smile, handshake, pinky hug or eye contact. Emma uses eye contact to connect during her welcome song. "We do a welcome song... I look at all the kids and I try to get that eye contact and that connection."

Kim explained that this time is important to really hear and talk to them.

I give them a lot of time to talk at the beginning of the day, to talk with each other, to me. We have talking sticks that everybody gets a turn, or we have take your turn and talk, or turn to a neighbor and talk. And I feel like that's a good way for us to start our day, because we have so much to say...they just love to be able to share.

Sue confirmed the benefits of research-based practices such as Conscious Discipline (Bailey, 2015) to build relationships stating that the strategies have helped her grow as a teacher by reinforcing the importance of relationship to children's learning.

Emma emphasized the importance of genuine relationships with children and likes to connect with conversation and questions. She described her routine of having a question of the day which provides a hint of what will be happening in the classroom. This initiates a conversation with the children. She then provides opportunities for the whole class to connect through a discussion of the question and welcome song.

Kim summarized the importance of relationship to create safe space for children. "The relationships are super important to me and that sense of feeling safe and calm, and really welcoming them into that environment."

Connecting with families. The teachers described many ways to connect with families. Emma keeps an open policy where families can e-mail anytime. The families can also complete surveys at the end of the school year providing good feedback about what can be done differently. Kim likes to stay connected to families and send positive messages about what the children are doing. This is especially important during times of struggle. She commented, "Connecting with them and knowing that we can get through

this together, and this is how I can help in the classroom, and then what's working at home." Kari shared similar ideas and noted that as a coach she can tell the teachers that don't have relationships with the children and families. "I see it more when there's challenging behavior. You can see there's not that relationship there...if you don't have that relationship, it's not going anywhere...So, it starts with relationships."

When culture is a factor, building relationships with families is even more important. Lisa and Emma both described in depth why this is important to building safe learning environments for children from other cultures. Lisa commented on the importance of understanding other cultures, learning how to connect, letting them know we value them and to show respect for them. Emma creates a culturally welcome classroom by celebrating each child with a families and friends board as well as welcoming everyone in their home language.

The first thing, when you walk into my classroom, on my door, it says, "How do you say, 'Hello'?" And I have every language that I've had for the last 15 years in my classroom. So, I try to make it culturally welcome for everybody.

Summary. The textural narrative as identified through the five themes, described the "what" of the experience. The structural narrative will describe the "how" of the experience by identifying the contexts, time, places, feelings, and beliefs that impact the themes identified in the textural narrative.

Composite Structural Narrative

The purpose of the structural narrative is to provide a description of the "how" of the experience. The structural narrative focuses on context, time, beliefs, and feelings

that impact the phenomenon. Structural themes, determined through data analysis and after the creation of the textural narrative, may either be direct statements from participants or can be identified through imaginative variation which allows the researcher to identify themes which may not have been explicitly stated. In order to address the scope of the research set in this study, specific interview questions were created to dig deeper into the structural nature of this phenomenon. Through analysis of the interview data, two primary structural themes were identified: barriers of developmentally appropriate practice implementation and drivers of successful developmentally practice implementation.

Theme one: barriers of DAP implementation. Within theme one, barriers of developmentally appropriate practice implementation, four horizons were identified and Table 4

Summary of Structural Theme One: Barriers of DAP Implementation

Structural Theme	Structural Horizons	Structural Constituents
Barriers of DAP implementation	Assessment	Impact on getting to know kids Time Fidelity of the information Authenticity Strategies to support assessment
	Balancing expectations	Differentiating instruction to meet the needs of diverse students Curriculum and assessment Time
	The setting	Climate at elementary sites Isolation of teachers
	Challenges of DAP	Differences in the definition of DAP Pushdown of kindergarten content

included in the description of the theme. They are assessment, balancing expectations, the setting, and challenges to developmentally appropriate practices. Table 4 provides a summary of the structural narrative for theme one.

Assessment. Assessment was directly mentioned as a barrier to the implementation of DAP practices by seven of the nine participants at multiple times during the interviews. Challenges such as time and strategies to report data were given as well as reflection on the impact of assessment such as impacts on their ability to build relationships with students as well as questions of the fidelity of the data and authenticity of the tool given the way they sometimes need to implement it. Emma commented, "The piece that gets in the way for me is the assessment piece and the expectations of the assessment."

All nine participants identified TS GOLD® as the assessment tool used in their district. The struggle to implement assessment for these teachers is real. Lisa commented, "I know my responsibility is to do this assessment. But, it's not as fun for me." Then, I feel like when I'm not having as much joy in the day, I'm not as good of a teacher." Kari identified that she doesn't think the assessment is developmentally appropriate. Ann stated that the tool drives her instruction. "The only way I can get through the assessment tool is by having my small groups directly related to my assessment tool. I'm bleeding rainbows at this point (in reference to TS GOLD®)." A common statement in the assessment conversation was "I know why we need to do it" and this was often followed by "I don't get to know the kids."

Impact on getting to know kids. Teachers such as Lisa and Emma talked extensively on feeling the loss of time to connect with children. Lisa stated, "What I notice because I'm so busy assessing all day is I don't feel like I actually know them as well. I'm not sitting down and playing with them, where I actually get to know them more." Emma had similar feelings.

That need for so much assessment. I know that I need to be on the floor, interacting with children and playing with children and facilitating their play and their language and then I'm also expected to be documenting and assessing - it's just really hard to get it all.

Time. The amount of time dedicated to assessment was noted by five of the teachers. Emma commented that even though school year had been done for a week, she was still doing TS GOLD®. Kim described the luxury of having students' five-days-perweek and noted that her two-day-per-week colleagues had the same assessment expectations. Lisa felt that "it takes a lot of time to make it work for your class. The assessment thing has gotten totally out of hand, in my opinion." Ann agreed with the time but still felt it was a good tool. "I mean, when it's all said and done, it's a great tool. When you're in the middle of the tool, I hate it. There are not enough hours in the day."

Fidelity of the information. Time constraints led to questions about the fidelity of the instrument. There is interpretation involved as well as questions about the accuracy of the information given the amount of time it takes to complete the assessment. Ann shared, "People would ask me questions and I'm like, "It's up to your interpretation.

Here's how I did it." Doesn't mean the way that I did it was the right way." Lisa also commented on the accuracy of the information.

I feel like we don't see our kids all day every day, so to try to get accurate information is really hard. I know that's part of my job, so how can I do it? How can I do it with fidelity, because, like I said, otherwise, why am I doing this if this isn't accurate?

Ann concludes, "I know this is going on record, but sometimes I feel like I'm just making it up."

Authenticity. Authentic assessment is an important term in early education and refers to the ability to collect assessment information in a manner that is authentic to children. It typically refers to assessment based on observation and not on pull-out methods. Amy and Ann provided examples of why authenticity is a challenge. Amy described,

We do one in November and then one in May. And the one in November is very challenging because I really don't have a lot of time to get to know the kids yet. So, I have two choices sometimes. Either A – I can guess or B – I can scrap my beliefs and pull them. And sometimes it ends up being a combination of both...in

May, it's totally different. I've really taken my time and done lots of observations.

Ann questioned the authenticity of the information when she pulls children from their regular activities to do assessment. She acknowledges that her supervisor doesn't want them to pull-out children because the assessment is to be as authentic as possible but sometimes it is needed to complete the assessment.

Strategies to support assessment. Teachers did provide ideas for strategies to support assessment. Kim stated that she has gotten "clever" with strategies so it doesn't feel like she's interfering with children. She says experience has made her more efficient and effective in her data collection but states that "it's still challenging." Emma uses a notebook and file folder system to organize her data collection as she takes notes on children every day.

Summary. Ann's comment on assessment provides a good summary. "So a huge barrier is our assessment tool. While it is not a bad tool, it just is not as realistic as it should be, and it puts a lot more stress on this."

Balancing expectations. Legislated program requirements for curriculum, assessment, and inclusion models for early childhood special education to serve students in the least restrictive environment, increases in students of diverse cultures, diversity of languages led seven of the nine participants to express challenges with balancing the expectations placed upon them by school districts, the legislature, and society.

Assessment was explored in depth as its' own theme so the focus here is on differentiation, curriculum, and time.

Differentiating instruction to meet needs of diverse students. The challenge created by meeting everyone's needs through differentiation, especially students from diverse backgrounds, English language learners, the needs of special education students, and children from families with high-risk factors were found through-out the interviews. Teachers Sue, Kari, Tessa and Lisa spoke to these challenges. Lisa described this challenge well with these statements, "How do I really, truly get you all to reach your full

potential this year?" "Diversity is a good thing but it can be a really hard thing, too...it takes a lot of energy."

The increase in the use of inclusion models has meant many special education students are mainstreamed into classrooms. The teachers, overall, felt this is a good thing but trying to reach every student becomes a challenge. Lisa described that in her classroom she had a four year old who was reading, two nonverbal boys with autism, had other children in the classroom with high needs, students who were new to the country who had experienced trauma and also had families with high risk factors. This type of scenario has become more common in school-based early education classrooms. Lisa described it this way. "It's hard and frustrating, but then at the same time I think these are the families that we want to serve, too...that takes an incredible amount of energy to meet their needs."

Amy described about the time it takes to support students learning English as a second language (EL). She described that the language difference make things take longer. Amy stated, "I wouldn't say it's a barrier to teaching and implementing, but it can make things take longer."

Four teachers stated that part of the answer lies in adding staff to address challenges presented by inclusive classrooms, the growing number of children with challenging behaviors, the growing population of EL students, and the growing number of children coming to school who have faced trauma and was noted by four of the participants. Amanda stated, "Sometimes it's difficult when there's just the two of us to effectively get to all of them." Ann explained why having more staff is helpful. "If I had

my magic wand, I would add another teacher, for sure. When we separate into smallersize groups, we are more successful."

Curriculum and Assessment. Challenges related to curriculum and assessment centered on time and the ability to fit it all into the school day. Kim stated that the alignment of curriculum, standards, and assessment goes back to time stating that if one had time to develop a good scope and sequence that tied the three pieces together, one would feel more efficient and learning goals would be easier to determine. Amanda expressed concern with fitting it all in especially while maintaining a focus on play. "How can you fit it all in, but give 'em the playtime that they need? Or being able to play a simple game that doesn't correlate with what you're talking about...So, that's a challenge.

Lisa talked about the challenges of curriculum and the time it takes to adapt it to fit the setting.

It's a good thing to have a curriculum, but it never really fits right. We all know that, right?...When you don't have the same group five days a week all day, that's what all the curricula are made for...but it takes extra time to go, "Well, what am

I going to pull out", because I only have them for two hours three days a week.

Kari talked about the challenge to teachers that results from having to refer to up to six different curriculum to meet standards and then to put the curriculum into lesson plans intended for two-and-a-half-hour classes. Amanda confirmed this frustration. "How to fit all the things that are in the curriculum in two days a week in two-and-a-half hours. So, we're gonna have to figure out what are the most important things."

Time. Balancing the expectations of the setting is largely connected to time as identified by all nine of the participants. All the participants reported that time is a barrier. Whether this was due to the number of hours per day or days per week, the teachers reported that there is not enough time to feel effective. Kim stated, "I think time is always a challenge and a barrier." Sue agreed stating, "There's a lot of things that are expected and required and necessary and to fit it all in can be really hard to do. I'm never on schedule."

Other teachers reported the things that take time such as bussing, challenging behaviors, language, and assessment. Amy reported that language is a barrier and impacts time because things take longer. "Students need lessons repeated many times before it really sticks." Teachers also described barriers to try and fit it all in. Sue commented, "So I feel like sometimes I'm rushing and I try to figure out the right balance. Every year it's different. I do know I would like more time. I don't know how much."

Bussing as an outside force that influences time was noted by four of the participants. Bussing drives schedules and the amount of time for programs, usually 2.5 hours to accommodate the need for other bus routes. Bus routes can influence the students who are in the classrooms. Ann described routes to low-income or high-income neighborhoods determining the levels of diversity in classrooms.

Several teachers identified the length of the day in reference to time as a barrier, stating that the typical 2.5 hour day is not long enough to get everything in that's expected and required. Sue gave explained, "So many times I have thought if I only had –

even if I just had a half-hour longer, if I had them for three hours that would be helpful." In addition, the challenges created by two-day-a-week programs were noted. Kari said that having a third day can make a difference in a teachers' ability to know the children better.

The setting. Although only four of the nine teachers referenced the influence of their setting at an elementary school on the implementation of DAP aligned practices, it is an important consideration as more preschool classrooms are located in elementary buildings. For those teachers located at elementary sites, staff or lack of staff can be especially challenging. Ann reported feeling that a center-based program has more staff available to provide support and that a center has more "respect" for the children, especially those with behavior needs. Amy feels the push for more at an elementary site and not supported as an early childhood classroom. "The one barrier I run into is that I am in an elementary building and so, there are times that I need to push them to be more mature than they actually are."

Climate at elementary sites. Sue, who has had both experiences having taught at an early childhood center and in an elementary school felt that families like being in the elementary school and being a part of that community. Having been in more than one elementary site, Sue noted that the experience can be different depending on the school. "Some schools embraced their early childhood classrooms more than the others. And I don't know- if it was leadership or what it was."

Isolation of teachers. Sue also stated that being in an elementary site can be isolating. It becomes difficult to stay connected to early childhood professionals and easy

to feel unsupported. She described the difference between an elementary school and center referencing that in a center people know your work is important and everybody is there to support you. She went on to say, "When I was in other buildings you didn't always get that feeling – for a multitude of different reasons people didn't think that we were worth the space." It can also be difficult to connect with elementary colleagues. Ann noted that she can join her elementary colleagues but it is difficult to relate. "I can join my school, but usually it's not directed at me. And so when we did a book study, I did one with them, just so I could get to know them."

Challenges of developmentally appropriate practice. Five teachers noted challenges to DAP largely created by the pressure to set a foundation for learning that considers the push down of kindergarten content into preschool. All of the participants expressed concern over what is happening in today's kindergarten classrooms and expressed concern about how this impacts early learning. Lisa has a unique perspective as a teacher who coordinates with kindergarten teachers to ensure alignment. She has observed that kindergarten classrooms are not developmentally appropriate and wonders why children aren't allowed time to play. The pressure to include kindergarten content is a reality for preschool teachers. Sue described how expectations have changed from the time she started in the field.

Expectations have exploded from really being a play-based exploring environment where of course they were getting things and learning things. Now I feel there's a shift where we have these expectations put upon us that are way

more academic-based than social-based. And the kindergarten that I student-taught is the preschool I teach.

The push down of kindergarten content combined with parent expectations and fears of children not being "ready" for kindergarten has led to additional barriers to DAP implementation.

Differences in the definition of DAP. Several teachers noted that within the field there are disagreements about definitions of DAP claiming that the definition is "all over the board". Kari noted, "I think I know innately what is developmentally appropriate and then a teacher will say, "Where's that written down?" Kari described differences around expectations for raising hands, sitting criss-cross applesauce, length of group time and calendar as examples. Teachers noted that it's important to remember that "we" don't want preschool to be kindergarten. Kari stated, "That pushback to make sure we are standing our ground. We can try to continue to do what we consider is developmentally appropriate."

Push-down of kindergarten content. Kim stated that the push-down of kindergarten and the concern about preschool demonstrates the importance of knowing the foundations of our beliefs. It can be hard to focus on beliefs when there are so many challenges and expectations to balance as well as feeling like there is so much "wrong" with what we are asking children to do. Ann also referenced the fluid definition of DAP and knowing our foundation. She described the importance of not feeling pressured by the legislature, culture, and society, to push children "too far". She summarized what is needed. "Really retreating back to the whys. Why are we doing this? Why are we

pushing it down on them? And is this developmentally appropriate? And that's where those beliefs really come into play. "

This demonstration of reflective practice and the importance of understanding the foundations of beliefs is critical to the implementation of developmentally appropriate practice and introduces the next structural narrative which identifies theme two; the drivers of successful DAP implementation.

Table 5
Summary of Structural Theme Two: Drivers of Successful DAP Implementation

Structural Theme	Structural Horizons	Structural Constituents
Drivers of Successful DAP implementation	Beliefs of DAP	Play Embedded academics Meeting children "where they are at" Confidence – "I know best" Aligned beliefs of DAP
	Role of the supervisor	
	Access to research-based practices	Conscious Discipline
	Relationships with Colleagues	Learning from each other Perceptions of K-12 colleagues
	Reflective practices	Awareness of skills Open to new learning Perspective of privilege – respect for others
	Passion for the work	

Theme two: drivers of successful DAP implementation. Within the theme of drivers of successful developmentally appropriate practice implementation five horizons were identified: beliefs of developmentally appropriate practice, role of the supervisor, access to research-based practices, relationships with colleagues, reflective practices and passion for the work. Table 5 provides a summary of the structural narrative for theme two.

Beliefs of developmentally appropriate practice. Definitions and beliefs of DAP were defined with words such as "best practice", "brain development", and "play". It was also acknowledged that the definition of DAP is "all over the board" with teachers sometimes not having a common definition of what is best practice or developmentally appropriate practices. The nine participants all shared similar beliefs of DAP and are defined here as play, embedded learning, meeting children where they are at, confidence in their beliefs of DAP and the significance of having beliefs of DAP that are aligned with colleagues.

Play. When teachers were asked about their beliefs about DAP, all nine commented on the importance of play. Kim summed up her beliefs of DAP with this statement, "Well, Play". All the teachers talked about play as a vehicle for learning and that play is most important because it is how children learn. Lisa stated, "I think play is so important. I can't say that strongly enough, and I think that kids' jobs are to learn through play." Tessa, "My beliefs are that play is what's most important and that's how children learn." Emma and Tessa commented that play is most important because learning is embedded in play. Emma shared,

I do know that there is more pressure because kindergarten isn't kindergarten anymore. And we want them to get there, but then, the hard part is, keep remembering to keep it in their play and keep it developmentally where they're at.

Embedded academics. Sue, Amy, Tessa, and Amanda talked about embedded and engaging academics in reference to DAP beliefs stating that it is possible to have both play and academics. Amy and Sue referenced the ability to provide academics in a way that is both fun and engaging and makes sense for children by embedding content such as colors, shapes, numbers and patterning into singing, movement and stories.

Amanda and Tessa commented that academics need to be presented in a way that is fun. Amanda stated, "I feel it's important that they have fun. That they enjoy coming to school…and just and playing. That if they're doing all of that then that's great, I can throw in the academic pieces."

Meeting children "where they are at". Amy stated it this way, "DAP is just meeting children where they are at." This concept was shared by all the teachers with every participant stating in some form. "Where children are at." "Teaching to where they are at." "Keep it where they are at." "Where they are at and what they need." Sue defined it this way. "It just means that I am teaching them in a way that is appropriate for where they are as a developing human person." They also referenced concepts such as the meeting the needs of the whole child, using variety, just-right-learning, cultural considerations and creating safe space for learning.

The ability to meet children where they are at included "just-right-learning" for children and was also mentioned by all the teachers. Kim and Amanda stated that

children need have successes and as teachers they need to figure out how to get them there. Amanda noted that this will vary from year to year, by maturity level, by age and socioeconomic status. It is what is appropriate at the time and "just knowing them and finding out what works best for them." She also commented that this just-right-learning includes figuring out what they're interested in so she can bring those interests in and make learning fun. Kim defined this belief by saying, "Developmentally appropriate – activities and tasks that children are successful with." Sue commented that just-right-learning is about differentiation. "We teach very differently. So we teach through play and through songs and through toys." Lisa shared this perspective. "We need to incorporate songs...they need to be up and moving and need have a lot of variety."

Meeting children where they are at is also learning about families, diversity, and other cultures. The teachers talked about their perspectives of diversity and how this informs their beliefs and practices. They stated that it's not only about knowing families differences and what works best but about valuing difference. Ann provided an example. "Finding what works best for each family is huge. So I don't know, my belief kind of spans what works for each family.

And again, across different cultures, it's very different."

The ability to meet children where they are at as part of teacher's beliefs about DAP, begins with creating safe space for learning and developing relationships. Tessa and Amy talked about creating calm, safe spaces and the importance of developing social skills to promote safe environments. Kim spoke to the importance of relationships with children and families to create safe space. "Relationships is a huge part of my belief

system of developmentally helping those children and families, as we go through preschool together." Sue stated that a safe environment is a core belief. "I've always come at education from the core belief that every child has the right to a safe and appropriate education. And so then what do they need?"

Confidence – "I know best". This comment or one's similar such as "I just do it" were made by all nine participants in reference to their belief in and ability to implement DAP. Amy stated that "behind my classroom door, it's all what I want." Ann and Amanda commented that they have a strong belief in what's best for kids because they know them best and are very confident in their ability to implement DAP principles. Emma stated that DAP is her guiding principle. "I would say they're my guiding principle of what I do in the classroom."

Ann, Kim, and Tessa all commented on connecting this confidence to training or learning. Ann stated that in her early years of teaching, she received "a lot of training" but sometimes the trainings gave conflicting information. She believes this made her a stronger teacher. "I became strong at my beliefs of how to teach, and I realized, "This is how I'm teaching it. I pull from this and I pull from this, and I make my own way." Tessa shared this statement. "I've been very open, I think, to different ways of doing it, but keeping in mind what I know is best."

Aligned beliefs of DAP. Several teachers mentioned a component of successful implementation of DAP practices is having beliefs that align with colleagues. This contributes to a culture that values children, play, and developmentally appropriate practices. Amy, in reference to DAP beliefs stated that she feels lucky to work in a

program where their beliefs are "pretty much the same". Kim stated that having conversations with peers and other teachers about how they can have classrooms that feel and look different "but going forward with the same belief system of play is so important, and relationships are so important." This helps create what Sue called a "community of early childhood people". Ann talked about the importance of beliefs based on research. "So that when I, or anybody, walks into the classroom, and you can start talking about what's developmentally appropriate, you can be kind of on the same page."

Summary of beliefs of DAP. From the statements of beliefs gathered through the interview process, the belief that seems to impact the teachers most is summarized by "doing what's best for children". Sue summed it up this way.

I just think early childhood has a lot to do with nurturing and creating or helping facilitate learners. Like they need to be in a place where they can learn. But we do all that stuff at the same time as we give them academic skills.

Role of the supervisor. Eight of the nine participants stated that their supervisor is part of their support system to implement developmentally appropriate practices and supports many other things required for a successful classroom. Kim mentioned such things as finding information, providing for classroom needs including adding support when needed, creating teams and small groups, access to training, and help with implementation of curriculum. Others described a supportive supervisor as allowing for the freedom and flexibility to implement curriculum in a way that meets the children's needs and all nine stated that their supervisors support play. They used terms such as "my supervisor is my cheerleader" and "I have a great boss who really supports me."

Amy referenced her supervisor who supports DAP. "My supervisor is wonderful. She pushes developmentally appropriate practice pretty hard. She's kind of a champion for kids."

Kim commented on the importance of having a supervisor who recognizes your needs as a teacher. "Knowing that you are led by someone that's willing to support ideas and what you might need as you move forward." Lisa provided insight into what it means to have someone who understands early childhood "I've had a lot of different bosses in 20 years – it's really nice that she gets early childhood. We've been told to adapt kindergarten curriculum in the past. To now be involved in choosing a curriculum is huge."

Access to research-based practices. Six of the nine participants mentioned specific research-based curriculum and practices as contributing to their success as a teacher. Ann, Kim, and Emma talked about the importance of attending workshops for continued personal growth and collaboration with staff and the value of training. Some referenced general professional development around topics such as behavior management, best practice pedagogy for literacy, math, and play, however, the following research-based practices were specifically mentioned by participants: Minnesota Reading Corps literacy intervention strategies, SEEDS of Early Literacy and Conscious Discipline (Baily, 2015). Each of these methods require professional development to implement with fidelity and teachers commented that they are provided with opportunities for training. Ann referenced the importance of training with Minnesota Reading Corps. "I

think that helped shape me...what we do and why we do it. And I'm not gonna lie – I was a hard one at first to bite. And then it just becomes ingrained in what you do."

Conscious Discipline. Conscious Discipline (Bailey, 2015) strategies were especially popular with five of the nine participants mentioning it by name. Emma, Kim, Sue, Ann, and Tessa specifically described the implementation of the strategies in their classrooms and spoke to the value of this research-based practice. Sue commented, "I have found Conscious Discipline to be a way to grow as a teacher, to help reinforce those relationships that are important so that children can learn." Ann described what Conscious Discipline strategies have meant for her instruction sharing that she loves even her hardest students. She further stated, "I think that's exactly what my behavior kiddos really need...to feel supported, and so I think it's been really a gift to our group."

Relationships with colleagues. The support of colleagues was noted by eight of the nine participants as important to successful DAP practice. Whether identified as collaboration, teamwork, respect, professional learning community, mentors, coaches, or support, the opportunity to have time with colleagues was important to the ability to keep teaching and to continue learning. Kari noted that time with colleagues is important because teaching can be isolating. "Teachers are kind of on their own and just doing what they do and not really knowing what other teachers are doing. So, it was good to talk about it." Lisa commented on the importance of connecting because the work is hard. "I work with great people, and that's part of what keeps you going. I mean, there are days...but you kind of find a way to pick each other up and come back the next day."

Kim noted the importance of having meaningful conversations with colleagues and classroom staff.

Learning from each other. Kim, Sue, Amy and Tessa all talked about learning from colleagues and observing others. Ann referenced working with a special education teacher that served as a mentor. "Learning from her methods, I took away some things, and she was learning from me...so that you don't always get locked into your ways and your methods." Amy and Tessa had opportunities to work as classroom assistants. Amy thought the opportunity to watch others teaching and learning from them was helpful. Tessa learned about the importance of having a positive attitude to new initiatives by observing others. For example, when a new curriculum was introduced and other teachers were pushing back, her mentor had the attitude, "Well, we're going to try it. We're going to see how it goes and we're going to do our best."

Perceptions of K-12 colleagues. Time to connect with colleagues was also identified as important due to perceptions that the rest of the education community does not understand early childhood. Sue described the support she receives from others. "I feel supported within my own community of early childhood people, but outside that I'm still trying to tell people I don't babysit, I'm not a babysitter." Ann, who teaches in an elementary school, commented that she is not seen as an equal among her elementary colleagues. "My colleagues of K-5, they don't know how much we're working with these kiddos. They don't see us as an equal." This perception transcends to the district level. Lisa stated that she doesn't feel those at the district level understand early learning. Sue commented that beyond her supervisor no one at the district level is supportive. "I mean

this might sound callous but for years they have been talking about supporting early childhood. It's not there. It just feels like lip service." These feelings of being misunderstand bind early childhood professionals together to keep pushing the profession forward. Lisa described it as needing to "wave a flag" and remind others the "we're here" and "keep pushing yourself out there."

Reflective practices. The ability to be aware of teaching skills, having a mindset open to new learning and accepting of feedback from others, and having an understanding of the influence of privilege, life experiences, and diversity and how these impact instruction are concepts aligned to reflective practices. The ability to reflect on one's practice was exhibited by seven of the nine participants and identified as important to the implementation of their instructional strategies and DAP aligned practices. These qualities led to passion for the work that went beyond professional responsibility and contributed to their success.

Awareness of skills. An awareness of skills along with an openness to learn when it was recognized their skill set was inadequate to meet student needs was evident in the answers of five participates. Amy identified the importance of having classroom management skills to provide an environment that supports learning. Lisa identified the importance of knowing your limits and the ability to know when you need to seek new skills. "I needed to stop and say, "I don't have all the answers, and I don't know everything," and "I need to get some new skills, and how do I work with a different population?"

Open to new learning. Open to new learning, new ideas, and being flexible was noted by seven of the participants as important to successful instruction. Ann beliefs that a teacher needs to be flexible in order to learn from peers, must be accepting of constructive feedback and should try to learn new ideas from peers.

It's really listening to peers and always listening to try something different...It's healthy to do something for a couple years, and then try and learn from another teacher, and their skills, so that you don't get locked into your ways and your methods.

Tessa also noted the importance of being open to new ideas and feedback. "I do think being open and flexible has really helped me a lot and having a good attitude when I'm there." Kari provided a list of things that it's important to be "open" to. This included open to change, open to equity training, open to different points of view, open to different family dynamics, open to not making assumptions. Kari continued,

Open to learning about each family and each child and taking it from there, – and just open to learning. They really just take things in. They take change...So, I think the teachers that are rocking it, just they take it in and they run with it.

Perspective of privilege – respect for others. The ability to reflect on practice and to step outside one's own experiences and have respect, empathy and understanding for students and families and how it impacts their teaching and the children was identified by Lisa, Sue, Emma and Ann. Lisa and Emma identified the importance of cultural considerations and connecting with families. Lisa spoke about her reflection on privilege. "You know, I've always been safe in my house where I grew up, and you

realize how lucky you are." In reference to knowing her own privilege, Sue stated "you need to look outside yourself." Lisa continued by recognizing the importance of understanding and having a respect for other cultures. "I think even just understanding other cultures, too...there's more than one way to do things...it's been eye-opening for me, too, very much. I feel like I learn as much as they do. I really do." Ann also provided examples of reflecting on the perspective of diversity and recognizing the challenges faced by children from other cultures. "But what's right for us is different across cultures. So you really have to also think about my beliefs being in Minnesota, in this community, in this world where we're at."

Summary of reflective practice. Sue's statements provide a summary to this section on reflective practice and how it can impact instruction. "They're coming from cultures that hold onto their kids so tightly that, you know, even giving them to us for that 2.5 a day feels like there's a responsibility to make sure that we are doing the best for them."

Passion for the work. Six of the nine participants expressed that a reason for their success in the classroom is the love and passion they have for the work. They used words such as love, passion, selflessness, positive outlook, value, genuine enjoyment, and joy to describe the connection they have for their work. Emma said, "I genuinely enjoy my job." Lisa said, "I love my job and I just think we do great things". Sue and Lisa described the work as a calling. Lisa stated, "I just think that you have to have the passion for it. It does, it feels like a calling to me."

The love for the job comes in spite of their reflection that the work is challenging and has gotten more challenging over the years. Lisa described the work. "The families are tough, the kids are getting tougher. It drains me in a way it didn't even five years ago.... But, I think it takes a certain personality. Not everybody is cut out for early childhood. It's tough." Participants stated the importance of what they do in reference to the challenges of the work. Lisa shared, "There's nothing kinder you could say to me than, "You helped my child," and I just think, "This is the best thing ever." Sue commented on the importance of the work. "I wish everybody could see how important the work is that we do with these little people." Sue reflected on the importance of the work by stating the importance of valuing the children. "You do have value and you are important and for 2.5 hours you get to be here and we get to do fun things and it's about you and it's not about your grown-ups and your situation."

Summary of the drivers of DAP. The drivers of successful DAP implementation reflect the participants attention to meeting the needs of all children while balancing expectations of curriculum, assessment, and accountability.

The Essence of the Phenomenon

The essence of the phenomenon of being a teacher of PreK-4 students in a school-based setting implementing DAP within the context of required practices is one of balance. Balance of the requirements with the skill and confidence to intentionally craft the curriculum to meet the learning needs of students: often through play. Teachers use relationships with children, built through genuine, authentic means, often using research-based practices such as Conscious Discipline, to build trust and emotional safety as part

of a climate for learning. Teachers use reflective practices to determine their own values, judgements, especially in relation to diversity, to ensure they are implementing developmentally appropriate practices aligned to their beliefs and to meet the learning needs of all children.

The capacity to do this requires a supportive supervisor who allows teachers the flexibility and freedom to do the work and supports the importance of providing play within the learning environment. The supportive supervisor provides opportunities for colleagues to meet, observe others, participate in professional development, and access to quality instructional tools.

The role of being an early childhood teacher is demanding and requires a great deal of energy. The increase in students with challenging behaviors, special education needs, English language learners, diverse cultures, students new to country, experiencing trauma, multiple risk factors, and families in crisis has resulted in classrooms that require support. It can take a toll. Yet, the teachers in this study reflected on the passion they have for the work, the love they have for the children, and the genuine hope they have for the children's futures.

CHAPTER V

Discussion

The purpose of this phenomenological study was to explore the experiences of highly-skilled early education teacher of PreK-4 students in Minnesota school-based early education programs and the alignment of their beliefs and practices to developmentally appropriate practice (DAP) principles, guidelines, and teaching strategies as defined by the National Association for the Education of Young Children (2009). Through interviews with nine early education teachers, the study identified their beliefs about DAP, the selection and implementation of instructional strategies, and the alignment of the strategies to DAP. It further explored the barriers teachers face as they implement DAP as well as the drivers of successful DAP implementation. Analysis of the interview data, using transcendental phenomenological reduction, resulted in the development of a textural description that identified the "what" of the experience and a structural description that identified the "how" of the experience. The textural and structural descriptions were combined along with reflections to form a description of the "essence" of the experience.

The significance of these findings is found in the ability of DAP to increase the likelihood that children will receive high-quality learning experiences in preschool settings. High-quality instruction, especially for at-risk children is what matters most for child outcomes (Brown, 2010; Chien et al., 2010; Goldstein et al., 2013; Howes et al., 2008; Reynolds et al., 2014). The findings can be used to inform leaders in early

education and assist to improve teacher practice, attain high-quality instruction, and provide tools and knowledge to implement culturally responsive DAP practices.

To determine the alignment of beliefs and practice to DAP, the discussion of the research will connect the findings of the data analysis as described in chapter four with the literature review. Specifically, the discussion will consider the foundations of teacher's beliefs, and the alignment of DAP beliefs as described by the teachers to the three core considerations of DAP. The alignment of instructional strategies as described by the teachers to the five principles of DAP will be discussed as well as considerations of the language and practices of the teachers and alignment with definitions of an excellent, responsive, and intentional teacher. It will also provide a comparison of the barriers to and drivers of success found in the data to those identified in the literature review.

The discussion will include implications to the field of early education professionals and those who have influence on teachers such as school administration and higher education, and will include recommendations for future studies. The discussion will conclude with a summary of the research and reflections of the researcher.

Foundations of Teacher's Beliefs

Research indicates that teachers filter decisions through their beliefs (Charlesworth et al, 1991; Hatcher et al, 2012, Murray, 2015, Stipek & Byler, 1997). The findings on teacher beliefs were placed within the structural narrative because through the data analysis process it seemed clear that the beliefs of the teachers were a universal structure of the experience and foundational to their practice. The research provided

clear indications that the foundation of the teacher's beliefs are aligned to the theorists identified in the literature review as well as to the core considerations of DAP.

Foundational theorists. Theorists whose work is foundational to early childhood education and the definition of DAP include Piaget, Vygotsky, Erickson, and Dewey (Squires, Pribble, Chen, & Pomés, 2013). Comments from teachers that described provisions for instruction that "meets children where they are at" and "teaching them in a way that is appropriate" support Piaget's theory that children construct knowledge by gathering information but require environments that support this work. Evidence of Vygotsky's Zone of Proximal Development was found in statements about "just-right-learning" where teachers described providing activities the "children are successful with." Both Piaget and Vygotsky viewed play as a source of learning and development (Mooney, 2013). Evidence of beliefs in the importance of play were found throughout the data.

Erickson believed that children need real work to master tasks and that clear limits and boundaries help provide the needed routines and structures (Mooney, 2013). This theory was evident in the descriptions of the routines and schedules teachers use as a framework for their time with children. As one participant described, "I am pretty strict on my schedule. I just know how important that consistency is for them and that they look forward to that routine".

Dewey believed that teacher's need to create meaningful environments, based on the interests of children (Mooney, 2013). Teachers described preparing the environment in-depth. Whether using children's interest to "drive" their instruction or preparing the environment for play with embedded learning Dewey's theories were present.

These theorists provide a foundation of beliefs inherent to developmentally appropriate practices and the definition of DAP developed by Copple and Bredekamp (2009) for the National Association for the Education of Young Children.

Evidence of DAP Aligned Beliefs

The data provided through interviews of nine early childhood teachers, found evidence of DAP aligned beliefs. Discussion of the alignment of teacher beliefs to developmentally appropriate practice will be addressed by connecting the evidence to the core considerations of DAP. "Knowing about child development and learning". "Knowing what is individually appropriate". "Knowing what is culturally appropriate". (Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth through Age 8, Third Edition, NAEYC, 2009, p. 9-10). All nine teachers felt their beliefs of DAP influenced their instructional decisions.

Knowing about child development and learning. Although the teachers didn't talk specifically about their knowledge of child development or knowledge of how children learn, some did reference the significance of their formal undergraduate education as a source of knowledge and the impact of having a good base of information. Some also referenced ways they know that what they are teaching students is appropriate, with five of the participants stating that the Minnesota's *Early Childhood Indicators of Progress* (2009) is a measure of the child's developmental level.

Knowing what is individually appropriate. The teachers provided evidence of their knowledge of the children, what information they gather, and how they use it to inform their instruction. Beginning with their beliefs about "meeting children where they are at" and "teaching to where they are at" and "what they need". This is also apparent in their descriptions of bringing in children's interests and using this to drive instruction and to engage the children in learning.

Knowing what is culturally appropriate. Evidence of this belief is first found in the descriptions teachers provided of building relationships with families to "find out what works best" and acknowledging that "across cultures, it's very different". It was also found in the descriptions of differentiated instruction to meet the learning needs of English language learners and children from diverse cultures.

Play. Although play is not a core consideration, it has a central role in the implementation of DAP practices and was found in all of the teachers statements of their beliefs. Definitions of play were not explored in the literature review, however, Copple and Bredekamp state that "play is an important vehicle for developing self-regulation as well as for promoting language, cognition and social competence (2009, p. 14). They go on to say that there are various kinds of play: physical play, object play, dramatic play, constructive play, and games. These are important to promoting physical, mental, emotional and social development (Copple & Bedekamp, 2009). They further state that teachers often use play to describe DAP and use the phrase "children learn through play" but don't fully realize that play is complex, needs definition and can contribute to different domains of development.

Copple and Bredekamp's comments were found to hold true with these participants. The teachers, when describing their beliefs of DAP, said play was most important with comments such as "play is so important" and "I think kids' jobs are to learn through play" and "my beliefs are that play is most important and that's how children learn". Some of the teachers did provide evidence and understanding of the deeper implications of play to children's learning. Some described it as a vehicle for their instruction stating that the environment is especially prepared for play with embedded instruction, describing play as a "framework" to explore. They intentionally design play with embedded content with staff in proximity to provide support, interact, and scaffold the children's learning.

Evidence of DAP Aligned Practices

DAP is recognized as an important feature of early childhood instruction (Wen et al., 2011). Evidence was found that the teachers implemented practices aligned to DAP. The discussion of practices aligned DAP is organized according to the five principles of DAP: creating a caring community or learners, teaching to enhance development, planning curriculum to achieve goals, assessing children's development and learning and relationships with families.

Creating a caring community of learners. "In developmentally appropriate practice, practitioners create and foster a community of learners that support all children to learn." (Copple & Bredekamp, 2009, p. 16). This might take the form of engaging in conversations with children, providing responsive, age-appropriate guidance for emotional support, and creating a of positive classroom climate (Zinsser et al., 2015). It

is also found in the integration of strategies that support differentiated and embedded instruction (Howes et al., 2013).

Evidence of this principle was found in the descriptions teachers used to describe the importance of using greetings to build relationships, using research-based strategies such as Conscious Discipline (Bailey, 2015) to support classroom community and promote "safe space". The importance of using children's interests to support engaging instruction is also evidence of teacher's caring and support of children. Teachers embed learning in fun, engaging ways through music, movement, and throughout the routines of the day such as snack and outdoor time.

Teaching to enhance development. "Developmentally appropriate teaching practices provide an optimal balance of adult-guided and child-guided experiences (Copple & Bredekamp, 2009, p. 17-18). This principle defines the pedagogy of early childhood classrooms and includes practices as such as scaffolding, using a variety of instructional strategies, and multiple learning formats (Howes et al., 2008). This principle was evident in the teacher's descriptions of "just-right-learning" with descriptions that noted giving children opportunities that "are not too hard...but push just a bit further". Teachers provided examples of scaffolding instruction through support, mirroring, and interactions. Adult-guided instruction is often used for large group and small group and child-guided used during play. Teachers were confident that the play time they provided children was intentionally planned to meet learning goals and offered children choices. Play was often offered along-side a small group format.

Planning curriculum to achieve goals. "Curriculum consists of knowledge, skills, abilities, and understanding children are to acquire and the plans for learning experiences through which gains will occur" (Copple & Bredekamp, 2009, p. 20). Teachers identified that it is important to know the *Early Childhood Indicators of Progress* (MDE, 2017) to define learning goals and the importance of curriculum. Teachers described providing intentional instruction through the use of district required curriculum however indicated that having flexibility in how the curriculum is implemented is important to meeting their learning goals and the learning needs of children. The ability to maintain flexibility was noted in the literature as well (Copple & Bredekamp, 2009).

Relationships with families. Establishing relationships with families is key to understanding the "context" within which the child lives and so gain knowledge of the child's development (Copple & Bredekamp, 2009). "The younger the child, the more necessary it is for practitioners to acquire this particular knowledge through relationships with children's families." (Copple & Bredekamp, 2009, p. 22). Although this principle was not addressed in the literature review, the teachers provided evidence that supported this principle. Teachers described ways they connect with families through email, home visits, and face-to-face conversation and the importance of the information they receive back through surveys and conversation. This is especially important when a child is struggling with school. Teachers provided comments to families such as, "We can get through this together".

Assessing children's development and learning. "Assessment of children's development and learning is essential for teachers and programs in order to plan, implement and evaluate the effectiveness of the classroom experiences they provide." (Copple & Bredekamp, 2009, p. 21-22). Assessment was found to be used for planning instruction but not as a tool to better understand where children are at developmentally. Although, it is possible teachers are using the tool to inform instructional content decisions based on children's current needs, this was reported by one participant. Most reported that assessment was used for planning as a means to complete the tool.

Teachers reported that assessment is driving the instruction, not of a need to know where children are at or for student outcomes or to inform instruction but as a means to complete the assessment tool. In theory, the purpose of authentic assessment, through observation, is to inform instruction, and not solely a tool of accountability. Many participants began their comments on the assessment by stating, "I understand why we need to do it and the importance of it." Further exploration of these comments, especially the "importance" of assessment may have clarified what was meant by this statement. Further exploration of how they use their assessment results may also have clarified the beliefs and purpose of assessment. Teachers reported that assessment interrupts the time they have to build relationships with students by taking time away from interactions with children.

The intentional, excellent, and responsive teacher. The definition of an excellent teacher is aligned with the concept of intentional practices and instruction in the early childhood environment. (Fowler, 2016). Responsive teachers are mindful of the

learning needs of children and determine a balance between child-guided and adult-guided instruction (Copple & Bredekamp, 2009). The intentional teacher, plans curriculum to achieve goals, considers the classroom environment, scaffolds learning and uses a variety of strategies such as large and small groups and centers, using assessment of development to guide and interactions with families to plan instruction (Copple & Bredekamp, 2009). All of the participants provided examples of their practice that met these definitions. They described practices aligned to differentiated instruction, embedded learning, and purposeful planning to meet student's needs. One participant reported, "It's all purposefully thought out. There's a goal in everything". Evidence is found in descriptions of how learning is embedded into routines such as transitions and snack time with strategies such as alliteration games. It is also present in descriptions of differentiated instruction such as adapted circle time expectations to meet student needs and in the willingness to repeat lessons to meet the needs of English language learners.

The value of providing extended periods of play as an indication of the importance of DAP aligned practices that promote child-guided activities alongside adult-guided activities was evident. Examples of learning embedded in play areas such as literacy activities in dramatic play alongside small group time are one example. Another is offering choice, such as in the sensory area, with a teacher interacting alongside, asking questions and providing feedback. Play is an essential strategy of the responsive teacher who uses it to promote cognitive, social and emotional development and the extent to which teacher's support rich, extended play is a measure of DAP aligned practice.

Barriers of DAP Implementation

The literature review identified the standards and accountability movement with requirements of assessment, urgency to cover material, mandated curriculum, definitions of school readiness, and parent expectations along with the research that DAP is difficult to implement, as possible barriers to DAP implementation (Alford et al., 2016; Daugherty et al., 2009; Goldstein, 2007; Graue, 2008; Graue, 2017; Howes et al., 2008; Pyle & Lace-Kapler, 2014). The participants, although referencing these barriers also reported time and assessment as a barriers.

Expectations of assessment presented many challenges for the teachers. Teachers reported that assessment drove their instruction as a means to complete the tool. Most reported that assessment gets in the way of getting to know their students because it interrupts the time they have to interact and play with the children and build relationships. There were also concerns of the authenticity and fidelity of the data collected. Teachers made comments such as, "I understand why we need to do it and the importance of it" before identifying it as a challenge.

Time was noted as a barrier in relation to several items: assessment, curriculum, and differentiated instruction. Many commented that the time they have with the children is too short. "It's a lot to cram into two-and-a-half hours". "There's a lot of things that are expected and to fit it all in can be really hard to do." The challenge to balance expectations of the setting could provide potential areas for low-quality instruction.

Brown and Pickard (2014) found that the ability to balance standards-based outcomes, curriculum, and DAP impacts classroom quality. The ability to balance these items with

the needs of children is key. If teachers are not adept at differentiated curriculum or able to choose their strategies wisely, it could impact the ability of the instruction to provide the level of quality necessary to close the achievement gap. Several teachers stated that differentiation takes a "lot of energy" and time. It takes time and commitment to "sift through curriculum to pick and choose what will work."

The pushdown of academic content or fear of it was evident and stated as a challenge to DAP practices aligned with definitions of school readiness (Daugherty et al., 2009). All expressed concern, noting that preschool has become the kindergarten they once knew. Although feeling pressure to meet these expectations, the teachers reported that "they know best" and are able to provide instruction in a way that aligns with their beliefs.

Drivers of Successful DAP Implementation

The literature review identified potential drivers of successful DAP implementation as education, experience, and professional development. The teachers in the study also reported that their own skill as a teacher, access to research-based practices, opportunities for professional development, time with colleagues, and a supportive supervisor drive success. It was evident that qualities of reflective practices, confidence in their skills, and passion for the work are influential as well.

All the teachers in the study had bachelor degrees or higher and were licensed or had credentials of licensure. The research indicates that education impacts beliefs finding that teachers with higher education levels more strongly endorse DAP (Han & Neuhard-Prichett, 2010). Research also indicates that certified teachers are more likely to report

DAP beliefs (McMullen & Alat, 2002; Vartulli, 1999). The data collected in this study supported these findings as all the teachers reported strong beliefs in DAP.

The importance of the role of the supervisor to promote success was very evident. Teachers reported that "I have a great boss who really supports me" and "my supervisor is my cheerleader". The supervisor set the climate and conditions that the teachers stated they required most: flexibility and freedom to meet the needs of the children. Most importantly, a supportive supervisor supports DAP and play.

Supervisors also provided opportunities for professional development and time with colleagues. Wen, et al. (2011) found that professional development can influence the link between beliefs and practices of DAP. Teachers noted an important feature of success is the ability to be open to new strategies and new learning so having access to professional development to grow skills is important. This is also an indication of reflective practice as a driver of successful DAP implementation. An open mindset that is accepting of feedback from others, open to new learning and takes notice of the impact of their own life experiences on practice was evident and essential to level of skill as a teacher and is a quality that can be supported by responsive supervisors.

Teacher's confidence in their ability to implement their beliefs of DAP was high.

This was evident in the comment, "I know what's best." This statement was made by all nine participants. This statement has implications for higher education and professional development to ensure that the foundation of teacher education programs is well-grounded in research. The nine participants were a highly educated group of practitioners identified as high-skilled. They had no doubts about their ability to do what's best for the

children and their learning. They had no doubts in their beliefs of DAP and ability to implement DAP. Choosing instructional practices that align with beliefs and align with what children need, requires confidence, however, it is imperative that the foundation of their beliefs and practices is high-quality and research-based.

Implications

The findings of this study are intended to inform those in early education leadership roles and those that have influence over early childhood education. Important is recognition of the conditions under which teachers can implement DAP practices aligned to beliefs and other factors that influence the structures that either support or provide barriers to DAP implementation.

Implications for teachers. It is important that teachers know the foundations of their beliefs and are able to articulate them succinctly, especially as they attempt to describe their work to K-12 colleagues, administrators and legislators. DAP is more than "children learn through play" and "I don't do worksheets". Teachers take time to think deeply about the common phrase associated with developmentally appropriate practices and decisions about instruction, "where children are at" and be able to define how they objectively know where the developmental level of the children and how this impacts instructional decisions. Describe how data is collected. Prepare definitions of play and how it can be rich in content and the contexts necessary to prepare children for kindergarten and beyond. Practice reflection. Focus on relationships which may first mean considering personal biases, values, and judgments. Be prepared to meet the cultural and education needs of diverse student populations. This may mean seeking new

instructional skills. Teachers need to be open to learning and feedback from colleagues, mentors, coaches, and supervisors.

Implications for supervisors. The role of the supervisor to support DAP is an important one. The supervisor sets the climate and conditions for teachers to implement DAP practices aligned to beliefs.

Provide opportunities for professional development that promote quality instruction related to scaffolding, differentiation, and meeting the unique learning needs of English language learners, special needs students, students who have experienced trauma, are recent immigrants, and addressing challenging behaviors. This includes access to quality training on research-based practices. Relationships are an important feature of DAP therefore professional development to ensure the development of relationships that provide safe environments for learning and quality relationships with families is available. Develop strategies and supports for those who struggle and professional development on ethical practice to ensure appropriate boundaries.

Strive to minimize the impact of the stress of assessment. Work with teachers to determine time management and data collection processes to reduce the impact on teacher's interactions with children. Provide time to align curriculum and assessment to reduce the time teachers use to sift through curriculum to determine essential learning. Provide professional development with learning that demonstrates the use of assessment data to inform instruction.

Consider standards and determine essential learnings, embedding this work in the time teachers spend with colleagues in professional learning communities. Consider

supports for teachers to meet growing populations of at-risk students and families. As one teacher noted "we're not social workers". Consider the additional support needs of teachers located at settings such as an elementary school and to reduce isolation.

Have a clear philosophy of early education developed by the program so teachers can communicate consistent message, key messages with parents and families so the expectations of the setting are clear and don't become barriers to DAP implementation

Lastly, supportive supervisors support DAP and play in the classroom.

Implications for public school administrators. Recognize early education professionals and the importance of their work and the value it brings to the school district and community. Work with early education professionals to problem-solve issues related to space, bussing, funding, and access to support professionals such as social workers, mental health professionals, behavior specialists, and EL teachers to help them meet the demands of a growing population of at-risk students and families. Provide assistance to elementary principals who may have an early childhood classroom in their building. Develop a clear understanding of the relationship and responsibility between building leadership, the teachers, and other early childhood program professionals in the district.

Implications for higher education. Teacher preparation is an important responsibility and is even more so for early childhood education professionals as their work, in partnership with parents and other influential adults, sets a child's foundation for future learning. The importance of teachers having a good foundation of knowledge in pedagogy, child development, instruction, curriculum, culturally responsive practices,

best practices, and the ability to reflect on their practice was apparent in the study.

Teachers talked about needing the flexibility to meet children's needs and ability to implement beliefs. The field needs to be assured that the array of strategies in their tool box and their beliefs are based on research of best practice to ensure the instruction they provide children is of the highest quality.

Recommendations for Future Studies

A number of opportunities were identified as possible areas for additional research. One involves definitions of intentional and embedded instruction. Although there are textbook and research-based definitions of these terms, knowing how teachers interpret and implement intentional and embedded instruction in real-world settings would provide insight into the quality of early education classrooms. Another key term that would benefit from research is that of differentiated instruction. Understanding how teachers interpret this word, choose differentiated instruction strategies, and implement them would provide insight into the level to which teachers are able to provide learning opportunities for diverse students. A follow-up would be to investigate the common phrase, "meeting children where they are at." What does this phrase mean to teachers? How do they determine where children are at and how do the "meet" them?

Explore play in the early childhood classroom. Play has been a topic of recent research, however exploring the many definitions and terms around play: free play, playtime, structured play, free choice, all seem to have different implications for classroom preparation. It would benefit the field to have common language and expectations for play.

The various formats for instruction in the early childhood classroom, the purpose of each, definitions and expectations is needed. To explore what happens in small group, large group, circle time, transitions, snack and identify the quantity and quality of instruction that can happen in each would benefit teachers as they attempt to make the best use of all time available to them.

Research on the impact of reflective practices in early education would provide information needed to help struggling teachers. It seems one thing that is difficult to coach is meaningful, realistic assessment of one's work, especially for those who struggle. Supervisors have noted that those who struggle most have strong beliefs of DAP but underestimate the level to which they are realistically implementing DAP practices (Wen et al., 2011). Research on the reflective practices of early childhood teachers is needed to help support the field to ensure high-quality classroom for all children.

Summary and Closing

The purpose of the study was to identify the beliefs and practices of early childhood education teachers by investigating the lived experiences of nine teachers of PreK-4 students in Minnesota school-based settings. The study explored their beliefs and practices and the alignment of these to developmentally appropriate practice (DAP). It also explored the elements that contribute to the teachers' success and/or barriers to implementation of DAP.

The research indicates that high-quality instruction is important, especially for children at risk and that DAP as a feature of high-quality instruction, can promote the level of positive outcomes necessary to close the achievement gap (Alford et al., 2016; Erickson, 2016; Huffman & Speer, 2000; Macron, 1999). The research also indicates that it takes a highly-skilled teacher to navigate the complex balance of DAP, standards, definitions of school readiness, and other pressures of curriculum and assessment, to provide a classroom that utilizes the full spectrum of DAP principles (Hamre, 2014; Howes et al., 2013). Therefore, the research focused on the experiences of teachers who were identified as highly-skilled, as a means to learn what drives their success.

The information gained from the study is intended to inform the field of early education, improve teacher practice to attain high-quality instruction, inform leaders of early education, and add to the base of knowledge and practice on culturally responsive practices in early education classrooms. DAP as a strategy to promote culturally responsive instruction is found in the three core considerations of DAP; knowing about child development, knowing what is individually appropriate, and knowing what is culturally appropriate.

The analysis of the data found that the teachers had strong beliefs of DAP and were confident in their ability to implement developmentally appropriate practices.

Evidence was found that linked their beliefs and practices to the three core considerations of DAP and the five principles. Evidence of the first consideration, knowing about child development, was found in the alignment of their descriptions of classroom practices to the language of the foundational developmental theorists on which the DAP framework is based. Evidence of the second consideration, knowing children individually, was found in the statements that demonstrated the importance of knowing where children are at and

knowing their interests followed by examples of how the information was used to provide differentiated instruction. The third consideration, knowing what is culturally appropriate, was found in the reflective practices on personal bias and values and their desire to learn about the families, children, their culture and language, and then incorporating this knowledge into their instruction and relationships with families and students.

Another key element of success found in the data was that of balance. These highly-skilled teachers, through support from supervisors, colleagues, and personal confidence in their skills, were able to balance the curricular and assessment expectations of the setting with what they know to be appropriate for children. They were allowed the space to be flexible to meet the needs of students and demonstrated skill in the ability to make instructional decisions that met standards-based goals.

The key to implementation of DAP, as identified in the essence of the phenomenon, is one of balance, skill, and confidence to manipulate curriculum to meet the learning needs of students: often through play and using relationships as a base of trust to provide a climate conducive to learning.

The words of Cornelius Minor (2019) describe what was evident in the data provided by the interviews and demonstrates DAP at work through the three core considerations.

My job as a teacher is not to teach the curriculum or even to just teach the students; it is to seek to understand my kids as completely as possible so that I can purposefully bend curriculum to meet them (p. 101).

The qualities exhibited by these participants, combined with their passion and dedication to the work, bring hope in the ability of teachers to do great things for children.

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APPENDIX A

Participant Invitation

Dear Early Childhood Teacher,

This is an invitation to participate in a research study at Minnesota State University, Mankato. Your name and email address were provided to me by your program administrator as a possible participant for this research.

I am a student at Minnesota State University, Mankato, working on my dissertation to fulfill requirements for a doctorate in educational leadership. This research is being conducted under the supervision of my advisor, Dr. Candace Raskin, Department of Educational Leadership. This study is to understand the beliefs and practices of highly-skilled teachers within public, school-based, early education settings. The results of this study will be of value to those in roles that support educators as they strive to provide high quality learning experiences for diverse students in these increasingly complex environments.

As a teacher, identified as highly-skilled, your experiences to provide high quality experiences for young children are of value to the profession, I extend an invitation to spend approximately 60-90 minutes answering questions using an interview format.

If you agree to participate, please respond by sending an email to me at julie.ritter@mnsu.edu. I will follow-up to schedule an interview and select a confidential location for the interview. In addition, please read and sign the attached Participant Informed Consent Form. The informed consent form outlines the research process in greater detail and requires your signature. The signed informed consent form can be mailed to me at: Julie Ritter, Crystal Lake Education Center, 16250 Ipava Ave. Lakeville, MN 55044 or delivered in-person at the time of the interview.

Thank you very much for your consideration.

Sincerely, Julie Ritter Ed. M.S.

IRBNet ID #: 1429994

APPENDIX B

Informed Consent

Dear Early Childhood Teacher,

My name is Julie Ritter and I am a student at Minnesota State University, Mankato, working on my dissertation to fulfill requirements for a doctorate in educational leadership. You are invited to participate in a research study at Minnesota State University, Mankato. This research is being conducted under the supervision of my advisor, Dr. Candace Raskin, Department of Educational Leadership, who is identified as the Principal Investigator. I am identified as the Student Investigator. The purpose of this study is to understand the beliefs and practices of highly-skilled teachers within public, school-based, early education settings.

You are being asked to participate in this study because you have been identified as a highly-skilled teacher who is providing quality learning experiences for young children.

If you agree to participate in this study, I will invite you to an interview. This interview will be approximately 60-90 minutes and will be held at a location where confidentiality can be maintained. This site will be by mutual agreement and may take place at my office located at Crystal Lake Education Center, 16250 Ipava Ave in Lakeville or at a confidential meeting space secured at a local library or other secure site by mutual agreement.

The interview will be digitally recorded to ensure accuracy. Two devices will be used; a primary device and a secondary device as back-up. A transcription service will be used to transcribe the voice-recorded data collected in this study. The researchers will ensure the protection of your confidentiality and privacy with the transcriptionist involved. The transcript will be used for data analysis and accessible by myself, as the Student Investigator and Dr. Candace Raskin, the Principal Investigator. Your identity and the identity of your school will be kept confidential through the use of pseudonyms. Prior to analyzing the transcripts (data), I will provide you with a copy of the transcript for your review. This will give you an opportunity to check the accuracy of your statements and verify that the interview accurately captures your experiences. After analysis of the data, I will share the themes developed through the analysis process with you to ensure accuracy. Analysis of the transcripts and development of themes will occur throughout the summer months.

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The primary digital recording will be erased by the student investigator following the completion of the transcription process. Consent forms, the secondary recording, researcher's notes, and transcripts will be stored in a secured cabinet for a period of three years at the office of the Principal Investigator, located at the 7700 France Avenue, Edina Campus of Minnesota State University, Mankato. This information will be destroyed by the Principal Investigator after three years of the completion of the study by shredding documents and deleting recordings.

Participation in this research study is voluntary. You can decline to be in this study, stop or withdraw at any time.

You may withdraw by telling the Principal or Student Investigator either through email, phone call, or in-person that you no longer want to be in the study.

Your decision whether or not to participate will not affect your relationship with Minnesota State University, Mankato, and refusal to participate will involve no penalty or loss of benefits.

The risks you will encounter as a participant in this research are not more than experienced in your everyday life.

There are no known direct benefits to you as a result of participating in this study however the results of the study may be of value to those who support educators as they strive to provide high quality learning experiences for diverse students in increasingly complex early education environments. Identifying the beliefs, practices, experiences, successes, and barriers faced by highly-skilled teachers and identifying their capacity to provide high-quality experiences for children, will provide information to the field that will help ensure children are receiving the high-quality education they need.

We will do our best to make sure that the personal information gathered for this study is kept private. However, we cannot guarantee total privacy. If information from this study is published or presented at conferences, your name and other personal information will not be used.

In return for your time, effort, and possible costs associated with traveling to the interview site, you will be able to choose one of two books; *Heart! Fully Forming Your Professional Life as a Teacher and Leader* by Timothy D. Kanold or *Serious Fun: How Guided Play Extends Children's Learning* edited by Marie L. Masterson & Holly Bohart.

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If you have any questions about this research study, contact the Principal Investigator, Dr. Candace Raskin at Minnesota State University, Mankato at candace.raskin@mnsu.edu or (952) 818-8881 or contact me, the Student Investigator, working under the direction of the Principal Investigator, Julie Ritter at julie.ritter@mnsu.edu. Or (952) 288-9498.

If you have any questions about participants' rights and for research-related injuries, please contact the Administrator of the Institutional Review Board, at (507) 389-1242.

Participation in this research is voluntary. You have the right to decline to be in this study or to withdraw from it at any point without penalty or loss of benefits to which you are otherwise entitled.

You have a right to a copy of this consent form and one will be provided to you by the Student Investigator.

Sign below to indicate your willingness to participate in this research study and to indicate that you are at least 18 years of age.

Signature	Your Name (printed)	Date

APPENDIX C

Interview Protocol

School District:

Interview Participant:

Date: Time:

Thank you for agreeing to meet with me today. I'm looking forward to hearing about your experience as a teacher of preschool students.

For the next approximately 60 to 90 minutes, I will be asking you questions about your experience as a teacher of 4-year-olds, who are attending preschool one year prior to kindergarten.

Some reminders for you before we begin. You have read and signed the Informed Consent Form. This form will be kept in a secure cabinet in the office of the principal investigator, Dr. Candace Raskin, on the Minnesota State University, Mankato, Edina Campus. The interview is being digitally recorded. A transcript of this interview will be shared with you to ensure accuracy. Recordings, transcripts, and notes of our conversation will also be kept in the same secure location on the Minnesota State University, Mankato, Edina Campus upon completion of my data analysis. I will use pseudonyms and remove any identifying information from my writing and presentations. Our conversation will be kept private and confidential.

If you do not want to answer a question, that is okay. If you would like to end the interview, you can do so at any time without consequence. Participation is your choice. Do you have any questions before we begin?

Demographic Information

The first set of questions I will ask will provide a description of your current setting, your education and your students.

Education

Please tell me about your education and preparation to be an early childhood teacher.

Prompt: Do you have a degree?

Prompt: Do you have any licenses or certifications?

Experience

How many years have you been teaching?

Prompt: Have you taught other age or grade levels?

Prompt: How many years have you been teaching preschool?

Current Setting

How many years have you been teaching at your current school district?

Do you only teach PreK-4 or do you also teach PreK-3 classrooms?

Describe the current structural features of your classroom(s)? This would include things like how many hours do your students attend preschool each day; how many days per week, number of students you teach, staff to student ratios of your classroom.

Student Demographics

Tell me about the demographic characteristics of your students. This would include things like ethnicity, gender, and socio-economic status.

Research Question:

What instructional strategies do PreK-4 teachers use within their classrooms?

Instructional Strategies

Describe the instructional strategies you use in your classroom?

Research Question:

What factors do PreK-4 teachers consider as they determine their daily instructional strategies?

Considerations in determining Instructional Strategies

What factors do you consider as you determine your daily instructional strategies?

What influences the decisions you make about instruction in your classroom?

Do you experience any barriers to implementing your daily instructional strategies? Explain.

Research Question:

What are the beliefs of PreK-4 teachers regarding the use of developmentally appropriate practices within their classrooms?

Beliefs of Developmentally Appropriate Practice

What are your beliefs regarding developmentally appropriate practices?

How do you define developmentally appropriate practice?

Research Question:

How do the instructional practices selected by PreK-4 teachers align with their beliefs of developmentally appropriate practices?

Alignment of Beliefs to Practice

How much do your beliefs of developmentally appropriate practice influence your instructional decisions?

Describe how your instructional practices align with your beliefs of developmentally appropriate practices?

You have been identified as a highly skilled preschool teacher. What contributes to your successes in the classroom?

Challenges and Barriers

Consider the expectations of your setting, do you experience any challenges in aligning these expectations with your beliefs? If so, how? (*Prompts*: curriculum expectations, assessment, expectations for student growth, standards-based goals)

Do you experience any challenges or barriers to implementing instruction that is aligned to your beliefs about developmentally appropriate practice?

Do you receive support for your practice and if so from whom? (*Prompts*: e.g. supervisor, colleagues, professional organization)

How do they provide support? (*Prompts*: e.g. how you use curriculum, assessment)

APPENDIX D

Data Analysis Worksheet

Data Analysis Worksheet Participant:

Textural Invariant	Structural Invariant	Personal
Constituents	Constituents	Reflections

APPENDIX E

Summary of Themes for Member-checking

Summary of Interview Findings

Main Textural Themes

Textural themes are those that describe the experience of being an early childhood teacher implementing developmentally appropriate practices in a school-based setting.

Theme 1: Principles that define DAP for teachers

Sub themes: Knowing where children are at; Play; Embedded Learning; Intentional Learning; Routines and Schedules; Relationships

Theme 2: The Teacher's ability to implement DAP

Sub themes: Assessment, Standards, Curriculum, Time, Classroom Support, Differentiation and Diversity balanced by Knowing where children are at, Self-efficacy, Confidence in Own Skills, Freedom and Flexibility, Authentic Relationships, Open Mindset, Love for the Job, Supportive Colleagues

Main Structural Themes

Structural themes are those that describe the elements that impact or influence the experience of being an early childhood teacher implementing developmentally appropriate practices in a school-based setting.

Theme 1: Role of the Supervisor

Sub themes: Creates a culture that supports freedom and flexibility to meet children's needs; Supports play; Supports teachers as they negotiate challenges

Theme 2: Access to quality resources and training in researched-based practices Sub themes: Minnesota Reading Corps; SEEDS; Conscious Discipline

Theme 3: The Setting Matters

Sub themes: Advantages and disadvantages of being in an elementary setting or central early childhood center

Theme 4: Required Practices

Sub themes: Assessment; curriculum; status of licensed early childhood teachers