

2019

Preschool teachers' beliefs and actions concerning creativity in the classroom

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PRESCHOOL TEACHERS' BELIEFS AND ACTIONS CONCERNING CREATIVITY
IN THE CLASSROOM

An Abstract of a Dissertation

Submitted

in Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

Approved:

Dr. Beth Van Meeteren, Committee Chair

Dr. Jennifer Waldron
Dean of the Graduate College

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December 2019

ABSTRACT

The purpose of this study was to examine preschool teachers' beliefs and actions associated with creative pedagogy. This study partially replicated a study by Cheung (2017) and allowed for comparisons among American, Greek, and Chinese preschool teachers. This qualitative study used case studies to examine preschool teachers' beliefs related to the definition of creativity, effective creative pedagogy, and contextual factors related to promoting creativity. Participants included three preschool teachers in rural settings in the Midwestern United States. Data included an initial interview, the completion of the Early Childhood Creative Pedagogy Questionnaire (Cheung & Leung, 2013), two lesson observations, and reflection interviews after each lesson. The following research questions guided the study:

- 1) What constitutes creative practice in preschool classrooms?
- 2) What kinds of creativity-fostering pedagogies are used in preschool classrooms?
- 3) What contextual factors do teachers report that support or impede efforts to promote creativity in their classrooms?

This study revealed teachers experienced difficulty defining creativity and articulating specific strategies conducive to creative pedagogy. Also evident was a lack of congruence between teacher beliefs about creativity and actual classroom practices. Teachers deemed the curriculum supportive of addressing creativity, but recognized barriers in the academic push in early childhood and lack of knowledge of the importance of play. Findings suggest an operational rather than conceptual definition of creativity may be practical for early childhood teachers, and a need for training related to creative

pedagogy. Findings also revealed teachers need others (parents, administrators, colleagues, and the community) to understand how the use of play and creativity support the development of young children to advocate for and support creative thinking. Additionally, at the teacher preparation level, exploring creativity and addressing creative pedagogy is an essential emphasis in early childhood curriculum courses.

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Dr. Linda Fitzgerald, Co-Chair

Dr. Mary Donegan-Ritter, Committee Member

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December 2019

DEDICATION

I dedicate this paper to the individuals who were there for me during my long journey. To my husband, Andrew, who provided ongoing support, love, and encouragement. Your strength made me stronger and your faith in what I could accomplish pushed me to do and be my very best. Thank you for taking care of our boys as I worked to accomplish my goal. I could not have done this without you.

To my mother, Linda, whose positivity kept me moving forward. You were always there to listen and offer reassurance. Thank you for always believing that I can accomplish anything I set out to do.

To my boys, Blake, Bryce, and Bo, who were my inspiration. Regardless of the challenges I experienced, at the end of the day I always had the three of you. Thank you for being the reason I persevered.

ACKNOWLEDGMENTS

I would like to acknowledge my committee co-chairs, Dr. Beth Van Meeteren and Dr. Linda Fitzgerald. Beth, thank for your kind words and caring demeanor. I sincerely appreciated your encouragement. You offered a different perspective and provided valuable suggestions to improve the quality of my writing and presentations. Linda, thank you for your constant communication and feedback. You challenged and pushed me and as a result, I became a more thoughtful researcher and stronger writer. I greatly appreciated your time and commitment to my dissertation.

I would like to acknowledge Dr. Mary Donegan-Ritter and Dr. Gary Gute. Thank you both for being valuable members of my committee. I appreciated your support of my research and writing.

I would like to acknowledge Dr. Audrey Rule, my advisor and professor during most of my time as a doctoral student. Thank you for teaching me so much about the topic of creativity and its importance. Your courses and guidance helped me to see my potential as a researcher and author.

I would like to acknowledge Upper Iowa University's recognition of my personal and professional endeavor. I was grateful for growth leave that enabled me to do research and focus solely on writing my dissertation. My colleagues fully supported me by teaching my courses, taking on responsibilities in my absence, and offering encouragement along the way.

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CHAPTER 1

INTRODUCTION

The demands of our ever-changing world have shifted the view of creativity. Once regarded as a unique characteristic of a few individuals, our 21st century society now deems creativity an essential characteristic in not a few, but all individuals. Creativity is now an indispensable skill closely related to the success of an individual in our current times (Eckhoff, 2011). Lowenfeld and Brittain (1975) identified creativity as a basic element in the development of children, which is the ultimate purpose of early education. “As recognition of creativity’s value continues to grow, it becomes increasingly important to consider how people learn to become creative within educational environments” (Rubenstein, Ridgley, Callan, Karami, & Ehlinger, 2018, p. 101). Dialogue related to creativity is crucial because research has indicated the creative thinking skills of young children are not waxing, but waning. There has been a decline in critical thinking among individuals in the United States. According to Kim (2011), “Since 1990, even as IQ scores have risen, creative thinking scores have significantly decreased. The decrease for kindergarten through third graders was the most significant” (p. 285). Because of the sharp decline in our youngest learners, this study focuses on the prevalence of creativity in early childhood classrooms.

Discussions of creativity are difficult as the construct of creativity is so complex even scholars disagree on how to define it (Mullet, Willerson, Lamb, & Kettler, 2016). In Makel’s (2009) view, development of creativity within adults in the workplace has received more attention than creativity within children. He coined this as a creativity gap

or a “disparity between valuing creative performance in adults and not fostering creativity within students” (p. 38). Kamylyis, Berki, and Saariluoman (2009) found it necessary to explore current definitions of creativity and develop one more appropriate for young learners. Leggett (2017) concurred and stated a definition that specifically addressed young children was essential for the field of early childhood. According to Leggett (2017), providing this type of transparency with regard to the definition of creativity would enable a teacher to consider how the arrangement of the physical, socioemotional, and intellectual environment of the classroom affects the development of creativity in young learners.

Play is often associated with the definition of creativity although some early childhood teachers may not be fully aware of the link between creativity and play despite researchers identifying this association. In a study of 225 children attending preschool, researchers found “clear relationships between certain types of social play and creativity and the complexity of social play and receptive language abilities” (Holmes, Romeo, Ciraola, & Grushko, 2015, p. 1192). Solitary, onlooker, and parallel play produced lower creativity scores. More involvement in parallel play resulted in lower receptive language scores. Symbolic play was highly correlated with receptive and expressive language capabilities and children who participated in cooperative symbolic play with a peer group had higher receptive scores in vocabulary. Robson and Rowe (2012) found exploratory play was a strong context for creative thinking. Exploratory play, or play with different types of objects, offers children opportunities to investigate and explore materials in their world. They make use of their senses during exploratory play (Isbell & Yoshizawa,

2016). Robson and Rowe (2012) found “Socio-dramatic play, in particular, was the activity most likely to lead to high levels of creative thinking” (p. 362). Socio-dramatic play is a more advanced type of pretend play. During this type of play children use make-believe, communicate through language, collaborate with peers, and create stories that develop with complexity (Piaget, 1971).

The physical and socio-emotional environment a teacher establishes can have a positive or negative effect on the creative endeavors of students as “the learning environment is one of the most important factors – determining in large part, whether creative potential will be supported (or suppressed)” (Beghetto & Kaufman, 2014, p. 54). Gajda, Karwowski, and Beghetto (2017) supported the idea that physical and socio-emotional environment matters. They found teacher relationships with students, including caring and supporting students emotionally, are factors related to creativity.

Less certain is a teacher’s awareness of how pedagogical decisions and types of pedagogy that nurture creativity influences the development of student creativity. Cheung (2017) found “In regard to teachers’ perspectives about effective creative pedagogy, teachers displayed limited knowledge of creative pedagogic strategies” (p. 82). If teachers understand the pedagogical approaches that are more conducive to promoting creativity, they may exercise their own creativity in their teaching practices to help their students. Although researchers have attempted to learn about the connection between beliefs teachers hold and how those beliefs are evident in the classroom, much about this topic is still uncertain (Cheung, 2012). In Cheung’s view, more evidence associated with

beliefs embraced by teachers and their observed classroom pedagogy would provide transparency on creativity promotion in the classroom.

Even if teachers become aware of pedagogy necessary to nurture creativity, they face many challenges that discourage the use of creativity within the school day (Rubenstein et al., 2018). According to Rubenstein et al. (2018), “Teachers are uniquely poised to provide instruction to facilitate that development, but many factors impede teachers’ capacity to develop students’ creativity” (p. 100). Many teachers feel overwhelmed by the amount of standards and content they need to cover in an academic year. A great deal of time in early childhood classrooms is teacher directed with a focus on math and literacy (Russo, 2012). Growing amounts of academic expectations push teachers into using direct instruction more often and away from opportunities to play (Russo, 2012). Since the development of creativity and play are so closely related, this is problematic and the same issues arise when play is concerned. Russo (2012) asserted, “When faced with the academic expectations for school readiness and the curricular and pedagogical dilemmas that accompany them, teachers tend to move away from a play-based curriculum” (p. 143).

A societal shift toward creativity as a needed skill for success challenges educators to think more critically about creativity and its presence in the school setting. Because of the intellectual and developmental benefits of creativity, this issue is of great importance to teachers, particularly to early childhood teachers who strive for pedagogy that is developmentally appropriate and establishes a strong foundation for later learning. Children are the future. They will hold positions as teachers, scientists, engineers, artists,

and leaders in business and healthcare fields in an increasingly diverse and global society. To be successful, they will need to produce novel ideas, understand content related to their field, and use relevant technologies (Isbell & Yoshizawa, 2016). Creativity is at the core of these abilities. In Miller and Almon's (2009) view, "No human being can achieve his full potential if his creativity is stunted in childhood....no nation can thrive in the 21st century without a highly creative and innovative workforce" (p. 2).

If change related to creativity in schools is possible, awareness of what is currently happening in early childhood settings can be a starting point. In this study, preschool teachers provide the lens for an examination of creativity with the purpose of contributing to existing research in early childhood settings.

Problem Statement

The emphasis on academic achievement sometimes overshadows knowledge about best practice in early childhood education. Katz (2015) addressed developmentally appropriate practice as it relates to the debate about how much academic focus should be part of the preschool curriculum. Her view was that instruction related to academics and play could both be part of an appropriate curriculum. The keys to teaching academic skills were to keep the children in mind and to integrate academics with appropriate experiences. Her discussion of academic and intellectual goals further clarified her stand on this issue. Katz (2015) indicated, "Academic goals are those concerned with the mastery of small discrete elements of disembodied information, usually related to pre-literacy skills in the early years" (p. 2). When these goals are in mind, teachers look for one correct answer and may use worksheets or skill and drill exercises to prepare children

for later grades, particularly kindergarten readiness. These are important skills for reading and writing success. Katz (2015) also noted, “Intellectual goals and their related activities, on the other hand, are those that address the life of the mind in its fullest sense (e.g. reasoning, predicting, analyzing, questioning, etc.), including a range of aesthetic and moral sensibilities” (p. 2). These goals engage children in experiences that encourage them to investigate, pose questions, and predict in an effort to learn new ideas and further their understanding. Katz (2015) asserted, “An appropriate curriculum in the early years then is one that includes the encouragement and motivation of the children to seek mastery of basic academic skills, e.g. beginning writing skills, in the service of their intellectual pursuits” (p. 2). This emphasized early childhood teachers use pedagogy that encourages young children to be “fully intellectually engaged” rather than the formal pedagogy delivered in many preschools that teaches school readiness skills separately and out of context (p. 4).

Despite knowledge about developmentally appropriate practice, in many classrooms across the United States achievement in the form of standardized test scores is emphasized and valued. As a result, state and federal mandates have increased instructional time on math and reading instruction (Center on Education Policy, 2017) and may be stifling creative thinking of teachers and their students. Bassok, Latham, and Rorem (2016) found “There is a growing impression among practitioners, researchers, and the media that in the past two decades, preschool and kindergarten classrooms have rapidly become more academically oriented and less focused on exploration, social skill development, and play” (p. 2). These changes, often viewed as detrimental for young

students, have been influencing the education system in the United States for many years. Miller and Almon (2009) cautioned that, if ignored, trends in kindergarten classrooms could also begin to appear in settings serving children younger than five years of age. Prentice (2000) stressed “Thus prescribed procedures and preconceived ideas squash the spirit of self-motivated exploration fueled by curiosity and, as a result, imaginative possibilities for learning dwindle” (p. 152). The value given to standardized testing may have forced schools to dismiss the importance of students thinking creatively and instead accept rote memorization and skill and drill as appropriate instruction. This shift in emphasis is apparent even in classrooms that educate our youngest learners. Preschool and kindergarten have more of an academic focus, resulting in expectations in early childhood classrooms that are not developmentally appropriate. Teachers and administrators often disregard the importance of play, resulting in young children being discouraged from using their natural curiosity to learn. There have been consequences of these changes. According to Kim (2011), abilities related to creative thinking have declined in our country. Kim (2011) proclaimed, “To reverse decline in creative thinking, the United States should reclaim opportunities for its students and teachers to think flexibly, critically, and creatively” (p. 294). She stressed teachers and schools should challenge the expectations related to standardization in schools.

Consequently, some schools may be failing to address creativity development in students. According to Bronson and Merryman (2010), “In effect, it’s left to the luck of the draw who becomes creative: there’s no concerted effort to nurture the creativity of all children” (p. 45). Seen as a necessary skill for young children, the view of creativity is

often favorable. Prentice (2000) claimed, “It is regarded by many as potentially the most powerful means through which all children have an opportunity ‘to open the gate of a better world’” (p. 146). Exploring play and creativity through the lens of preschool teachers has the potential to affect the field of early childhood education. Because teacher experiences vary, these individuals have much to offer with their views of play and creativity in early childhood classrooms. It may be beneficial to examine how some teachers are meeting the developmental needs of young students through play and creative experiences, while still addressing standards and curriculum requirements. Teachers of young children are in a position to influence the development of children entrusted to them and this responsibility is extremely important. Prentice (2000) stressed, “All children are entitled to an education that fosters vital learning dispositions that include perseverance, self-motivation, flexibility and adaptability, through which they are able to sustain, in adulthood, creative ways of thinking and behaving” (p. 156).

Theoretical Framework

To examine creativity in early childhood, this study centered on cognitive constructivism (Piaget) and sociocultural theory or social constructivism (Vygotsky). Based on the ideas of Piaget and Vygotsky, the concept of developmentally appropriate practice is fundamental to the theoretical framework as it guides the work of early childhood teachers. Finally, a definition related to the creativity of young children provides a consistent definition most appropriate to early childhood settings.

Piaget

Cognitive constructivism, derived from Piaget's theory of cognitive development, states that individuals construct knowledge on their own, as opposed to just receiving information from others (Piaget, 1953). The idea that children construct knowledge based on their experiences that leads to personal meaning forms the basis of constructivism (Powell & Kalina, 2009). Constructivist approaches assist teachers in their efforts to help students learn at a pace appropriate to their prior experiences and provide opportunities to address misunderstandings related to content acquisition (Powell & Kalina, 2009). Research centered on creativity provides an opportunity to examine constructivism in the context of the classroom (Plucker, Beghetto, & Dow, 2004).

Cognitive constructivism also relates to teachers constructing their own knowledge about creativity and their teaching practices. Rubenstein et al. (2018) stated, "Teachers support creative development by modeling their own creativity, providing opportunities for creative expression, and conveying social cues about the acceptance and importance of creativity in their classrooms" (p. 102). Early childhood teachers can shape the creative experiences children have in the classroom. In some cases, teachers may question their own creative abilities, thereby affecting the creative experiences available to children. Many teachers have differing views on what exactly defines a creative activity or experience. There may even be instances where teachers avoid creative activities due to the constraints imposed by standardized assessments and mandated curriculum (Rubenstein et al., 2018).

Vygotsky

“A sociocultural approach to research with young children has a great deal to offer in expanding our understanding of their capabilities” (Robbins, 2005, p. 168). This study addresses creativity in early childhood classrooms; therefore, it is appropriate to use Vygotsky’s sociocultural theory as the foundation of the theoretical framework.

Every function in the child’s cultural development appears twice: first, on the social level, and later, on the individual level; first, between people (interpsychological) and then inside the child (intrapsychological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relationships between individuals. (Vygotsky, 1978, p. 57)

Vygotsky believed it was necessary to look outside an individual and take into consideration the social and cultural contexts related to a child’s mental functioning. Those contexts are especially important when thinking about experiences offered to students in classroom settings. Thought, according to Vygotsky’s theory, is very much a social experience (Berk & Winsler, 1995). This theory reminds early educators of the importance of a classroom environment engineered to nurture communication, collaboration, and cooperation in young learners. Creativity is part of this social-emotional environment. According to Sakr, Trivedy, Hall, O’Brien, and Federici (2018), creative identity “is generated and enacted in the sociocultural context, rather than a quality that exists inside of individuals and is simply externalized through creative activities” (p. 12). According to Robbins (2005) “The sociocultural perspective emphasizes that it is through involvement in activities with others that development occurs and shared understandings are created” (p. 154). Leggett (2017) underscored the importance of analyzing early childhood teachers’ instructional strategies in relation to

the socio-emotional environments they create for students: “Creative thought processes and sound knowledge bases are developed through social interaction and under the guidance of an experienced educator who can direct children’s thinking” (p. 846). Social experiences have the potential to alter children’s thinking and much evidence suggests these experiences are associated with cognitive growth (Berk & Winsler, 1995).

Vygotsky’s sociocultural theory is an appropriate lens to examine creativity in early childhood classrooms. Robbins (2005) suggested, “When adopting a sociocultural approach, we need to examine the context, relationships, culture and activities in which children participate and the tools and artifacts they use, if we are to determine and understand their ideas” (p. 153). Sakr et al. (2018) stated, “Sociocultural perspectives encourage us to understand children as active producers of culture, so that their creative outputs are not seen simply as an expression of their competencies, but instead as influential responses to the sociocultural environment that surrounds children” (p. 11).

Vygotsky’s (1930/2004) ideas about imagination are also relevant to creativity development in young children. He identified two types of activities characteristic of human behavior. The first is reproductive activity, which has ties to memory. Based on previous experiences of the individual, repetition of activity occurs. In these instances, behaviors do not produce something novel; rather, there is a link between the behavior and something already in existence. In other words, this activity illustrates recall of behavior based on prior understandings and linked to feelings, thoughts, and routines in an individual’s life. The other type of activity is creative and often called imagination. With creative activity, the individual has the capacity to form a mental image and

visualize what the image is or what it could be, rather than simply reproducing something familiar. With both types of activity, previous experiences are meaningful. According to Vygotsky (1930/2004), “The brain is not only the organ that stores and retrieves our previous experience, it is also the organ that combines and creatively reworks elements of this past experience and uses them to generate new propositions and new behavior” (p. 9).

Vygotsky (1930/2004) asserted that creativity is not limited to few individuals, a prevalent belief of many. Not only can artists, inventors, and those well known for their work be creative, but also all individuals, including young children, can express creativity. He believed creativity materialized any time an individual produced something new, regardless of the product or outcome. According to Vygotsky’s view, creativity happens in early childhood settings and there are ways teachers may be able to promote and encourage creative behaviors in young children. Play is the most common way children exhibit creativity. Opportunities for children to engage in play have the potential to increase creative behaviors in children. Children use imitation to represent their world, what they have observed and experienced in their daily lives. Children take these experiences and use their imaginations to represent their new and different perceptions of reality. Children replicate and role-play patterns they discover within the physical, biological and social worlds around them. When they playfully vary their actions within these replications, creativity is often the result.

Vygotsky’s ideas about creativity in early childhood and the significance of imagination have implications for educators. Vygotsky (1930/2004) declared, “One of

the most important areas of child and educational psychology is the issue of creativity in children, the development of this creativity and its significance to the child's general development and maturation" (p. 11). Understanding how creativity is developed and expressed may help early childhood teachers as they plan environments for young children. The environment in an early childhood setting can convey appreciation and support for creativity development or it can devalue and hinder this type of development (Eckhoff & Urbach, 2008). It may benefit teachers to consider the environment and influence it can have on creativity.

We believe that this is an essential task of education – to create a stimulating environment in which creative thought is encouraged. It speaks to the importance of providing young children with opportunities to experience new things, draw upon the experiences of others, and to be allowed many opportunities to create materials that embody their imaginative thoughts. By nurturing students' imaginative thought, early educators are preparing students to become creative thinkers and problem-solvers who have the capabilities to explore difficult problems and issues in new and innovative ways. (p. 185)

Vygotsky (1930/2004) concurred with the importance of creativity development in educational settings.

To the extent that the main educational objective of teaching is guidance of school children's behavior so as to prepare them for the future, development and exercise of the imagination should be one of the main forces enlisted for the attainment of this goal. (p. 88)

If we neglect to nurture the imagination of young children, in essence we disregard an important facet of their developmental needs (Eckhoff & Urbach, 2008).

Powell and Kalina (2009) stated, "The constructivist classroom allows effective learning where light can be shed so that imagination, knowledge, and inspiration can glow within each individual student" (p. 248). Coined by Vygotsky, social

constructivism supports the idea that social experiences are at the heart of learning.

According to Powell and Kalina (2009), “Vygotsky believed that internalization occurs more effectively when there is social interaction” (p. 244). In a social constructivist classroom, it is recommended students be placed in situations where they can work collaboratively on creative projects or engage in creative endeavors with peers. The interactions that challenge them to look at the world from different perspectives have the potential to increase content knowledge and understanding among peers. Some teachers use questioning and ask students to express their ideas verbally.

While asking children to explain their thinking can be an effective strategy, some concepts can be better represented through drawings or models that children create and then explain. Constructing models and explanations is a strategy that helps children to be reflective on both the concepts, and their own thinking about the concepts. (Hong, Torquati, & Molfese, 2013, p. 4-5)

When teachers adhere to social constructivism in the classroom, they can create opportunities for student engagement in activities that will directly affect learning (Hong et al., 2013). According to Isbell and Yoshizawa (2016), “A child who is skilled or knowledgeable in a certain area may also mentor others by scaffolding their understanding with conversations, demonstrations, and collaboration on projects related to their interests” (p. 70). When children have the opportunity to engage in a collaborative activity with peers, children not capable of working independently can find support and motivation to be part of the creative activity (Cheung, 2018). Teachers can model and convey to young children that engaging in creative behaviors, playing, and expressing themselves can be valuable, enjoyable, and beneficial to their learning and the learning of peers (Saracho, 2012).

Developmentally Appropriate Practice

Early childhood teachers are the focus of the study, so it is essential to include developmentally appropriate practice (DAP) as integral to the theoretical framework in addition to the ideas of Piaget and Vygotsky. Based on the National Association for the Education of Young Children (2009), “Developmentally appropriate practice is informed by what we know from theory and literature about how children develop and learn” (p. 10). DAP is at the core of early childhood education. Teachers of young children need to be well versed in what constitutes DAP in their early childhood settings. As early childhood teachers plan and set achievable goals for the learning and development of young children, the National Association for the Education of Young Children (NAEYC) recommends the following core considerations:

- What is known about child development and learning—referring to knowledge of age-related characteristics that permits general predictions about what experiences are likely to best promote children’s learning and development.
- What is known about each child as an individual—referring to what practitioners learn about each child that has implications for how best to adapt and be responsive to that individual variation.
- What is known about the social and cultural contexts in which children live—referring to the values, expectations, and behavioral and linguistic conventions that shape children’s lives at home and in their communities that practitioners must strive to understand in order to ensure that learning

experiences in the program or school are meaningful, relevant, and respectful for each child and family. (NAEYC, 2009, p. 9-10)

The position statement from NAEYC (2009) also described principles of child development and learning that inform practice. Three of these principles are worthy of mention in light of the research study in this dissertation:

- Development and learning occur in and are influenced by multiple social and cultural contexts. (#8)
- Always mentally active in seeking to understand the world around them, children learn in a variety of ways; a wide range of teaching strategies and interactions are effective in supporting all these kinds of learning. (#9)
- Development and learning advance when children are challenged to achieve at a level just beyond their current mastery, and also when they have many opportunities to practice newly acquired skills. (#11)

The core considerations and principles of child development and learning outlined by NAEYC (2009) align well with the ideas presented by Piaget and Vygotsky, particularly the constructivist approach to learning and sociocultural theory. According to NAEYC (2009), “Young children construct their knowledge and understanding of the world in the course of their own experiences, as well as from teachers, family members, peers and older children, and from books and other media” (p. 14).

Definition of Creativity

DAP must also be taken into consideration when defining creativity, particularly in early childhood settings. There are many definitions of creativity. A prevailing

definition for something to be creative is that it “requires both originality and effectiveness” (Runco & Jaeger, 2012, p. 92). The National Advisory Committee on Creative and Cultural Education (1999) defined creativity as “imaginative activity fashioned so as to produce outcomes that are both original and of value” (p. 30). Plucker et al. (2004) provided the following definition: “Creativity is the interaction among aptitude, process, and environment by which an individual or group produces a perceptive product that is both novel and useful as defined within a social context” (p. 90). According to Isbell and Yoshizawa (2016), “Creativity refers to children actively producing ideas, inventing or making something for the first time, or coming up with unique and different ways of expressing their thinking” (p. 6). Characteristics of creative children include using their imagination, showing curiosity, exhibiting playfulness, and being adventurous. Creative children, although reserved and independent, are lively participants in early childhood settings (Isbell & Yoshizawa, 2016). Duffy (2006) also felt creativity was attainable by all children. Definitions of creativity should celebrate the gifts of all children, recognize a child’s need to explore ideas, acknowledge all young children have the capacity to exhibit creativity, and recognize the critical role of the environment in promoting creativity.

Creativity and the purpose behind it differ significantly when comparing adults and young children. Kampylis et al. (2009) offered a definition they deemed as appropriate for primary education.

We call creativity the activity (both mental and physical) that occurs in a specific time-space, social and cultural framework and leads to a tangible or intangible outcome(s) that is original, useful, ethical and desirable, at least to the creator(s). (p. 18)

While this definition addresses the social and cultural nature of creativity, it does not fully represent creativity in young children. Rather, it resembles definitions associated with adult creativity. Vygotsky's idea that all individuals can exhibit creativity, including young children, addresses Makel's (2009) concerns that the creative endeavors of young children are less significant when compared with adults. Leggett (2017) was aware of this issue and stated that a new definition, one specifically for early childhood, was needed. Leggett's definition supports Vygotsky's belief that all children can be creative. To ensure early childhood curriculum and policy include creativity, she offered the following definition:

Creativity for young children involves cognitive processes that develop through social interactions, play and the imagination. Creative thinking is a transformative activity that leads to new ways of thinking and doing that are novel for the child or useful to children's communities. (Leggett, 2017, p. 851)

Plucker et al. (2004) stated, "We do not define what we mean when we study 'creativity,' which has resulted in a mythology of creativity that is shared by educators and researchers alike" (p. 88). As a result, teachers and those who research creativity may have inconsistent ideas and perceptions of the concept of creativity. Therefore, Leggett's definition specific to early childhood creativity is the definition used in this study.

Purpose of the Study

The purpose of this study was partial replication of a study by Cheung (2017) to examine preschool teachers' beliefs and actions associated with creative pedagogy. This study allowed for comparisons among preschool teachers in the United States and contexts outside of the United States. This study examined preschool teachers' beliefs related to the definition of creativity and effective creative pedagogy in addition to

barriers to promoting creativity. To contribute to the field of early childhood education, this study specifically examined creativity in early childhood settings.

Significance of the Study

The research is significant to the field of early childhood education. Isbell and Yoshizawa (2016) stressed, “There is an urgent need for educators to encourage children’s independent, creative thinking in preschool, pre-K, and kindergarten” (p. 6). Lowenfeld and Brittain (1975) declared creativity as a basic element in the development of children, which is ultimately the purpose of early education. Kim (2011) agreed when she wrote, “Efforts to encourage creativity should begin in preschool or before” (p. 293). Early childhood teachers can take advantage of the developmental characteristics of young children. Isbell and Yoshizawa (2016) emphasized, “The preschool years are a highly creative period – perhaps one of the most creative periods of human development” (p. 8). Leggett (2017) concurred when she wrote, “There is enough evidence to support the belief that children between the ages of 4 and 6 years of age are in a critical period for creative thinking forming the foundations for later creative potential” (p. 847).

This study was personally significant to me because of my work in the field of early childhood education. As a professor who teaches early childhood courses, I address theorists, theories, and developmentally appropriate practice. Increasing my knowledge in the area of creativity in early childhood classrooms was valuable for me as a professor because I work with both preservice and inservice teachers. I am in a position to influence the preparation of preservice and continuing education of inservice teachers through the courses I teach at the university level, particularly my early childhood

methods course. The study provided me with the opportunity to work with teachers and examine their practices in the classroom to inform my own practice.

Creativity in educational settings is a worthy topic in the dialogue of teachers and schools. Early childhood is a focus because these years are both a critical and natural time to begin promoting creativity as it contributes to the development of the whole child. Creativity exhibited by children differs significantly than that of adults. Vygotsky believed all children exhibit creatively through play and use of their imagination. When children are learning, Vygotsky's sociocultural theory emphasizes the consideration of contextual factors, namely social and cultural contexts. Social interactions are key to development and learning of young children. Play is the most beneficial outlet for fostering creativity and imagination. Piaget's theory of cognitive constructivism stresses the importance of children constructing their own knowledge as active learners. It also recognizes how the experiences of the child influence cognitive development. Finally, DAP guides the work of teachers as they plan curriculum for young children. DAP takes into consideration knowledge of child development, needs of individual children, and the influences of social and cultural contexts. The theories of Vygotsky and Piaget and the concept of DAP provide the conceptual framework to further explore the concept of creativity through the work of teachers in early childhood classrooms.

CHAPTER 2

REVIEW OF LITERATURE

In the first chapter, I identified the conceptual framework as constructivist and summarized Piaget's theory of cognitive constructivism and Vygotsky's sociocultural theory. I highlighted the concept of DAP and its association with imagination, play, and academic versus intellectual goals as they relate to the development of young children. I also stated the definition of creativity used in this study. By doing so, I have provided a connection between theories, DAP and creativity in early childhood settings. In this chapter, I review literature that examined many issues in creativity and developmentally appropriate pedagogy in early childhood classrooms.

Definition of Creativity

Several studies offer insight into how teachers define creativity in early childhood classrooms. Leggett (2017) conducted an Australian study to examine teacher beliefs about how children exhibit creativity, children's capability for being creative, and how teachers support creativity within early childhood environments. The study was qualitative in nature and used a case study approach with six educators from three early learning centers. Data sources included observations, digitally audio recorded interactions between teachers and young children, field notes, memos, artifacts, photos, and recordings of focus groups. Defining creativity was challenging for the teachers. "Through questioning it was found that educators were more likely to describe *how* children were being creative through their observations and everyday interactions rather than explain *what* creativity is" (Leggett, 2017, p. 848).

Mullet et al. (2016) undertook a systematic literature review of articles addressing creativity and published in well-known journals between 1999 and 2015. The review highlighted teacher perceptions of creativity, implicit theories of creativity, beliefs about students' expression of creativity, and the link between personal characteristics and perceptions of creativity. The review included a thematic analysis of eighteen articles. One major theme that emerged was "researchers and teachers have different definitions and conceptions of creativity and creative behaviors in students" (p. 15). This theme was prevalent in 11 of the 18 articles studied. Challenges experienced by teachers in their efforts to identify creativity and promote it within their classrooms had a link to the inconsistency among researchers and teachers. Teacher definitions were often general and while teachers agreed creativity was essential in educational settings, many grappled with a definition.

Alkus and Olgan (2014) questioned 10 fourth year preservice teachers majoring in early childhood education and 11 inservice teachers (1-9 years of experience) teaching in Turkey. They used focus groups to learn about teacher views on creativity, creative people, the importance of creativity in early childhood, and obstacles to creativity in early childhood settings. All 21 teachers held similar beliefs about the definition of creativity by using the word originality in their definitions. When describing creative people, they focused on characteristics of individuals including novel ideas, multiple perspectives, and self-assurance. All 21 teachers' responses demonstrated they valued creativity and had an awareness of the significance of creativity related to the development of young children.

Several more studies revealed teacher beliefs about the definition of creativity. Original ideas are often associated with the idea of creativity (Aljughaiman & Mowrer-Reynolds, 2005; Alkus & Olgan, 2014). In addition, creativity is “thinking out of the box, producing original ideas for a situation, and noticing the difference that could be recognized by anyone and representing it in a unique way” (Alkus & Olgan, 2014, p. 1908). Some teachers give emphasis to behavior, more specifically actions or creative products (Rubenstein et al., 2018). Furthermore, novel or useful describes creative products.

Beliefs and Practice

A recent study by Kettler, Lamb, Willerson, and Mullet (2018) involved 371 teachers in the United States. The teachers represented five different school districts in two states. Of those teachers, 80 taught K-2, 62 taught grades 3-5, 95 taught grades 6-8, 112 taught grades 9-12, and 22 taught students at more than one level. The study was a “conceptual replication of the Westby and Dawson (1995) study, which demonstrated that teachers found students with creative characteristics less desirable in class” (p. 169). The study’s purpose was to address teacher beliefs about creative students in the classroom, and about personal creativity as it related to student characteristics of creativity. The study looked at the link between teacher beliefs about the importance of creativity and student characteristics related to creativity. To collect data, the researcher developed and used the Teachers’ Perceptions of Student Characteristics Survey. It had four areas: demographic information, eight items linked to personal creativity, a ranking of objectives related to curriculum, and finally, ratings for 20 characteristics of students.

Although there has been a push for creativity in today's classrooms, the teachers in this replicated study had feelings similar to teachers in the 1995 study. Teachers in both the 1995 and 2018 studies did not view students demonstrating creative personalities favorably. However, study results exposed a link between the personal creativity of a teacher and positive feelings of characteristics associated with creative students. More research would support this finding. Teachers have specified outside barriers that affect their ability to promote creativity in the classroom; however, "evidence continues to indicate that within schools, teachers prefer students to behave in ways contraindicative to creativity" (p. 170). The researchers suggested that proper training might increase the skill level of teachers in the area of creativity and help them understand how to work with students who exhibit creative characteristics.

Kampylis et al. (2009) examined teacher ideas and theories of creativity overall and specifically in early education. They were also interested in how prepared teachers felt they were to help students develop their creative potential. The study involved 70 teachers in Greek State Primary Schools in the area of Athens in addition to 62 preservice teachers in their final semester at a university. Researchers used the Teachers' Conceptions of Creativity Questionnaire (TCCQ). Most of the items on the questionnaire used a Likert-type scale. Additional items included multiple choice and open-ended questions. Findings revealed 100% agreement "that sociocultural and environmental factors influence creative performance" (p. 21). Over 80% of preservice and inservice teachers agreed that all individuals have the potential to develop creativity. When asked if they could teach the skill of creativity, a little over half of the teachers questioned

agreed. Over 60% of preservice teachers held the belief that the school setting was the ideal setting to express creativity, while 55% of inservice teachers disagreed. However, over 70% of all teachers reported there are few opportunities for students in the primary school setting to exhibit creativity. This may be due to contextual factors within Greek educational settings.

Rubenstein et al. (2018) used the Teaching for Creativity Scales (TCS) to examine creativity beliefs of both inservice (n=359) elementary and secondary teachers and preservice (n=166) teachers in their sophomore or junior year of college. On the survey, teacher beliefs included the following areas: beliefs about their abilities linked to assisting students in their creativity development, beliefs about students making gains in creativity development, beliefs about the support provided by the environment, and beliefs about society's views of creativity. In addition to the Likert scale using the TCS, inservice and preservice teachers defined creativity, what they viewed as impediments to creativity, and their personal creativity. When asked to define creativity, teachers focused on behaviors, more specifically, what the students did and what they created. The teachers were more likely to talk about novelty than usefulness when asked about products created by students. The researchers noted that most of the teachers overlooked the environment as linked to the definition of creativity. This disregard was a concern because there is consensus among theorists and researchers that creativity is often a social experience and a child's surroundings have a part in creativity experiences and development. If teachers understand the environment's role in creativity development in students, it may influence how the classroom is planned, thereby supporting the efforts of

the teacher. Data also revealed teachers with the most experience in the classroom (10+ years) had the highest levels of self-reported effectiveness.

Cheung (2012) used interviews and observations to determine how teachers define creativity and how their actual behaviors in the classroom align with these beliefs. The fact that “the exact nature of the relationship between teachers’ beliefs and their actual classroom practices is still unclear” prompted Cheung’s research (p. 43). Due to their reputation for supporting creativity within the curriculum, researchers selected five schools in Hong Kong. Focus groups identified teachers who exhibited strong aptitudes for creativity. From those focus groups, researchers selected 15 early childhood teachers. Data included semi-structured interviews with each teacher in addition to 45 classroom observations. The observations involved three activities for each teacher. Similarities in beliefs about promoting creativity among the teachers included a stimulating environment, numerous occasions for children to explore the environment, flexibility with time, interactions with others, and open-ended questioning. However, the relationship between these beliefs and actual pedagogy was not consistent. Teachers used teacher-centered pedagogy and instead of promoting many of their identified beliefs in the classroom, teachers placed more emphasis on facts and managing the students in the classroom took precedence over creativity. The teachers in the study avoided open-ended questioning, used large group teaching methods often, and used direct instruction rather than providing opportunities for children to share ideas and think in different ways. Cheung (2012) concluded there was a need for more research related to creativity in early

childhood classrooms, particularly reasons forcing teachers to deliver pedagogy in a way that contradicted their beliefs.

In another study in Hong Kong by Cheung (2017), three preschool teachers reflected on creativity in their classrooms. The study's purpose was to examine what practices in the classroom teachers viewed as creative, what types of pedagogy were conducive to promoting creativity in the classroom, and the contextual factors that hinder the promotion of creativity. Reform in Hong Kong in 2000 first brought creativity to the forefront. As a follow-up, "a revised pre-primary curriculum guide was published in 2006, which adopted 'child-centeredness' as the core principle of the early childhood curriculum and 'learning through play' as the key teaching and learning strategy" (p. 75). Qualitative case studies included interviews and observations as data sources. Criteria used to select teachers were years of teaching experience, ages of children taught, and use of an integrated approach to curriculum. Evidence of two of the three teachers' thoughts about creativity was not evident in the classroom. One teacher emphasized outcomes associated with learning rather than creativity. Another teacher stressed the process of creativity; however, that teacher did not effectively facilitate the experience, resulting in difficulties for the children. One teacher structured the environment successfully and the result was communication, collaboration, and enthusiasm on the part of the students. Cheung (2017) revealed "Pedagogic practice was found to be more effective in the Chinese preschool classrooms when a teacher executed a role of facilitator with a guided approach, helping children develop their ideas in a purposeful way" (p. 84). From the

study, Cheung concluded teachers have similar thoughts about creative pedagogy, but those thoughts look very different when actualized in the classroom.

Cheung and Leung (2013) reviewed literature and concluded beliefs held by teachers throughout the world had many similarities. However, in the context of Hong Kong, they felt there was a need for more research specifically in early childhood education through use of a model appropriate for the context. Researchers developed the Early Childhood Creative Pedagogy Questionnaire (ECCPQ) to examine 564 early childhood teacher and administrator beliefs about teaching creativity, including methods teachers use to foster creativity with preschool children. Participants rated 22 items on the ECCPQ using a five-point Likert scale based on their importance with regard to creativity. Researchers found the instrument showed contextual factors do influence the pedagogy used by teachers in the classroom. The instrument revealed teacher beliefs that may be valuable for promoting creativity in early childhood settings. Although teachers had knowledge related to creative pedagogy, responses indicated the necessity of ongoing support for teachers to address creativity regularly in the classroom. Using tools such as the ECCPQ can reveal teacher beliefs about creativity teaching that can inform stakeholders to assist teachers in their efforts to improve creative pedagogy practices. Future research may address teacher beliefs compared to actual classroom pedagogy and replication of the study using the ECCPQ in contexts outside of Hong Kong.

Play

Examining play in early childhood settings as it relates to development of young children may provide insight into the effective promotion of creativity. Robson and

Rowe (2012) used the Analysing Children's Creative Thinking (ACCT) Framework to obtain evidence of children behaving and thinking creatively in early childhood settings. The individuals in the study were 30 three- and four-year-olds in addition to several adults (teachers, nursery officers, professionals working with the children, an artist, and family workers, to name a few). The setting was a Nursery School Center in London. For five months, data collection used video-recorded activities (child-initiated and adult-initiated) coded using the ACCT Framework. Reflective dialogues (RDs) that occurred with children and their teachers or nursery officers was another method for data collection. Observations revealed that all children in the study exhibited an ability to think creatively, but for some children these instances occurred more often. Findings revealed children engaging in play in outdoor settings allowed for numerous instances of creative thinking. In addition, "it was evident that children's exploratory play with materials and resources of all kinds proved to be a very strong context for their creative thinking" (p. 356). Activities initiated by children, rather than adults, proved to have the most involvement by children. When children initiated the activities, "children were over twice as likely to try out ideas, and to display more flexibility and originality, imagining and hypothesizing, and also significantly more likely to analyse ideas and to involve others" (p. 358). High levels of involvement were associated with children who played in pairs and in a group.

Robson (2014) again used the ACCT Framework to study 20 adults and 56 children who were 3-5 years old. The children were located in "two children's centres, a foundation stage unit in a primary school and a private workplace nursery" in London (p.

125). The ACCT framework identified ways children exhibited creativity in early childhood settings and how social aspects of early childhood settings affect the creativity of young children. One method of data collections was videotaping children during play. While most studies involve teachers and researchers reflecting on observations, Robson engaged the children in reflections of their play to “provide evidence of children’s verbal reflections, helping to elicit their thinking directly” (p. 126). The observations and reflections “give a detailed, contextually-rich picture of what individual children both *do* and *say* about their experiences” (p. 132). Three categories including exploration, involvement and enjoyment, and persistence, along with additional indicators for each category, make up the framework. The indicators are a way for teachers and researchers to find evidence of creative thinking while children are in their natural environment. Researchers found “pretend play, particularly socio-dramatic play, was the most likely of any activity to lead to high levels of creative thinking” (p. 130). Data related to pretense among young children emphasized certain activities and experiences offer children more ways to exhibit creativity and advance their creativity. This finding can support teachers as they advocate for developmentally appropriate practice in early childhood settings. The ACCT framework can also provide teachers an opportunity to examine their interactions with young children.

Holmes et al. (2015) were interested in the relationship between social play, creativity, and the language abilities of young children. The connection between teacher participation in play and the creativity and language abilities of young children was also of interest. The participants in the study were 225 preschool children in three different

settings: Warren Preschool, Gubkin Preschool, and Lorenzo Preschool. Warren Preschool children were native English speaking and came from middle-income homes. Gubkin Preschool children were also from families with middle incomes and a majority of native English speaking children. Lorenzo Preschool was ethnically diverse with many low-income children. Data included participant observation, time sampling focused on play and social interactions, and additional tasks completed by the children including the Goodenough Harris Draw a Person Task and the PPVT IV to measure receptive vocabulary. The researchers found “clear relationships between certain types of social play and creativity and the complexity of social play and receptive language abilities” (p. 1192). When children were engaged in solitary, onlooker, and parallel play, lower creativity scores resulted. Types of play also affected vocabulary. According to Holmes et al. (2015), “Children with higher receptive language scores (more extensive vocabularies) took part more frequently in complex social play” (p. 1193). Higher receptive vocabulary scores correlated with symbolic play with other children.

Pedagogical Approaches for Promoting Creativity

A teacher’s pedagogy in an early childhood setting may influence the creative experiences young children will have. Chien and Hui (2010) stated, “What educators believe along with their attitude towards creativity determine whether a child’s creativity will be recognized, encouraged and thus developed, or undermined and stifled” (p. 50). In their study of 877 early childhood teachers from Hong Kong, Shanghai, and Taiwan, Chien and Hui used questionnaires to find similarities and differences among teacher views of variables associated with creativity in early childhood classrooms. These

variables included creative performance, ecology of creative teaching, ecology of creative learning, barriers, and improvements. All three Chinese societies have policies in place to provide guidance on education related to creativity; however, ideas about creative teaching and learning differed among all three. Taiwanese teachers gave attention to methods used and the curriculum in place. They understood their role as teachers; however, their perception of the environment they were teaching in is that it does not necessarily support teaching creativity. Hong Kong teachers viewed creativity development linked more to the family setting rather than something the teachers should address in the educational setting. Shanghai teachers demonstrated awareness of creativity as it relates to the teacher and the students; however, their understanding of the ways to enhance creative teaching and barriers impeding creative teaching were not well defined. Teaching experience was statistically significant, with veteran teachers scoring higher in ecology of creative teaching. These examples illustrate “the effectiveness of promoting creativity in early childhood education largely depends on the contextual factors in Chinese societies” (p. 57).

A pilot study by Cheung (2018) consisted of one teacher and twenty-four children aged 5-6 years old. Researchers used the Analysing Children’s Creative Thinking (ACCT) Framework to collect data within areas of exploration, involvement and enjoyment, and persistence. The study determined the effects of two different teaching approaches (free play and guided play) on children’s creativity during a creative problem-solving activity. The children experienced the same activity with one group being the hands-off approach and the other group was teacher guided. Observations during the

activities provided the data on the frequency of behaviors from the ACCT framework. In the teacher-guided approach, more focused exploration by the children occurred in addition to engagement and willingness to share ideas and problem solve. Observations revealed children found the teacher-guided approach to be more enjoyable as the teacher facilitated their play and set the stage for critical thinking. Observation revealed persistence in both groups; the hands-on group had difficulty and moved from one idea to the next. The teacher-guided group was able to persist and collaborate with one idea. Cheung stated, “The results highlighted that a key element for encouraging creativity thinking behaviours is play, where children have the autonomy and freedom to choose what to do and how to do it” (p. 52). Children who engage in play tend to produce and explore their ideas, feel they can tackle problems without assistance, and possess beliefs they have the capacity to solve problems that are challenging. For the children in this particular study, it is important to note contextual factors. In Chinese culture, children are used to the guidance of a teacher rather than freedom to follow their own interests. In this setting, the children responded more positively to the teacher-guided approach where children had freedom to choose but the teacher was available for support.

Teacher’s Role

In Leggett’s (2017) study, teachers identified several characteristics of creativity including promotion of the imagination, offering experiences to promote intrinsic motivation for children to create, play, and engaging students cognitively during as they learn while playing. However, teachers were less clear about their role as educators in

promoting creativity. Data showed the role of the teacher was not an important element of creativity while children interacted within the environment.

What is missing is an understanding of their role as educators who facilitate, model thinking, question, provoke, and use other various intentional teaching strategies that guide and support children as they trial new ideas and think about an array of possibilities through play. (Leggett, 2017, p. 849)

She went on to say there was little evidence of teachers engaging with children in an effort to promote and encourage thinking. Rather, many teachers used praise to engage with the children. To support teachers as they design environments that are favorable for creativity there is a need for more emphasis on the role of the educator. Teachers may need support as they attempt to understand strategies to challenge young children to think and engage in problem solving activities. These deliberate strategies may help children expand their ideas during play.

Leggett's finding about the teacher's role is similar to the role of adults in Robson and Rowe's (2012) study. Although children verbally conveyed their part in choosing activities, it was evident "children's initial engagement in an activity was often the result of adult direction" (p. 357). This is insightful as teachers attempt to understand their role in encouraging and supporting children in their creative endeavors. Another finding that may help teachers understand their role in promoting creativity was associated with speculating. It was a behavior not often observed, but when it appeared adults were more capable of helping children foster this skill than children being able to do so with peers. The researchers noted that children were able to speculate during dialogue with teachers and nursery officers, thus concluding that teachers may be able to use reflection with young children to support their thinking. Researchers also found that a link between

encouraging persistence and activities offered by teachers. In their attempts to offer DAP and meet the individual needs of students, teachers may offer activities that allow children to be successful, but eliminate the opportunity for challenge and overcoming problems, which is more characteristic of activities initiated by children themselves.

Holmes et al. (2015) provided insight into the teacher's role in promoting creativity, play, and language abilities of preschool children. In their study, teacher involvement observations uncovered variances in the timeframes children engaged in play, how involved teachers were in the play of children, and limits on the number of children each center accommodated. Warren Preschool reported the most instances of cooperative play and vocabulary scores were the highest. Teachers designed play to meet the outcomes of the curriculum and children had plenty of time to engage in play experiences. Teachers supported play and sometimes engaged in play alongside the children. Teachers avoided initiating play or directing the experiences of the children. Gubkin Preschool children had the most occurrences of complex social play and high scores in language. These children also had sufficient time to engage in play and teachers guided children when needed. Lorenzo Preschool offered more structure and emphasized acquisition of skills. Play was less flexible and teachers limited by the number of children permitted to play in different centers within the classroom. Although there was plenty of time to play, simple social and parallel play episodes occurred frequently, rather than complex social play and play among groups of children. Lack of flexibility and expectations in the classroom created a similar obstacle for teachers in the study by Alkus and Olgan (2014). Forcing children to follow rules put into practice in an early childhood

classroom may negatively affect creativity. Alkus and Olgan (2014) claimed, “If a teacher...implements strict rules and does not allow children to use the materials freely and does not let them mix all those materials based on their wishes, s/he will handicap the young children’s creativity” (p. 1912). Furthermore, “setting rules, even in the simplest way, for children from a young age adversely affects their creativity” (p. 1912).

Barriers to Promoting Creativity

While teachers may be willing to offer young children creative experiences, reported barriers may hinder their ability to do so. Mullet et al. (2016) reviewed articles addressing creativity and published in well-known journals between 1999 and 2015. One conclusion from the systematic review of the literature pointed out “a teacher may be well prepared to recognize and cultivate creativity, but the environment within schools must allow for it in order for creative practices to take root and flourish” (p. 26). When Rubenstein et al. (2018) asked preservice and inservice teachers to identify the biggest hindrance in helping students to think creatively, “the majority of teachers (76%) responded with macro-environmental constraints” (p. 105). These included time, curriculum requirements, standardized tests, and unsupportive administrators. Similarly, in Cheung’s (2017) study, teachers cited “time, space, large class size, content-oriented curriculum and limited knowledge of creative pedagogy as some of the challenges” (p. 81). The teachers reported too little time during the day to devote to creative experiences coupled with the difficulty of following the interests of the children when a rigid curriculum was in place. Cheung (2017) identified a “tension between creativity and productivity in the highly structured daily schedule” (p. 81). The teachers in the study

pointed out time was influential and directly related to the quality of teaching practices related to creativity.

Over half of the 21 teachers in a study by Alkus and Olgan (2014) noted a lack of administrator support of creativity promotion. Along with administrators, teachers admitted that such classroom practices as rules and strict expectations can limit the experiences of the children. Kampylis et al. (2009) reported 85.5% of preservice and 88.5% of inservice teachers felt young children do not have adequate time to display creativity abilities in the classroom. Implications for administrators and education policy include awareness of challenges associated with creative pedagogy and more support for teachers with their efforts to implement creative pedagogy.

Standardized Testing and Prescribed Curriculum

Mullet et al. (2016) asserted “Teachers are trapped...between the demands of a high-stakes system and their own beliefs in the value of creativity” (p. 29). The emphasis on standardized tests has resulted in many districts and schools opting for prescribed curriculum for teachers to follow. This phenomenon is evident in early childhood classrooms with very young learners. Teachers feel pressure to prepare children for kindergarten and for behavior expectations in the upper grades. Bassok et al. (2016) used data from the Early Childhood Longitudinal Study (ECLS-K:1998 and ECLS-K:2011) to examine phenomena related to the changes and expectations in kindergarten classrooms over the last two decades, between the years of 1998 and 2010. This was a longitudinal study of two cohorts of kindergarten students. Data collection was surveys (completed by parents, teachers, and administrators) and assessments of children. In 1998, over

21,000 children participated and the number for 2010 was over 18,000. As for teachers, 2,500 participated in 1998 and 2,700 in 2010. All teachers were in public school settings. The survey focused on expectations related to incoming kindergarten students, the subjects and skills focused on in the curriculum and time spent on those subjects and skills. In addition, the survey addressed activity centers (water or sand table, art, dramatic play, to name a few), approaches to pedagogy (child- versus adult-initiated activities and use of workbooks and worksheets), and assessment as it related to local and state standards and standardized testing. There were distinctions between schools serving high populations of students receiving free and reduced lunch and percentage of White students enrolled. A major finding was the percentage of teachers that felt children should be able to read in kindergarten (increase from 31% to 80%). In 1998, 92% of kindergarten classrooms had an art area; however, that percentage dropped to 71% in 1998. Furthermore, other areas including science, dramatic play, and a sensory table, went down more than 20%. The researchers suggested additional studies to understand fully the sources of these changes. The focus on accountability requirements in schools may be the driving force; however, the fact more children have access to academic settings prior to beginning kindergarten may also be an influence.

Bassok et al. (2016) also revealed differences in teacher beliefs related to assessments in the years of 1998 and 2010. Kindergarten teachers who believed achievement of young children as defined by “local, state, or professional standards to be very important or essential rose from 57% to 79%” (p. 10). The value placed on comparing the achievement of individual children with their classroom peers went from

47% to 67%. The teachers in the study also reported use of standardized tests in kindergarten settings. The prevalence of these types of tests administered at the kindergarten level was close to 30% in 2010, but only 11% in first grade settings in 1999.

Some curriculum expectations may pose problems for teachers who desire to integrate creativity in their daily curriculum. Aljughaiman and Mowrer-Reynolds (2005) found that, although teachers wanted to address creativity, they felt burdened by other tasks that took precedence and viewed academic concerns as their top priority. Some teachers viewed creativity as something isolated from the regular curriculum in place in the classroom. In Cheung's (2017) case study, "all three teachers highlighted that the prescriptive and overloaded curriculum hindered the development of creativity in their classrooms" (p. 81).

Administrators

Administrators can sometimes pose obstacles for teachers when creativity is concerned. The 21 preservice and inservice teachers in a study by Alkus and Olgan (2014) reported administrators failed to support efforts to promote creativity in children. Administrators believed the products created by the children were more notable than creativity itself. Rather than encouraging young children's development, the intent is to produce products and display them for parents. Researchers concluded collaboration among teachers, parents, and administrators might be beneficial. The creativity of young children requires several levels of support, not just the support of the teacher. Collaboration among these individuals may help with encouraging the creativity of young children. It is noteworthy to mention although they were in settings that lacked

administrator support related to creativity, many teachers in the study reported they could cope with the circumstances and still encourage creativity in children. One suggestion was professional development opportunities for administrators as one solution to increasing their understanding of creativity in early childhood.

Lack of Preparation

Another obstacle to creativity development in young children may be lack of preparation in this area. In their systematic literature review, Mullet et al. (2016) discovered “teachers are generally unprepared to design creative curriculum activities, teach creative strategies, or clearly define and recognize creativity in order to cultivate it in students” (p. 25). This lack of preparation was due to teacher preparation and lack of exposure to creativity as preservice teachers. Similarly, Aljughaiman and Mowrer-Reynolds (2005) stated, “Pre-service training programs do little to broaden knowledge of the phenomenon of creativity” (p. 31). Mullet et al. (2016) suggested a stronger focus on understanding creativity, identifying creativity in students, and skills related to planning and delivering creativity within the curriculum is necessary if preservice teachers can enter the teaching profession equipped with the necessary skills to promote creativity in their future students. Mullet et al. (2016) also stated, “Teachers need rigorous preparation and training that develops conceptions of creativity informed by contemporary theory and research” (p. 29). Cheung and Leung (2013) pointed out uncovering teacher beliefs about creative pedagogy could inform stakeholders at both the teacher preparation level and inservice level to assist teachers in their efforts to promote creativity.

Of the 132 teachers in their study, Kampylis et al. (2009) revealed 98.4% preservice and 98.5% inservice agreed that a responsibility within their teaching was to promote student creativity. However, more than half of all teachers “replied that they do not feel well-trained to act as creativity facilitators, while only 25.8% and 18.8%, respectively, felt well-trained” (p. 25). There was a need for further research that delves into the explanations related to the lack of preparation of teachers. Possible avenues for research include the effectiveness of initial preparation and inservice opportunities dedicated to creative pedagogy.

Contextual Factors

Several studies reviewed occurred in contexts outside of the United States. Most of these studies recommended further research with regard to replication within other contexts to see if the results were similar for teachers in different settings. For example, respect for cultural appropriateness was a factor in a case study of three preschool teachers (Cheung, 2017). In 2000, Hong Kong early childhood education changed. Reform endorsed by the government shifted the view of early education and recognized the early years as critical time in development and learning. However, because conformity is characteristic of the culture, Chinese preschool teachers felt challenged by the shift from a teacher-centered approach to child-centered practice and an emphasis on creativity. The shift also affected children because of their limited exposure to the expectations associated with creative pedagogy and a different style of teaching. Cheung (2017) stressed that culture should be taken into consideration when making decisions about pedagogy in the classroom. In the context of Greek primary schools, creativity is a

goal; however, the value placed on exams and rote memorization, curriculum, and little guidance for teachers make this goal difficult to achieve (Kampylis et al., 2009). Furthermore, the lack of inspiration to address creativity had a link to lack of knowledge. According to Kampylis et al. (2009), “Another area that requires further investigation is the comparison between the conceptions and preconceptions of creativity of Greek teachers’ and those from other nationalities, cultures, and educational systems” (p. 26). Based on their findings related to creativity and preschool teachers in Turkey, Alkus and Olgan (2014) agreed a need exists for studies to investigate differences among cultures and creativity beliefs of preschool teachers. Cheung’s (2018) study revealed preschool teachers in Hong Kong using teacher-guided pedagogy might be more conducive to creativity based on the particular context. Cheung (2018) stated, “When one is seeking to change teachers’ pedagogical practices, one must contend with cultural and contextual influences and an awareness of teachers’ professional competencies” (p. 524). Chien and Hui’s (2010) study used a questionnaire administered to 877 early childhood teachers from Hong Kong, Shanghai, and Taiwan. The study revealed contextual factors influenced the promotion of creativity in early childhood settings as evidenced by the variations among teachers and their beliefs about creativity. The studies highlighted above illustrate the value and need for conducting similar studies in the United States to see if findings are similar in preschool classrooms.

Chapter Summary

In this chapter, I reviewed literature related to creativity in early childhood classrooms. The literature revealed confusion experienced by teachers when asked to

define creativity. Teachers struggled to define creativity and their views of this concept differed from researchers' views. Teachers agreed that creativity was of value in early childhood classrooms; however, many were unclear of their role as the teacher and the role of the environment when promoting creativity. There were instances when teacher beliefs were similar; however, those beliefs did not equate to practices that were comparable from classroom to classroom. Several researchers found beliefs and practice to lack congruence in early childhood classrooms. Teacher identified barriers also surfaced as hindrances to the promotion of creativity. These barriers reported by teachers included lack of time, prescribed curriculum, testing, and lack of administrator support. Several teachers also reported lack of preparation in preservice teacher preparation programs and inadequate training as inservice teachers.

The literature revealed the need for more research of creativity, specifically in early childhood classrooms. There is a need to explore the experiences of young children and teachers related to creativity and examine if those experiences are similar to what other teachers report. Several studies were in settings outside the United States including early childhood settings in Hong Kong, Shanghai, Taiwan, London, Greece, Turkey, and Australia. Schooling and expectations differ from settings in the United States. One suggestion for future research was to replicate studies done in Hong Kong in an effort to explore findings in different contexts. Numerous studies focus on preschool teachers in early childhood settings.

Based on the literature review and Cheung (2017), the following questions guided the study:

- 1) What constitutes creative practice in preschool classrooms?
- 2) What kinds of creativity-fostering pedagogies are used in preschool classrooms?
- 3) What contextual factors do teachers report that support or impede efforts to promote creativity in their classrooms?

CHAPTER 3

METHODOLOGY

The purpose of this study was to examine preschool teachers' beliefs and actions associated with creative pedagogy. An important aspect of the study's design was partial replication of a similar study by Cheung (2017). This study provided an opportunity to make comparisons among the experiences of preschool teachers in the United States and contexts outside of the United States. This chapter addresses the methodology of the study including the participants, methods of data collection, data analysis process, and credibility and trustworthiness.

This study was qualitative in nature. "A central characteristic of qualitative research is that individuals construct reality in interaction with their social worlds" (Merriam, 2009, p. 22). Experiences related to creativity in preschool classrooms, how teachers interpret their experiences with creativity, how they construct their classrooms for creativity, and the meaning they attribute to their experiences with creativity were areas of focus of this qualitative study. More specifically, this study used case studies. Case studies provide a researcher the opportunity to collect data and reveal experiences of individuals via rich descriptions. In this study, rich descriptions related to the phenomena of creativity in preschool classrooms. "Qualitative interviewers examine the complexity of the real world by exploring multiple perspectives toward an issue" (Rubin & Rubin, 2012, p. 4). Because more than one individual or case was the subject of the research, comparative analysis determined commonalities and differences in the experiences of the preschool teachers. The study's design replicated a similar study by

Cheung (2017) so further comparisons could be made among the experiences of preschool teachers in the United States and preschool teachers in contexts outside of the United States.

Participants

In this study, recruitment of participants used convenience and purposeful sampling. Convenience sampling is “based on time, money, location, availability of sites or respondents, and so on” (Merriam, 2009, p. 79). Recruitment of participants who were in proximity geographically ensured access for interviews and observations. Recruitment occurred through emails and contact with administrators. Through recruiting efforts, three preschool teachers agreed to participate in the study. All classrooms were located in rural areas in the Midwestern United States.

When asked for her preference, Teacher #1 requested the pseudonym Kay. Her degree was a BA in elementary education with endorsements in reading and prek-K. She also earned a M.Ed. in curriculum and instruction with an emphasis in reading. She had 15 years of experience, with 14 of those years spent teaching preschool. Her preschool classroom during the study had 12 children who were 4 or 5 years old. Her classroom was in an elementary school. The rural school district consisted of four communities. The school was located in a community with a population under 1000. In the 2018-2019 school year, the district enrolled over 700 students (Iowa Department of Education, 2019). Her preschool classroom received funding from Iowa’s Statewide Voluntary Preschool Program (SWVPP). The intent of SWVPP was to expand access and increase the number of children enrolled in quality early childhood programs. Voluntary access

for all children four years of age provides more opportunity for young children in the state of Iowa to begin school equipped to learn (Iowa Department of Education, n.d.-b).

When asked for her preference, Teacher #2 requested the pseudonym Sarah. Her degree was a BA in early childhood education with endorsements in reading and English language arts. She had eight years of experience and taught only in a preschool classroom. Her preschool classroom during the study had 10 children who attended three days a week and five who attended two days a week. All children were four years old. Her classroom was in an elementary school. The location of the school was in a community with a population over 600. In the 2018-2019 school year, there were over 1,000 students enrolled in the rural district serving six communities (Iowa Department of Education, 2019). Her preschool classroom received funding from SWVPP.

Teacher #3 did not have a preference when asked, so I assigned her the pseudonym Anna. Her degree was a BA and she double majored in elementary and early childhood education. She had fifteen and a half years of experience, with nine of those years spent teaching preschool. Her preschool classroom during the study had 20 children who were four or five years old. Her classroom was in a learning center in the community and associated with the elementary school. The community's population was under 2000. In the 2018-2019 school year, there were under 1000 students enrolled in the rural district (Iowa Department of Education, 2019). Her preschool classroom received funding from SWVPP.

Standards, Assessment, and Curriculum

School districts with SWVPP were required to meet preschool program standards approved by Iowa Administrative Code. One of the approved options was Iowa Quality Preschool Program Standards (IQPPS). There is alignment between the IQPPS and the NAEYC Program Standards. The ten standards include relationships, curriculum, teaching, assessment of child progress, health, teachers, families, community relationships, physical environment, and leadership and management. There are 21 required criteria within the ten program standards. As of the 2018-2019 school year, all SWVPP annually submitted a desk audit to show evidence of implementation (Iowa Department of Education, n.d.-b). Table 1 shows IQPPS that address creativity.

Table 1

IQPPS Addressing Creativity

Program Standard 2 – Curriculum
Curriculum: Essential Characteristics
<p>2.4 Materials and equipment... <i>f. encourage exploration, experimentation, and discovery.</i> <i>g. promote action and interaction.</i> <i>h. are organized to support independent use.</i> <i>i. are rotated to reflect changing curriculum and accommodate new interests and skill levels.</i> <i>j. are rich in variety.</i></p>
<p>2.5 The curriculum guides teachers to incorporate content, concepts, and activities that foster: <i>a. social [development],</i> <i>b. emotional [development],</i> <i>c. physical [development],</i> <i>d. language [development],</i> <i>e. cognitive development and</i> <i>f. integrate key areas of content including literacy, mathematics, science, technology, creative expression and the arts, health and safety, and social studies.</i></p>

<p>2.6 The schedule</p> <p><i>a. provides children learning opportunities, experiences, and projects that extend over the course of several days and incorporates time for</i></p> <p><i>b. play,</i></p> <p><i>c. creative expression,</i></p> <p><i>d. large group,</i></p> <p><i>e. small-group, and</i></p> <p><i>f. child-initiated activity.</i></p>
<p>Curriculum Content Area for Cognitive Development: Creative Expression and Appreciation for the Arts</p>
<p>2.26 Children are provided many and varied open-ended opportunities and materials to express themselves creatively through</p> <p><i>a. music,</i></p> <p><i>b. drama,</i></p> <p><i>c. dance and</i></p> <p><i>d. two-and three-dimensional art.</i></p>

Iowa Administrative Code also required districts with SWVPP to use the Iowa Early Learning Standards (IELS). The IELS provide a structure to help early childhood professionals understand how to teach and provide care for young children. The standards provide guidance on the knowledge and skills young children should acquire from birth to five years (Iowa Department of Education, 2018). The IELS standards emphasize what is developmentally appropriate for young children to know and do before they begin kindergarten (Iowa Department of Education, n.d.-a). The developmental areas of the IELS include social emotional, physical well-being and motor development, approaches to learning, social studies, creative arts, communication, language, and literacy, mathematics, and science. Table 2 shows IELS that address creativity (Iowa Department of Education, 2018).

Table 2

IELS Addressing Creativity

Area 3: Approaches to Learning
<p>Curiosity and Initiative - Preschool (3 - 5 years)</p> <p><i>Standard 3.1.PS Children express curiosity, interest, and initiative in exploring the environment, engaging in experiences, and learning new skills.</i></p> <p>Benchmarks: The child...</p> <p>3.1.PS.1 chooses, deliberately, to explore a variety of materials and experiences, seeking out new challenges.</p> <p>3.1.PS.2 participates in experiences with eagerness, flexibility, imagination, independence, and inventiveness.</p> <p>3.1.PS.3 asks questions about a variety of topics.</p> <p>3.1.PS.4 repeats skills and experiences to build competence and support the exploration of new ideas.</p> <p>Play and Senses - Preschool (3 - 5 years)</p> <p><i>Standard 3.4.PS Children engage in play to learn.</i></p> <p>Benchmarks: The child...</p> <p>3.4.PS.1 engages in a variety of indoor and outdoor play experiences.</p> <p>3.4.PS.2 uses sights, smells, sounds, textures, and tastes to discriminate between and to explore experiences, materials, and the environment.</p> <p>3.4.PS.3 engages in self-initiated, unstructured play.</p> <p>3.4.PS.4 plans and executes play experiences alone and with others.</p>

Area 5: Creative Arts

Art - Preschool (3 - 5 years)

Standard 5.1.PS Children participate in a variety of art and sensory-related experiences.

Benchmarks: The child...

5.1.PS.1 uses a variety of drawing and art materials, such as drawing utensils, paint, clay, and wood to create original works, form, and meaning.

5.1.PS.2 expresses ideas about his or her own artwork and the artwork of others, relating artwork to what is happening in the environment or life experiences.

5.1.PS.3 demonstrates care and persistence when involved in art projects.

5.1.PS.4 plans and works cooperatively to create drawings, paintings, sculptures, and other art projects.

Music, Rhythm, and Movement - Preschool (3 - 5 years)

Standard 5.2.PS Children participate in a variety of music and movement experiences.

Benchmarks: The child...

5.2.PS.1 participates in a variety of musical and rhythmic experiences, including singing, dancing, listening, playing simple rhythmic and pitched instruments, and creating and singing chants, rhymes, and finger plays from diverse cultures.

5.2.PS.2 demonstrates meaningful creative and imaginative responses, including taking on pretend roles, when listening to music to reflect the expressive elements of music.

5.2.PS.3 notices differences in high and low sounds (pitch), long and short sounds (rhythm), loud and quiet sounds (dynamics), fast and slow sounds (tempo), and differences between instruments or sounds (timbre).

5.2.PS.4 recognizes patterns in songs and rhymes and repeats them, using songs, chants or instruments, including the development of ability to keep beat.

5.2.PS.5 demonstrates an awareness of music and sound as part of daily life indoors and outdoors.

Dramatic Play - Preschool (3 - 5 years)

Standard 5.3.PS Children engage in dramatic play experiences.

Benchmarks: The child...

5.3.PS.1 shows creativity and imagination when using materials.

5.3.PS.2 assumes different roles in dramatic play situations.

5.3.PS.3 interacts with peers in dramatic play experiences that become more extended and complex.

In addition to standards, Iowa Code required districts to utilize the GOLD online assessment system for all children of preschool age (Iowa Department of Education, n.d.-b). GOLD is an “authentic, ongoing observation-based assessment system” (Teaching Strategies, 2019a, para. 1). GOLD includes 38 objectives for development and learning based on research that provide the framework for the assessment system. GOLD assists teachers as they use documentation to create a developmental profile for each child to illustrate what each child knows and is able to do (Teaching Strategies, 2019a). Table 3 shows the Creative Curriculum Objectives for Development and Learning that address creativity (Teaching Strategies, 2019b).

Table 3

Creative Curriculum Objectives for Development and Learning Addressing Creativity

<p>Cognitive <i>14. Uses symbols and images to represent something not present</i> a. Thinks symbolically b. Engages in sociodramatic play</p>
<p>The Arts 33. Explores the visual arts 34. Explores musical concepts and expressions 35. Explores dance and movement concepts 36. Explores drama through actions and language</p>

Another assessment used by some districts was the Individual Growth & Development Indicators of Early Literacy (myIGDIs). This assessment identifies children at risk for developmental delays early on and for use with progress monitoring and data based decisions to support children’s reading success. Creativity is not addressed through use of myIGDIs as teachers assess children through the following

measures: picture naming, rhyming, sound identification, “Which one doesn’t belong?”, and alliteration” (myIGDIs, n.d.).

The state in which the study took place did not have a required preschool curriculum, as this was a local decision for schools to make. The selected curriculum was required to be developmentally appropriate to address the individual needs of each child in addition to considerations of age and cultural background (Iowa Department of Education, n.d.-b). The required assessment system was GOLD; therefore, many districts and early childhood settings used the Creative Curriculum for Preschool because the 38 research-based objectives associated with GOLD form the framework for the curriculum (Teaching Strategies, 2017). The objectives for development and learning addressed the following areas: social-emotional, physical, language, cognitive, literacy, math, science and technology, social studies, the arts, and English language acquisition. The curriculum offered the foundation and daily resources. The foundation assisted teachers as they set up their preschool environments and followed best practice. The daily resources included teaching guides to support teachers in their daily planning efforts. The intent of the curriculum was to emphasize exploration and discovery within preschool classrooms. According to Teaching Strategies (2017), “The Creative Curriculum for Preschool is a comprehensive, research-based curriculum that features exploration and discovery as a way of learning, enabling children to develop confidence, creativity, and lifelong critical thinking skills” (p. 6). In addition, the curriculum supported the belief “that the best way to help children succeed is to teach them to be creative, confident thinkers (p. 9). A teacher using the Creative Curriculum organized the

environment into ten interest areas including blocks, dramatic play, toys and games, art, library, discovery, sand and water, music and movement, cooking, and technology. Creative Curriculum provided guidance on the items and quantities to include within each interest area. The outdoors was also an important part of the curriculum (Teaching Strategies, 2016).

Data Collection

This study partially replicated a study by Cheung (2017). Data collection consisted of a variety of methods. The first method was an initial interview with each preschool teacher. Table 4 shows the interview questions. The preschool teachers defined creativity and identified pedagogic strategies they deemed most conducive to developing creativity in young children (Cheung, 2017). Use of audiotape allowed for transcription of the initial interviews.

Table 4

Initial Interview

Preschool Teacher's Pseudonym:	
Total Years as a Teacher:	
Years Teaching Preschool:	
Highest Education Level:	
Question #1: What is creativity? Please give me some words that first come to your mind when you hear the word 'creativity'.	
Question #2: What kinds of pedagogic strategies do you think are best for developing creativity in your preschool classroom?	

After the first interview, each preschool teacher completed the Early Childhood Creative Pedagogy Questionnaire (ECCPQ) (Cheung & Leung, 2013). Use of the ECCPQ was a means of understanding creative pedagogy beliefs held by preschool teachers. A review of creativity literature and interviews with 27 Hong Kong preschool teachers resulted in 22 items that defined creative pedagogy. For further validation, a sample size of 474 preschool teachers completed the ECCPQ and confirmed four domains: self-initiated pursuit, interpersonal exchanges, possibility thinking, and teacher-oriented pursuit (Cheung & Leung, 2013). In this study, each of the three preschool teachers completed the ECCPQ using the Likert scale to identify the importance or lack of importance of the 22 practices related to creativity on the ECCPQ. Teachers were able to select very important, quite important, fair, not important, or not important at all. Table 5 shows the ECCPQ completed by each preschool teacher. This questionnaire was the second method of data collection.

Table 5
Early Childhood Creativity Pedagogy Questionnaire

Preschool Teacher's Pseudonym:

Your Views on Creative Pedagogy

In this section, you are asked to give your views on creative pedagogy. Read each item and then decide to what extent you agree with the item as important in fostering creativity in the classroom.
In developing creativity of young children, I believe that:

Directed teaching is	Very important	Quite important	Fair	Not important	Not Important at All
Accepting illogical thinking is	Very important	Quite important	Fair	Not important	Not Important at All
Asking open-ended questions is	Very important	Quite important	Fair	Not important	Not Important at All
Accepting children's mistakes is	Very important	Quite important	Fair	Not important	Not Important at All
Encouraging thinking from different perspectives is	Very important	Quite important	Fair	Not important	Not Important at All
Giving choices is	Very important	Quite important	Fair	Not important	Not Important at All
Encouraging creative behaviors is	Very important	Quite important	Fair	Not important	Not Important at All
Getting preschool children to evaluate their work is	Very important	Quite important	Fair	Not important	Not Important at All
Accepting failure is	Very important	Quite important	Fair	Not important	Not Important at All

Stressing correct answers is	Very important	Quite important	Fair	Not important	Not Important at All
Using repeated exercises is	Very important	Quite important	Fair	Not important	Not Important at All
Providing opportunities for discussion and cooperation is	Very important	Quite important	Fair	Not important	Not Important at All
Encouraging children to question and make suggestions is	Very important	Quite important	Fair	Not important	Not Important at All
Letting children ask questions freely is	Very important	Quite important	Fair	Not important	Not Important at All
Paying attention to individual difference is	Very important	Quite important	Fair	Not important	Not Important at All
Giving sufficient time for children to think is	Very important	Quite important	Fair	Not important	Not Important at All
Encouraging children to express their opinions is	Very important	Quite important	Fair	Not important	Not Important at All
Encouraging hands-on experiences is	Very important	Quite important	Fair	Not important	Not Important at All
Valuing children's interests is	Very important	Quite important	Fair	Not important	Not Important at All
Encouraging children to try new things is	Very important	Quite important	Fair	Not important	Not Important at All
Encouraging different styles of expression is	Very important	Quite important	Fair	Not important	Not Important at All
Stimulating thinking from different perspectives is	Very important	Quite important	Fair	Not important	Not Important at All

The third method of data collection was two classroom observations per preschool teacher. Each preschool teacher taught two lessons. Since creativity was the purpose of the observations, the preschool teachers designed both of their lessons with one objective being to develop creativity. Table 6 shows the observation protocol. During the observations, the focus was on the following: setting, introductory activity, whole class/group/individual activity, and concluding activity (Cheung, 2017). I observed and took notes during each lesson. Videotaping lessons provided the opportunity for additional viewing and accuracy.

Table 6

Observation Protocol

Preschool Teacher's Pseudonym:	
Setting:	
Introductory Activity:	
Whole class/group/individual activity:	
Concluding activity:	

After the first lesson observation, a semi-structured interview took place with each preschool teacher. Use of audiotape allowed for transcription of the semi-structured interviews.

The preschool teachers reflected on the pedagogic strategies that worked, what they would improve, and problems they faced while teaching their first creative lesson

(Cheung, 2017). Table 7 shows additional questions posed to learn more about creativity in each teacher's setting.

Table 7

Lesson Reflection #1

Preschool Teacher's Pseudonym:

Reflecting on the creative lesson you taught:	
What practices worked? (Cheung, 2017)	
What needed to be improved? (Cheung, 2017)	
What problems and difficulties did you encounter? (Cheung, 2017)	
Additional questions about creativity:	
Is there enough time for children to be creative? Why or why not? (Sakr et al., 2018)	
How much is play part of your day? (Sakr et al., 2018)	
What learning centers seem to stimulate children's most innovative thinking? (Isbell & Yoshizawa, 2016)	
How might you expand your thinking and approaches to include more opportunities to be creative? (Isbell & Yoshizawa, 2016)	

After the second lesson observation, another semi-structured interview took place with each preschool teacher. Use of audiotape allowed for transcription of the semi-structured interviews. The preschool teachers again reflected on the pedagogic strategies that worked, what they would improve, and problems they faced. (Cheung, 2017). Table

8 shows additional questions posed to learn more about creativity in each teacher's setting.

Table 8

Lesson Reflection #2

Preschool Teacher's Pseudonym:

Reflecting on the creative lesson you taught:	
What practices worked? (Cheung, 2017)	
What needed to be improved? (Cheung, 2017)	
What problems and difficulties did you encounter? (Cheung, 2017)	
Additional questions about creativity:	
Does creativity in your classroom reflect the He-paradigm (creativity exhibited by particular individuals only), the I-paradigm (everyone can be creative), or the We-paradigm (emphasizes how creativity happens as a result of interactions between children and the environment)? (Sakr et al., 2018)	
How are you being influenced by accountability in your classroom? (Isbell & Yoshizawa, 2016)	
What are barriers in promoting creativity education for early childhood teachers? (Chien & Hui, 2010)	
What are areas for improvements in promoting creativity education in early childhood classrooms? (Chien & Hui, 2010)	
What can school administrators do to enhance creativity in teachers and students? (Chien & Hui, 2010)	

Data Analysis

The researcher partially replicated Cheung's (2017) data analysis procedures. For the first interview, transcriptions of audiotapes allowed for identification of comments associated with teachers' beliefs about what creativity is and pedagogy related to creativity. The process of open coding and axial coding allowed for analysis of the interview data. A diagram representing the views of all three preschool teachers represented the categories that emerged from the definitions. This process of analysis is clustering, or developing a diagram to illustrate relationships found in data (Marshall & Rossman, 2016). Categories that emerged from the preschool teachers' discussions of pedagogic strategies they felt were best for developing creativity in the classroom were also used to create a diagram for each teacher.

Each teacher completed the ECCPQ. Cheung and Leung (2013) identified four domains within the ECCPQ to organize the 22 items about teacher views on creative pedagogy. Table 9 shows the ECCPQ with the following domains: self-initiated pursuit, interpersonal exchange, possibility thinking, and teacher-oriented pursuit.

Table 9

Early Childhood Creativity Pedagogy Questionnaire Domains

Domain 1: Self-Initiated Pursuit				
Giving choices is	Very important	Quite important	Fair	Not important at All
Encouraging creative behaviors is	Very important	Quite important	Fair	Not important at All
Encouraging children to express their opinions is	Very important	Quite important	Fair	Not important at All
Encouraging hands-on experiences is	Very important	Quite important	Fair	Not important at All
Valuing children’s interests is	Very important	Quite important	Fair	Not important at All
Encouraging children to try new things is	Very important	Quite important	Fair	Not important at All
Encouraging different styles of expression is	Very important	Quite important	Fair	Not important at All
Stimulating thinking from different perspectives is	Very important	Quite important	Fair	Not important at All
Domain 2: Interpersonal Exchange				
Getting preschool children evaluate their work is	Very important	Quite important	Fair	Not important at All
Providing opportunities for discussion and cooperation is	Very important	Quite important	Fair	Not important at All

Encouraging children to question and make suggestions is	Very important	Quite important	Fair	Not important	Not Important at All
Letting children ask questions freely is	Very important	Quite important	Fair	Not important	Not Important at All
Paying attention to individual difference is	Very important	Quite important	Fair	Not important	Not Important at All
Giving sufficient time for children to think is	Very important	Quite important	Fair	Not important	Not Important at All
Domain 3: Possibility Thinking					
Accepting illogical thinking is	Very important	Quite important	Fair	Not important	Not Important at All
Asking open-ended questions is	Very important	Quite important	Fair	Not important	Not Important at All
Accepting children's mistakes is	Very important	Quite important	Fair	Not important	Not Important at All
Encouraging thinking from different perspectives is	Very important	Quite important	Fair	Not important	Not Important at All
Accepting failure is	Very important	Quite important	Fair	Not important	Not Important at All
Domain 4: Teacher-Oriented Pursuit					
Directed teaching is	Very important	Quite important	Fair	Not important	Not Important at All
Stressing correct answers is	Very important	Quite important	Fair	Not important	Not Important at All
Using repeated exercises is	Very important	Quite important	Fair	Not important	Not Important at All

ECCPQ data allowed for analysis of the overall beliefs of all three preschool teachers including:

- What was most important to teachers?
- What was not important to teachers?
- What domain was most important?
- What domain was least important?

The 22 items on the ECCPQ served as a priori codes. While assigning a priori codes to classroom practices evident during Observation #1 and Observation #2, I used my early childhood teaching background and understanding of early childhood pedagogy to determine appropriate codes. Due to the fact Cheung and Leung (2013) did not provide definitions for the 22 items, the potential for different interpretations existed. To provide clarity, I included an explanation along with each a priori code assigned. The a priori codes and explanations are in the observation protocol tables for each teacher. This includes Tables 13 and 14 for Kay, Tables 17 and 18 for Sarah, and Tables 21 and 22 for Anna. The codes showed the occurrence of the 22 items in each teacher's classroom practices. I created a table to show the beliefs of each individual preschool teacher with regard to the 22 items. Two additional columns included specific classroom practices associated with the a priori codes. This data allowed for an examination of teacher beliefs that supported classroom practices and beliefs that lacked congruence with classroom practices. Analysis of each individual preschool teacher's beliefs and actions included

- Overall, what was most important to the teacher? (beliefs)

- Overall, what was least important to the teacher? (beliefs)
- What domain was least characteristic of the teacher? (actions)
- What actions supported the teacher's beliefs? (beliefs and actions)
- What actions lacked congruence with the teacher's beliefs? (beliefs and actions)

For data analysis purposes, I used Leggett's (2017) definition of creativity to judge whether a teacher's action or an activity was creative.

Creativity for young children involves cognitive processes that develop through social interactions, play and the imagination. Creative thinking is a transformative activity that leads to new ways of thinking and doing that are novel for the child or useful to children's communities. (p. 851)

Data analysis of the second and third interviews (Lesson Reflection #1 and Lesson Reflection #2) again involved the process of open coding and axial coding. Clustering allowed for analysis of the ideas and experiences related to each preschool teacher in her setting. There were six diagrams (two for each teacher) created based on the two interviews and then reduced to three diagrams (one for each teacher) as categories from the two interviews were refined. The 22 items from the ECCPQ provided a priori codes for the interview data. This illustrated the occurrence of the 22 items in interview discussions, in addition to the ECCPQ survey and classroom practices.

Analytic memoing described the process of data analysis. According to Marshall and Rossman (2016) this involves writing "thoughts about how the data are coming together in clusters or patterns or themes" (p. 221). Notes reflected what I noticed in the data including ideas, insights, significant quotes, and categories. The memoing also described decisions I made to provide clarity associated with codes, categories, and identified themes.

Credibility and Trustworthiness

Methodological triangulation, data triangulation, and a member check addressed credibility and trustworthiness. For methodological triangulation, the researcher used data collected from multiple methods including questionnaires, interviews, and observations (Merriam, 2009). The use of audio and video recordings, transcripts, and field notes addressed data sources triangulation. A member check asked participants for feedback and ensured accuracy of interpretations (Merriam, 2009). Each preschool teacher reviewed interview transcriptions to confirm accuracy of the information prior to data analysis. The member check provided the opportunity to pose additional questions for clarification and to gather more data.

CHAPTER 4

FINDINGS

In this chapter is a discussion of findings from the initial interview, ECCPQ, observations, Lesson Reflection #1 and Lesson Reflection #2. Included in the discussion is the overall beliefs, actions, and experiences of all three preschool teachers and then each individual preschool teacher's beliefs, actions, and experiences related to creativity with regard to the following research questions:

- 1) What constitutes creative practice in preschool classrooms?
- 2) What kinds of creativity-fostering pedagogies are used in preschool classrooms?
- 3) What contextual factors do teachers report that support or impede efforts to promote creativity in their classrooms?

ECCPQ

In response to the research question addressing creativity-fostering pedagogies used in preschool classrooms, the ECCPQ revealed the beliefs and actions of preschool teachers relating to creative pedagogy. Table 9 shows the beliefs of all three preschool teachers. The 22 items and 4 domains from the ECCPQ were included in addition to the responses of the three preschool teachers. Overall, the items the teachers deemed most important (all three teachers selected very important) included asking open-ended questions, providing opportunities for discussion and cooperation, encouraging children to question and make suggestions, paying attention to individual differences, and encouraging hands on experiences. Overall, the item viewed not important to teachers (all three teachers selected fair or not important) was stressing correct answers. Domain

two, interpersonal exchange, was most important to teachers when considering beliefs about creative pedagogy (this domain had the most responses of very important by all three teachers) while domain four, teacher-oriented pursuit, was least important (this domain had the most responses of fair and not important). When looking at the teacher responses overall, only five of the 22 items had responses other than very important or quite important. It was promising the teachers recognized behaviors and actions conducive to creative pedagogy in preschool classrooms, particularly those in three of the four domains. No teacher selected not important at all for any item. Beliefs are important; however, the key to understanding creative pedagogy is the teachers' actions or actual classroom practices.

Table 10 includes all 22 items used as a priori codes. Each teacher has three columns including beliefs, actions (from Lesson Observation #1 and Lesson Observation #2), and dialogue (from Lesson Reflection #1 and Lesson Reflection #2). The beliefs columns show the level of importance the teacher selected for each item (very important = 4, quite important = 3, fair = 2, not important = 1). The actions columns have an X if the item occurred during one or both of the lesson observations. The dialogue columns have an X if the teacher mentioned an item during one or both of the interviews.

Table 10

A Priori Codes Evidenced in Beliefs, Actions, and Dialogue

	Kay <i>Beliefs</i>	Kay <i>Actions</i> <i>LO#1</i> <i>LO#2</i>	Kay <i>Dialogue</i> <i>LR#1</i> <i>LR#2</i>	Sarah <i>Beliefs</i>	Sarah <i>Actions</i> <i>LO#1</i> <i>LO#2</i>	Sarah <i>Dialogue</i> <i>LR#1</i> <i>LR#2</i>	Anna <i>Beliefs</i>	Anna <i>Actions</i> <i>LO#1</i> <i>LO#2</i>	Anna <i>Dialogue</i> <i>LR#1</i> <i>LR#2</i>
Domain 1: Self-Initiated Pursuit									
Encouraging creative behaviors	4	X	X	3	X	X	4	X	X
Giving choices	4	X	X	3	X	X	4	X	
Encouraging children to express their opinions	3	X		4	X		4	X	
Encouraging hands-on experiences	4	X		4		X	4	X	
Valuing children's interests	4		X	4		X	3		X

	Kay	Kay	Kay	Sarah	Sarah	Sarah	Anna	Anna	Anna
	Beliefs	Actions LO#1 LO#2	Dialogue LR#1 LR#2	Beliefs	Actions LO#1 LO#2	Dialogue LR#1 LR#2	Beliefs	Actions LO#1 LO#2	Dialogue LR#1 LR#2
Encouraging children to try new things	4		X	4		X	3		
Encouraging different styles of expression	3		X	4			3		X
Stimulating thinking from different perspectives	4			4		X	3		
Domain 2: Interpersonal Exchange									
Getting preschool children to evaluate their work	2			4			4		
Providing opportunities for discussion and cooperation	4	X	X	4	X	X	4	X	
Encouraging children to question and make suggestions	4			4			4		X

	Kay	Kay	Kay	Sarah	Sarah	Sarah	Sarah	Anna	Anna	Anna
	Beliefs	Actions LO#1 LO#2	Dialogue LR#1 LR#2	Beliefs	Beliefs	Actions LO#1 LO#2	Dialogue LR#1 LR#2	Beliefs	Actions LO#1 LO#2	Dialogue LR#1 LR#2
Letting children ask questions freely	3	X		4				3		
Paying attention to individual differences	4	X	X	4			X	4	X	
Giving children sufficient time to think	4	X		4		X		3	X	
Domain 3: Possibility Thinking										
Accepting illogical thinking	1			3		X		3	X	
Asking open-ended questions	4	X		4		X		4	X	
Accepting children's mistakes	3			4				4	X	
Encouraging thinking from different perspectives	4			3		X	X	4		

	Kay Beliefs	Kay Actions LO#1 LO#2	Kay Dialogue LR#1 LR#2	Sarah Beliefs	Sarah Actions LO#1 LO#2	Sarah Dialogue LR#1 LR#2	Anna Beliefs	Anna Actions LO#1 LO#2	Anna Dialogue LR#1 LR#2
Accepting failure is	3			4			3		
Domain 4: Teacher-Oriented Pursuit									
Directed teaching	3	X	X	3	X		2	X	
Stressing correct answers	1	X		2	X		1	X	X
Using repeated exercises	3	X		3	X		2	X	

Kay

Kay had a BA degree in elementary education with endorsements in reading and prek-K. She also earned a M.Ed. in curriculum and instruction. Her career in teaching began 15 years ago and she taught 14 years at the preschool level. During the study, her classroom had 12 preschool children who were 4 or 5 years old. Her setting was an elementary school in a community with a population over 800. Table 11 shows Kay's daily schedule. There were two opportunities within the daily schedule for choice time. During these times, children were engaged in play in the ten interest areas defined by the Creative Curriculum. She said she tried very hard to give the children a full hour for each of those choice times. I observed for one hour on two occasions. For the first observation, Kay taught a lesson and then during choice time offered a painting activity that complemented the lesson. During choice time, some children did the painting activity at a small table while the other children played in interest areas. For the second observation, Kay taught a lesson and then the children completed a journal page that complemented the lesson. After they finished their journal page, Kay dismissed the children to choice time.

Table 11

Kay's Daily Schedule

Daily Schedule
<i>Table work</i>
<i>Circle time</i>
<i>Story time</i>
<i>Snack time</i>
<i>Book time</i>
<i>Outside time</i>
<i>Small group</i>
<i>Choice time</i> <i>(interest areas)</i>
<i>Clean up</i>
<i>Lunch</i>
<i>Bathroom</i>
<i>Rest time</i>
<i>Table work</i>
<i>Choice time</i> <i>(interest areas)</i>
<i>Snack time</i>
<i>Circle time</i>
<i>Prep backpacks</i>
<i>Specials</i>
<i>Handwriting</i>
<i>Time to go home</i>

Definition of Creativity

Kay began defining creativity “as an expression of oneself.” She expressed the challenge of articulating a definition noting, “This is hard at the end of the day.” She continued and said creativity is “expressing yourself through different media, you know, whether that’s dance or play or art, different, you know, materials and there’s lots of ways to show your creativity.” Kay’s definition illustrated some difficulty associated with defining creativity. She said a general definition of the concept, though her

definition seemed to refer to children given that she noted dance, art, and play, which are often associated with young children. Use of materials surfaced in her definition, although expression was the primary idea she conveyed. She focused mainly on expression, but also noted there were many ways to show creativity.

Pedagogic Strategies

Kay talked about pedagogy with ease. She was comfortable and talked at length about strategies she deemed were creative in her preschool classroom. Three categories emerged through her dialogue: Creative Curriculum, involvement of children, and ways to promote creativity. Kay began her discussion of pedagogic strategies by discussing Creative Curriculum, the curriculum utilized in her setting. She said, “I use the Creative Curriculum in this, in our setting and it is all about what you do to set up the environment.” She spoke highly of Creative Curriculum and saw it as very beneficial with regard to creative pedagogy. According to Kay, “Creative Curriculum gives the students the materials and opportunities to express themselves. The teacher sets up the interest areas with a variety of materials and toys which allows the students to create and explore.” When asked if the Creative Curriculum discourages creativity in any way she responded, “I don’t think so because there is so much room for the students to help create their own unit of study and adapt the curriculum to match their interests.” She also noted, “I mean, I think it (Creative Curriculum) just encompasses what we do on a daily basis, that it’s so part of our early childhood, um, experience.”

Kay mentioned interest areas often and this emerged as a sub-category of Creative Curriculum. She conveyed the interest areas of Creative Curriculum were key to creative

pedagogy. “Also, within the interest areas, the students are given the choice to choose where they would like to play and how they would like to play and learn. This leaves a lot of room for creativity.”

Involvement of children with regard to pedagogy also emerged as a category. She said the children voted on materials to go in the dramatic play interest area.

We have, you know, like the dramatic play. So, for example, we put away the construction. We had voted on what we were going to have in like dramatic play, you know, housekeeping area and where we just put it away, the construction today. And so we’re going to set it up as a farm.

Children were also involved in setting up the room. She said, “For tomorrow and they’re going to help me set that up, too. And just allowing them to really be involved in the play and the setup of the classroom allows them to show their creativity.” Kay also considered children’s interests and recognized the value of their ideas.

We made a list of all the interests area or the...what they’re interested in you know, and so they came up with better ideas than I had, you know, of what they wanted to turn the classroom into or what we wanted to study. And it was so fun because I was like, oh, that’s a great idea.

The final category, ways to promote creativity, emerged as Kay shared several examples of how she promotes creativity in young children.

Oh, I guess a big piece too would be I am all about movement because four and five year olds need to move a lot. And so you, when you come to my classroom, I use a lot of music. I use a lot of singing and dancing.

Allowing children to express themselves was important to Kay. She noted, “And so I try to give them opportunities all the time where they can express themselves, you know.

Okay, for example, like our art center is always open.” Providing opportunities for choice and freedom was also key for Kay.

Then just allowing them to like free paint, you know, like I like to just set out paint and let them do what they want to do because some of them, you know, they like that freedom of not a product but a process.

Kay also spoke of additional creative experiences provided to preschool children in her classroom.

Like I had an endorsement in reading to start and I love children's literature. So whenever I can, I try to get students to retell stories, you know, by acting out or you know, doing a puppet show or you know, whatever we're doing. You know, I try to make the reading come alive for them so that they can express themselves, too. And oh, we also do lots of journal writing, you know, and so I will give them a topic that they have to write about, but they draw the picture, they tell, they tell the story.

When talking about creative pedagogy, Kay recognized her own creative abilities and the benefits of teaching in an early childhood setting.

Like I did have to go back to school and I got my early childhood endorsement obviously. And so, you know, all those classes were teaching us how to, and I learned really hands on. I had to learn via being in the classroom, if that makes sense. While I was teaching and so I had to, you know, do that. But it was, it wasn't things that I hadn't already known and I think it's just part of me and that's who I am. So it worked out and I'm, I'm semi creative myself and I like that and I don't know that I can teach, you know, in a very structured setting where I have to, it's August, I have to teach this one thing. It allows me to be creative, which then allows the children to be creative.

She also said, "I am creative in incorporating art, dance, music, and experiences into the daily curriculum. I am always thinking of art projects, music, dancing, movement activities, etc. to add to the curriculum."

ECCPQ Beliefs

Table 12 shows Kay's beliefs about creative pedagogy. She marked 19 of the 22 items as very important or quite important. Kay selected very important for asking open-ended questions and providing opportunities for discussion and cooperation and she

selected quite important for directed teaching and using repeated exercises. Domain one, self-initiated pursuit was the most important domain to Kay due to all items being selected as very important or quite important. Overall, the items least important to Kay were accepting illogical thinking and stressing correct answers, as she selected not important for these items. She also selected fair for getting preschool children to evaluate their work.

Table 12

ECCPQ - Kay's Beliefs

	Very important	Quite important	Fair	Not important	Not important at all
Domain 1: Self-Initiated Pursuit					
Encouraging creative behaviors is	X				
Giving choices is	X				
Encouraging children to express their opinions is		X			
Encouraging hands-on experiences is	X				
Valuing children's interests is	X				
Encouraging children to try new things is	X				
Encouraging different styles of expression is		X			
Stimulating thinking from different perspectives is	X				
Domain 2: Interpersonal Exchange					
Getting preschool children to evaluate their work is			X		
Providing opportunities for discussion and cooperation	X				

	Very important	Quite important	Fair	Not important	Not important at all
Encouraging children to question and make suggestions is	X				
Letting children ask questions freely is		X			
Paying attention to individual differences is	X				
Giving sufficient time for children to think is	X				
Domain 3: Possibility Thinking					
Accepting illogical thinking is				X	
Asking open-ended questions is	X				
Accepting children's mistakes is		X			
Encouraging thinking from different perspectives is	X				
Accepting failure is		X			
Domain 4: Teacher-Oriented Pursuit					
Directed teaching is		X			
Stressing correct answers is				X	
Using repeated exercises is		X			

ECCPQ – Actions

I coded classroom behaviors observed during the two lesson observations of Kay using the 22 items from the ECCPQ as a priori codes. Table 13 and Table 14 show the observation protocol for the two lessons observed and the a priori codes. Of the 22 items, those most evidenced in Kay’s two lessons were directed teaching, open-ended questions, and providing opportunities for discussion and cooperation. The domain most characteristic of Kay was domain four, teacher-oriented pursuit. She was in a directed teaching role in both lessons, used repeated exercises to help preschool children learn about the farm, and on a few occasions stressed correct answers as children shared their knowledge about the farm. The domain least characteristic of Kay was domain three, possibility thinking.

Table 13

Observation #1 Protocol - Kay

	Observations with a priori codes
Setting:	Kay’s lesson took place in the preschool classroom. To begin, Kay sat in front of the children seated in rows on the carpet. (<i>directed teaching; the teacher used large group instruction and led the lesson</i>) After the whole group lesson on the carpet, Kay dismissed the children for choice time (interest areas). The creative aspect of the lesson was one option during choice time (interest areas) and offered at a small table.
Introductory Activity:	(Whole class) To begin, Kay referred to a poster that previously created with the children’s help. The title of the poster was, “what we know about farms.” Kay read the information to review what they had talked about with regard to the topic of

	Observations with a priori codes
	farms. <i>(repeated exercises; the focus was a review of information previously learned about farms)</i>
Whole class/group/individual activity:	<p>(Whole class)</p> <p>Part 1:</p> <p>Kay introduced a book, “Good Morning Farm.” The book was nonfiction and she discussed characteristics of nonfiction books. <i>(repeated exercises; the teacher reviewed characteristics of nonfiction books)</i></p> <p>Kay read the book to the children.</p> <p>As she read the book, she asked questions. The children were quiet while Kay read the book. <i>(directed teaching; the teacher used large group instruction and led the discussion of the book)</i></p> <p>Kay called on children as they raised their hands to answer questions and offer their ideas. <i>(open ended questions; the teacher accepted a variety of responses)</i></p> <p>One of the children made a comment about a class field trip.</p> <p>Kay asked, “Was it a real cow or pretend cow?”</p> <p>A child asked, “How do they get the water in the cow?” <i>(letting children freely ask questions; the teacher welcomed a question asked by a child)</i></p> <p>Kay said, “I wonder. They have a spot where they open it up and pour the water in.”</p> <p>A child said, “Gator kind of sounds like Gatorade.”</p> <p>Kay responded by saying, “Absolutely, you are right. Good job! Smart thinking.”</p> <p>Kay restated ideas shared by the children.</p> <p>Kay showed interest in the ideas and experiences of the children by accepting those ideas and responding positively to their responses. <i>(providing opportunities for discussion and cooperation; the teacher encouraged children to participate in the discussion)</i></p> <p>Kay called on an “expert,” a child who lived on a farm so he could answer several questions.</p> <p>Kay said, “What a good idea, L, I love it.”</p> <p>Kay listened patiently while the children offered their ideas. <i>(giving children sufficient time to think; the teacher was patient and did not rush children while they were thinking of a response)</i></p> <p>Part 2:</p>

	Observations with a priori codes
	<p>Kay told the children they were going to play a game. She paired them up with a partner and explained the game. <i>(directed teaching; the teacher explained the game and what she expected the children to do)</i></p> <p>Kay and her assistant teacher modeled the expectations for the game, including what the children would talk about with their partners.</p> <p>Each child told a partner the name of the animal on his or her card and if it lived on the farm or in a zoo. Then Kay called each child up front individually (using name cards drawn from the basket) to place the animal card in the correct pocket (farm or zoo) on the chart. <i>(stressing correct answers; the focus was to correctly identify animals that lived on farms)</i></p> <p>Kay reminded the children of how to talk (with regard to volume) and she gave them time to talk with their partners. <i>(providing opportunities for discussion and cooperation; children were provided with the opportunity to engage in discussion with a peer)</i></p> <p>Kay expanded on an idea a child shared. She explained why an animal might go to the zoo and expanded on the child's thinking. <i>(providing opportunities for discussion and cooperation; the teacher provided an opportunity to discuss an idea presented by a child)</i></p> <p>A child offered additional information about an animal and Kay said, "Kiss your brain – that was smart!"</p> <p>Kay said, "E had a really good point." Kay expanded on the comment made by a child. She explained that sometimes zoos have farms within the zoo. <i>(providing opportunities for discussion and cooperation; the teacher provided an opportunity to discuss an idea presented by a child)</i></p> <p>Part 3:</p> <p>Kay had a large basket with small farm items. She held up each of the items and asked the children to identify and describe uses for the items on a farm. <i>(stressing correct answers; the focus was to correctly identify each piece of farm equipment and describe its use)</i></p> <p>Kay reminded to say the names of the items quietly.</p> <p>Kay asked, "Your grandpa works at the Co-Op, do you know what anhydrous does? <i>(providing opportunities for</i></p>

	Observations with a priori codes
	<p><i>discussion and cooperation; the teacher posed a question for the children to discuss)</i></p> <p>Kay helped the students understand why an answer offered was incorrect. <i>(stressing correct answers; the teacher explained an incorrect answer in an attempt to correctly answer the question posed)</i></p> <p>The assistant teacher shared her knowledge about one of the farm items because she lived on a farm.</p> <p>Kay said, “Interesting, very interesting. I’m learning new things every day.”</p> <p>The assistant teacher said, “I learn new things too every day.”</p>
Concluding activity:	<p>(Whole class)</p> <p>Kay introduced the creative activity available to children during choice time (interest areas) to complement the lesson. <i>(directed teaching; the teacher told the children what was expected with regard to the painting activity)</i></p> <p>Kay explained each child would get a piece of green construction paper to represent the field. There was brown paint to dip the farm equipment in to represent dirt. Kay said the children could make their own design using the paint, farm equipment, and paper. She pointed out the marks the different farm items could make. She compared the marks to actual farmers driving through the mud. Kay asked that the children not dip the entire farm items in the paint.</p> <p>Small group</p> <p>Creative activity:</p> <p>Each child went over to the small table during choice time to do the painting activity.</p> <p>Some children sat in chairs and some stood up.</p> <p>Many children moved the farm equipment back and forth or in circles. <i>(encouraging hands on experiences; children had the opportunity to dip farm equipment in paint and make marks on paper)</i></p> <p>The assistant teacher primarily monitored the painting activity while the Kay interacted with children in the other interest areas throughout the room.</p>
Kay’s dialogue with children in interest areas	<p>“Here you go – try this one.”</p> <p>“See if it fits.”</p> <p>“What about this one?”</p>

	Observations with a priori codes
	<p><i>“B, what are you making over here?” (open ended questions; the teacher posed a question that went beyond a yes or no response)</i></p> <p><i>“Why was the car in the jail?” (open ended questions; the teacher posed a question that went beyond a yes or no response)</i></p> <p><i>“What does this do?” (open ended questions; the teacher posed a question that went beyond a yes or no response)</i></p> <p><i>“What else do we need in our farm?” (open ended questions; the teacher posed a question that went beyond a yes or no response)</i></p>

Table 14

Observation #2 Protocol – Kay

	Observations and a priori codes
Setting:	<p>The lesson took place in the classroom.</p> <p>To begin the lesson, Kay sat in front of the children seated in rows on the carpet. (<i>directed teaching; the teacher used large group instruction and led the lesson</i>)</p> <p>After the whole group lesson on the carpet, Kay dismissed the children to tables to complete a journal page.</p> <p>After the table activity, children had choice time (interest areas).</p>
Introductory Activity:	<p>(Whole class)</p> <p>To begin, Kay asked the children what they were studying (the farm) (<i>repeating exercises; the teacher reviewed previously learned information about the farm</i>). She referred to the song Down on Grandpa’s Farm, which was familiar to the children. Kay said they were going to sing a different version. Kay introduced the characters in the song: a little green frog, a fat pink pig, a milk white cow, a red rooster, and an old time band. Each child received a character attached to a popsicle stick. Kay identified the characters she handed out the out.</p> <p>Kay had the children stand up and make the sound of their character to practice before singing the song.</p> <p>She helped with ideas for actions for the children who had the old time band. The children participated by singing, slapping their legs to the beat, standing up when their character came up in the song, and making the sounds associated with the characters. (<i>encouraging creative behaviors; the teacher encouraged children to be creative as they moved their bodies in different ways and made different sounds</i>)</p>
Whole class/group/individual activity:	<p>(Whole class)</p> <p>Part 1:</p> <p>Kay posed the question, “Are all farms the same?” (<i>encouraging children to express opinions; the teacher posed a question for the children to answer and explain their opinion</i>)</p> <p>She provided a microphone for the children to use when it was their turn. She asked each child to tell one thing found</p>

	<p>on the farm. (<i>open ended questions; the teacher posed a question and accepted several responses</i>)</p> <p>Kay encouraged the children to think of something new when it was their turn. (<i>giving children sufficient time to think; the teacher waited for children to think and provide a response</i>). She wanted to hear their ideas and then wrote those ideas on chart paper.</p> <p>Kay waited patiently for each child to respond. She asked questions and expanded on their ideas. (<i>providing opportunities for discussion and cooperation; rather than simply accepting a response from the children, the teacher prompted discussion based on their responses</i>)</p> <p>Kay welcomed and accepted all ideas. If a child said something already on the list, Kay provided the child with more time to come up with another idea. (<i>giving children sufficient time to think; the teacher recognized some children might need more time to come up with a response</i>)</p> <p>After all of the children had a turn, more ideas were accepted.</p> <p>Kay told the children they were going to complete a farm journal page.</p> <p>She asked, “What’s on the farm? Hmm...what do I want to draw?” (<i>repeating exercises; the focus was drawing an item on the farm previously discussed in lessons</i>)</p> <p>She wrote, “On the farm, I see (modeled how to spell ‘see’) tractors” (sounded out and spelled ‘tractors’ with the students). (<i>directed teaching; the teacher explained and showed the children what she expected</i>)</p> <p>Kay modeled how to draw a picture by quickly drawing a tractor. She said, “I know you can do a much better job than (the teacher said her name).” The children said her tractor looked like a train and she said, “Just don’t make it look like a train.”</p> <p>Kay said, “I want you to draw a picture of something you see on the farm.”</p>
Concluding activity:	<p>(Whole class)</p> <p>When each child was quiet and sitting criss cross applesauce, Kay handed out the journal pages and they moved to the tables.</p> <p>Kay and the assistant teacher stood in proximity to the students as they worked.</p> <p>Each child took one crayon.</p>

Kay said, “Hmm...on the farm. What do you see on the farm?” (*open ended questions; the teacher posed a question and accepted several responses*)

The children were able to draw anything they chose (something from the farm). (*encouraging creative behaviors; the teacher encouraged the children to be creative through drawing*)

Kay responded to a child’s drawing by saying, “I was wondering if anyone was going to say that – we need the farmer.”

As the children started drawing their pictures, they used more crayons.

When a child showed his picture Kay said, “No, that look’s great. Now do like the bill of the hat, the front part.”

(*stressing correct answers; the teacher stressed that there was a correct way to draw a hat*)

Kay said to a child, “You just do the best you can, okay?”

Kay sat with children and assisted as needed. (*paying attention to individual differences; the teacher worked with individual children based on their needs, specifically children who needed assistance with writing*)

The assistant teacher wrote the words ‘I see’ on a wipe board for the children to see and use in their writing. She sounded out words and assisted students as needed.

Kay asked, “It’s a what? It is a farmer’s tractor? Can you write the words?” (*repeated exercises; there was an emphasis on writing words including correct spelling and forming letters*)

Kay said, “Oh, cute! T, that’s awesome!”

Kay said, “Oh, that’s good!”

Kay said, “Oh, cute!” She asked, “Are you going to color your duck? What color?”

Kay asked a student about his journal page and wrote what he shared about his drawing. (*paying attention to individual differences; the teacher assisted a child with writing based on the child’s writing ability*)

A child said, “(Teacher’s name), I added some water.”

Kay said, “Oh, that’s a great idea!”

Kay said, “1, 2, 3 eyes on me.” The children responded by saying 1, 2 eyes on you.

Kay said, “If you are done, this is what I need you to do. Only if you have your name, your picture, and you’ve written the words down below are you done. (*directed*

	<p><i>teaching; the teacher explained what she expected the children to do</i></p> <p>Kay said, “I will give you your stick and you may quietly put your paper on my table and make a choice (interest areas).” <i>(giving choices; the teacher offered children choices based on the interest areas available)</i></p>
<p>Kay’s interactions with children in interest areas</p>	<p>Kay moved around the room during choice time (interest areas).</p> <p>She put a puzzle together with a child. <i>(encouraging hands on experiences; the teacher encouraged a child to put a puzzle together in an interest area)</i></p> <p>Kay observed children playing in the blocks.</p> <p>Kay moved back to the puzzles and worked with two children. <i>(encouraging hands on experiences; the teacher encouraged two children to put a puzzle together in an interest area)</i></p> <p>Kay watched a puppet show put on by a couple of children (she added a new puppet stage to dramatic play for use with the puppets). <i>(encouraging creative behaviors; the teacher showed her support of the creative efforts of children by watching their puppet show)</i></p> <p>After choice time (interest areas), children cleaned up and moved back to their spaces on the carpet.</p> <p>Kay put on a song and dismissed the children to get their backpacks.</p>

ECCPQ – Beliefs and Actions

The a priori codes helped to pinpoint specific classroom behaviors that supported Kay’s beliefs. Kay selected quite important for directed teaching. The following examples illustrate congruence between her beliefs and actions. She was in the directed teaching role at the beginning of both lessons while the children sat on the carpet. The children raised their hands to answer questions. During the first lesson, Kay paired each child with a partner and explained a game. Towards the end of lesson one, Kay introduced the creative activity available to children during choice time. She explained what they were to do with the paper, paint, and small pieces of farm equipment. Kay

clearly conveyed her expectations for the creative activity. During lesson two, Kay told the children they were going to complete a farm journal page and modeled the expectations. Towards the end of the lesson she stated, “If you are done, this is what I need you to do. Only if you have your name, your picture, and you’ve written the words down below are you done.” Again, Kay explicitly stated the expectations for the creative activity. Although directed teaching was an item in domain four, teacher oriented pursuit and a pedagogic strategic not conducive to creative pedagogy, there was congruence between her beliefs and actions.

Also evident in Kay’s lessons was open-ended questioning. During lesson one, she involved the children in the read aloud as she asked questions throughout the book. Kay asked several open-ended questions while she interacted with children during their play in interest areas. Some examples include “B, what are you making over here?”, “Why was the car in the jail?”, and “What else do we need in our farm?” During lesson two on two separate occasions, Kay asked children what things they could find on farms.

Kay selected very important for providing opportunities for discussion and cooperation and there was evidence of this in her teaching. A child made a comment about a field trip the class had taken and Kay posed a question in response to get the children talking. She paired children up to play a game during group time on the carpet. This gave the children an opportunity to talk and share their ideas with each other, rather than just listening to the teacher. Kay had a microphone for the children to pass and use when it was their turn to talk. She asked the children to think of something new when it was their turn and she stated a desire to hear their ideas. During lesson two, Kay

expanded on an idea a child shared. She explained why an animal might go to the zoo and expanded on the child's thinking.

Kay selected quite important for using repeated exercises and there was evidence of this in both of her lessons. At the beginning of lesson one, she referred back to a poster showing what the children already knew about farms. She read the poster to remind the children of the ideas they had already shared about the topic. Soon after, she introduced a book, *Good Morning Farm*, and reviewed characteristics of nonfiction books. For lesson two, Kay asked the children what they had been studying (the farm). They sang a different version of the song *Down on Grandpa's Farm*, and held up Popsicle sticks while making noises and doing actions to represent different characters. The creative activity within the lesson was a journal page using a template familiar to the children. Kay modeled and reminded children how to fill out the journal page. She also modeled how to write a sentence about farms by sounding out and spelling the words. Similar to directed teaching, using repeated exercises was an item in domain four, teacher oriented pursuit. Although not often associated with creative pedagogy, Kay's beliefs about this item and her actions were congruent.

Concerning beliefs that lacked congruence with her actions, Kay selected not important for stressing correct answers. While there were only a few examples, Table 12 and Table 13 show evidence of an emphasis on acquisition of knowledge and knowing the right answer during both lessons. During lesson one, each child told a partner the name of the animal on a card and if the animal lived on the farm or in the zoo. Then each child went up to the front individually to place the animal card in the correct pocket on

the chart. Kay had a large basket with small pieces of farm equipment. She held up each of the items and asked the children to identify and describe the use of each one on the farm. The purpose of the activity was for the children identify each item correctly. Kay asked the children the use for anhydrous and after a child provided a response, she explained why the answer was incorrect. A final example is when a child drew a hat and Kay said, “No, that looks great. Now do like the bill of the hat, the front part.” Again, Kay stressed the correct way to do something.

Kay selected encouraging creative behaviors as very important although the creative activities in both lessons did not fully align with Leggett’s (2017) definition for creativity in early childhood. The painting activity required little cognitive activity on the part of the children. Most children dipped the farm equipment in paint and simply moved it back and forth or in circles. There was little room for imagination. The children worked individually at a small table, rather than in a social capacity. The usefulness to children with regard to the activity was unclear (Leggett, 2017). For the journal page, Kay used a template and the children drew one item and wrote about that item, focusing on things found on farms. Based on her reflection, Kay felt the journal writing was an open and creative experience for the children. She noted, “They draw the picture, they tell, they tell the story.” Although the activity addressed cognitive processes as children thought about what and how to draw in addition to what and how to write, there was a limit on imagination because only items on the farm were the focus. In addition, children were not encouraged to think in new ways, rather, the focus was on what they had already

learned about farms (Leggett, 2017). According to Rubenstein et al. (2018), it is common for teachers to have different opinions with regard to what defines a creative activity.

ECCPQ – Lesson Reflection #1 and Lesson Reflection #2

When used as a priori codes, two of the 22 items emerged as notable within Kay's Lesson Reflection #1 and Lesson Reflection #2. These two codes were valuing children's interests and providing opportunities for discussion and cooperation. In her interviews, Kay referred to valuing children's interests often.

In my instruction and reading the story, Good Morning Farm, it's simple yet, you know, it shows a lot of different types of farms and gets the students like really thinking and like, oh, you know, about their grandpa's farm or their farm and most of our kids here have been to a farm or have a lot of experience on farms. So I knew it was going to be a topic where they were really interested in.

Kay also said she kept going with the lesson because of the students' interest. She noted, "I mean the lesson went longer than I expected, but it was just because they were so interested in it." Kay mentioned following the interests of the children when discussing materials offered to them. "So it's always really nice to see because then you see new play that you haven't seen before." According to Kay, following the interests of the children not only has the potential to impact play and creativity, but also behaviors.

When it starts to get like old, you know, because they've had this for a while then you often find it that I do anyway, that you see more misbehaviors and kids doing things they shouldn't be doing, but when it's something new and they can really expand on their play, they build off of that.

Kay talked about planning and how relates to not only children's interests, but her interests and creativity, too.

I'm not one of those teachers that pulls the lesson plan out from last year and does the exact same thing because I get bored with it and I like to, I like to go with what their interests are. And so I think we talked about that earlier too. I like to

change it up every year. So that's kind of fun. And that's what I really love about preschool is that you can do that, you know, and you have that flexibility to be creative yourself and kind of work with their interest and see what they like doing.

Kay shared that she sometimes uses Creative Curriculum resources. However, she also takes into account student interests when planning the studies offered by the curriculum.

And I pick and choose, honestly, like I don't do every week of the studies because I find that they're really long. They can be like up to six weeks and they (the children) lose interest after a while. So I do pick like, okay I usually do maybe a month of one study.

Kay also referenced providing opportunities for discussion and cooperation in her interviews.

I like to get them talking to each other if possible. They need to talk, they need to get their ideas out and they want to be heard. And so I try to get them to like have a partner or like a small group to share that with.

Kay talked about creativity and the paradigms reflected her classroom.

Hmm...I think that they are given a lot of opportunities to interact with each other in our classroom. So I would say the We (paradigm). Yeah, I would say somewhere between the second one, the third one (I paradigm). I mean I see a lot of creativity building on each other in our class. And just what they do, you know, like especially in dramatic play in the blocks. And then the library, especially with the puppet theater has been a big hit today.

Kay referenced interest areas when talking about ways to encourage discussion and cooperation among children. "And so I really try to make sure that there's multiple kids in each interest area, you know, so they have that time to play with each other."

When looking at the dialogue shared by Kay in her lesson reflections, several categories emerged. These categories included play, focus on academics or skills, support for creativity in the classroom, and challenges to offering creative experiences.

Kay conveyed the importance and value of play in both lesson reflections. "Uh huh, we

try to incorporate as much play as possible because that's how they learn best." Kay continued to talk about play opportunities available to the children.

I have different things, you know, play dough or whatever we have out, but it'll be something that they're playing with because again, that's what they want to do, right? And so I try to give as much opportunity as they can. And then obviously during interest areas, and obviously playing outside is huge, playing at recess or like playing indoors if it's too cold or too wet to go outside. So I try to incorporate it in all areas and really, a lot of times they go home and they tell their parents, you know, hey, they'll ask, "What did you do today? And they're like, we played and I'm like, yep, that is what we did.

Kay also recognized that children need ample time to engage in play.

I know that's the reason why they say, you know, to have like a good amount of time during those choice times (play in interest areas) that they are allowed to really be creative and continue their play and not just cut it off all the time, you know?

When reflecting on her decision to do an activity as a large group or in a small group during interest area time, Kay talked about her reasoning.

I thought it would be best to get everybody to do it at the same time because sometimes during interest area time, if I have a group coming over during that time, they rush through the activity because they want to go back and play.

This may be valuable evidence of how children view play versus teacher-directed activities.

Another category that emerged was a focus on academics or skills in the preschool classroom. There were several instances of focusing on academics, especially during lesson one. When asked what worked, Kay reflected on what the children were doing and learning.

Let's see what else, kind of brainstorming what's on the farm, what we see. And then modeling the journal which they've done several times, but just to kind of get them thinking of how they can write the word and, and I think if they wouldn't have been so squirrely, I could've done a little more with that.

Kay also referenced working on writing skills with the children.

And so that gives me less time to like help them with their writing when we do it that way (as a large group) because I'm walking around the whole class and trying to help them all, you know, and there's some that are really like, you know, far in advance. And then some that are like scribbles, you know, and so it's a big, big range of, of writing ability.

As she reflected, Kay talked about preparing children for kindergarten.

You know, a very typical problem in preschool is blurting and some teachers have the philosophy that it's okay because it's not developmentally appropriate, right? To always know to raise your hand and not just talk out of turn or whatever. And so we've tried, we've tried hard to get students to raise their hand and prepare them for kindergarten in the way that they know that they can't all talk at the same time. And so that is a challenge for me as a teacher because I find there's a fine line between too much talking and then, being respectful because sometimes they have such good things to share and I don't want to squash that, but at the same time they need to learn when it's appropriate, when it's not appropriate to talk and share.

This suggests Kay struggled with doing what she knew was developmentally appropriate for young children, but also ensuring children were prepared for expectations they would need to meet next year in kindergarten.

Kay's next category related to the support of creativity in her preschool classroom. She talked about how children influence the creativity of their peers and how choices children make also affect their peers.

We've had puppets out and we've done different things, but we just never have had the theater like that before and so that being new, they're really adding to each other's creativity, you know, back and forth and building on those, you know, plays that they're making.

She provided a specific example of an interaction between two students.

And today I saw two students that were playing off of each other this morning, like one started making a flower, you know, and then the other one's like, oh, I can, you know, do that too. And they had very similar, but they were still different paintings.

The influence of peers came through in her dialogue, too. “And then some that were, some that weren’t very interested at all in art have been like more attracted to that if their friends go there.”

When thinking about curriculum, Kay spoke about Creative Curriculum and standards positively with regard to creativity. When asked if IQPPS, IELS, and GOLD supported or hindered her efforts to encourage play and creativity in young children she replied, “No I believe the standards support and encourage creativity.” She also noted, “Anyway, so, yeah, we’re just allowed to be more creative in developing our own curriculum and you know, filling in our own way in order to get to those objectives.”

Kay had access to additional Creative Curriculum resources, as there was one set shared between buildings in her district. She talked about using some of the studies, including trees, balls, and reduce, reuse, and recycle, depending on the year.

Yeah, the studies are good, but they’re also very basic and so they don’t tell you like they don’t give ideas as far as like this particular project or this particular art thing, you know they don’t give you that. It’s more of kind of a guideline. And so you have to fill in a lot of things with the curriculum. So it does give you some, which is good for a lot of things because it gives you the flexibility of doing what you want. But it’s, I almost want it to be like heartier, you know? But at the same time I’m sure they did that on purpose.

Kay talked specifically about her preschool in an elementary setting and some ways creativity is encouraged in that setting. She said the school does not have an art teacher so instead of art as a special, classroom teachers are required to teach the subject. She said although there is a need for an art teacher as an expert, teachers address creativity when they do lessons on their own. The school also invites authors to come in during literacy week. She was in support of this.

I think that's a really great thing because it shows, you know, different ways, avenues of being creative and being a writer or being an illustrator. So bringing those people in to kind of show different types of art, would be good.

Kay supported the idea of showing children the different ways individuals can be creative.

Kay referenced interest areas and materials when talking about creativity in her preschool classroom. She said she incorporated creativity into choice times during the day. Kay talked about interest areas that stimulate the most innovative thinking.

I think dramatic play, also art I see a lot of creativity, blocks. I'm thinking of the ones that they love the most. Some kids are really drawn to discovery depending on what's in there. The science, you know honestly I don't have as much time to change out the discovery as I should or want to because it just takes so much time to pull things out and change it all the time, you know. But I know when we do, it really does stimulate that creativity and the thinking, you know, library too. I mean library is, we change out the books. We change out the activities in there and they are writing in there, they're reading, you know, looking at books there. Sometimes they're playing school, which is super fun.

To Kay, new materials were key with regard to play and creativity. She said, "But when it's something new and they can really expand on their play, they build off of that. And it is fun to see."

A final category that emerged for Kay was challenges to offering creative experiences in her classroom. Time surfaced as an issue in several ways. She noted the challenge of having small group, circle time, recess, and snack in the morning block of time. Therefore, the daily schedule encompassed many activities that needed to be completed. Those activities affected interest area time, too. "Today's like lesson went longer. I don't think we got into interest areas until probably 10:30ish. I'm not really sure exactly, but I just kind of go with the flow. I'm not like a strict by the clock person."

This indicated Kay does not always adhere to the schedule. In the example above, this could limit the amount of time children are engaged in play and being creative. Kay shared several other examples of how time is a factor when offering creative experiences.

Like I said before, you know, having, it always comes down to time and I know that's not a great excuse, but I can't live here either. It's a reality. And so I think if I had more time to prepare my classroom and in the ideal world you would right? You would have all your interest areas be different all the time and you would be changing things out. But that's not the reality of it. You have GOLD assessment and I'm working on that at night time instead of, you know staying, and I'm like, on Friday everybody else went home and I stayed late and changed out my interest areas, you know, and like, and that's fine. You know teachers do that all the time, right? We're always putting in extra hours.

Kay shared that her personal life limits her ability to stay late at school. She has her family and because her children are older, her evenings are full with their activities.

So it just has changed from when I was a new teacher, you know, and young teacher had a lot more energy, too. But I think also that being said I have a good repertoire of ideas and things that I have done in the past.

Contextual Factors

During the second lesson reflection interview, Kay discussed contextual factors that supported or impeded her efforts to promote creativity in her preschool classroom. There were three categories for the contextual factors based on the questions asked including accountability, barriers, and improvements. Kay said she was accountable to her colleagues in several ways. She was part of a professional learning community (PLC) team and met once a week with another preschool teacher who taught in the district, but in another town. She said they also met during professional development days in the district.

And so we share, you know, what we're working on, kind of our data as far as, you know, with our GOLD assessment where we're at on that. That holds us

accountable just to have a partner in that way. And then also with within our own classroom, having my associate, you know, in her knowing early childhood that piece, having her having like an early childhood degree, I get a lot of ideas from her, too. So that's a nice piece of holding each other accountable to stay focused on, you know, our goals.

Kay also mentioned accountability to standards. She said she used IQPPS and IELS, which align well with the GOLD objectives. She mentioned accountability to her principal and the state.

So we have to, we're held accountable to our principal and then, we've done a desk audit. All preschool administrators had to do a desk audit this year and we had to help them find, or they, excuse me, had to find evidence that showed that we were meeting those criteria for IQPPS. So the state asked that all preschool administrators do this and so it was kind of a big undertaking just to, you had to go on and the principal had to put an artifact in and then like a description of how that meets the standards. And so it was kind of all-encompassing for the program. And, and then we also had to meet with our community partner. And so we all three met with her and went through that and then she had to turn it into the state and they review it and those kinds of things. So there's those kinds of accountability pieces, too.

Kay discussed different examples of accountability in her preschool classroom and said these examples were supportive. Working with her colleagues, including her associate, helped her to stay focused on her goals. Kay appreciated the use of the standards and previously mentioned she felt they supported and encouraged creativity in the classroom. Although a difficult task, the desk audit appeared to verify the work she was already doing in her classroom with regard to the standards.

The next category was barriers. Kay said that her setting within an elementary school was a barrier because of the lack of understanding of the significance of play in early childhood.

Well, I think one barrier would be that maybe especially at an elementary school, you know, sometimes people will look at it and they'll say, oh, they're just

playing you know, and, and, not understand where, how play is such a big role in our learning. And that's a little bit tough sometimes to sell, I would say to parents and, and the outside community. But we all know the importance of it and we know that that's how they learn. And so I would say that would be a barrier.

When asked if there were any other barriers, Kay did not feel there were many to note.

“Not a lot. I feel like there's a lot of room and openness of being creative in early childhood, more so than maybe in the upper grades just because well, you know, with our curriculum it's called Creative Curriculum.” She again mentioned that Creative Curriculum supported her creativity efforts and expressed that not many barriers to promoting creativity existed for early childhood teachers.

Although she did not identify many barriers, Kay had some suggestions for improvements in promoting creativity in early childhood education, the final category. One of those suggestions was more collaboration among teachers. She said, “I would think, I mean, one improvement would be more time to collaborate with other teachers and share ideas because I feel like that stimulates some of that creativity when you are able to share with other teachers.” She also said there was a need for more time for children and teachers. She said, “Well both probably, but more time planning and setting up the classroom for those opportunities and then also more time for the students just to be creative and, and have that freedom.” When asked what administrators can do for creativity, Kay referenced her specific setting and the absence of an art teacher. The lack of this position in the elementary setting bothered her administrator because of the importance of art. She offered another way of promoting creativity by administrators.

But I think ways that they can promote it would be you know, some communities have like a community like art center where they can go and kids can go after school and, and have a space where they can just be creative.

Sarah

Sarah had a BA degree in early childhood education with endorsements in reading and English language arts. Her career in teaching began eight years ago and she had only taught at the preschool level. During the study, her classroom had 10 preschool children who attended three days a week and five who attended only two days a week. All children were four years old. Her setting was an elementary school in a community with a population over 600. Table 15 shows Sarah's daily schedule. The schedule reflected one opportunity for centers. During centers, children were engaged in play in the ten interest areas defined by Creative Curriculum. Sarah said the timeframe was an hour to an hour and a half. Although the schedule does not reflect it, Sarah also said she tried to offer another time for centers in the afternoon for about half an hour. I observed for one hour on two occasions. For observation one, Sarah interacted and engaged in play with children during centers. For observation two, Sarah read a book and facilitated a creative activity that complemented the lesson. The children did the creative activity at a large table.

Table 15

Sarah's Daily Schedule

Daily Schedule
<i>Arrival</i>
<i>Centers</i>
<i>Circle</i>
<i>Small group</i>
<i>Recess</i>
<i>Lunch</i>
<i>Story time</i>
<i>Outside</i>
<i>Nap</i>
<i>Snack</i>
<i>Music – Library – PE</i>
<i>Dismissal</i>

Definition of Creativity

Sarah's definition of creativity was specific to a preschool setting. Rather than defining creativity, she focused on what children do to be creative and what it might look like in her classroom.

In a preschool setting, like very child directed, like when I look around like center time and think of children being creative, it's them like creating their own structure in the blocks, being able to paint with paint freely as they would like. Yeah, just open I think open ended and stations throughout the classroom.

Through the member check, Sarah added an additional response. She added, "Children freely using the items they find in the room as they please, freely expressing themselves. Children using their imaginations as they build, draw, write, and play." Again, she referred to what creativity looks like and what children might do to be creative as she defined the word. When she finished defining the word she said, "I don't know." This

may have been an indication she was unsure of her ideas and her ability to define creativity.

Pedagogic Strategies

Sarah experienced some difficulty talking about creative pedagogy. She talked for a few minutes about her strategies and then said, “I don’t even know.” Then she continued to share her ideas. Three categories emerged in her dialogue: Creative Curriculum, classroom environment, and ways to promote creativity. Sarah identified the curriculum used in her setting as Creative Curriculum. She said she used the curriculum to set up her classroom and guide the children’s learning during play. She also referenced a thematic approach in her discussion. Sarah mentioned the classroom environment and materials offered to children often.

I think like, so for center time there will be like open-ended centers, what do you call them? Invitations to play. Invitations to play is arranging the environment so that it “invites” the children to come to an area to explore, investigate, question, and participate through as much independent play as the materials can possibly allow. We kind of set up to kind of get their mind thinking in a certain direction and then just let them, wherever it goes from there.

Sarah noted the materials offered to children are purposeful because they connect with the theme, a story, or academic skills. Props, music, and dramatic play were also important to creative pedagogy in the classroom.

Like with dancing we might use some different props, like story retelling with props. Maybe just giving them like the pieces to The Three Bears and Goldilocks and then they get to set it up and go through it all and act it out and out on our playground we have the stage and they get to, we have band instruments and things that they get to play with out there. Setting up our dramatic play in different, usually a couple of times a month it changes from what it is letting them pretend to be someone other than a preschooler.

The final category that emerged was ways to promote creativity. As mentioned above, Sarah offered materials to children and encouraged them to use the materials in their own way. Independent play was characteristic of the environment as children played in open-ended centers (interest areas). When discussing materials, Sarah pointed out the impact new materials made on the play of children. To make play more engaging for children, she said she offered new materials to the children. She also noted value in considering the interests of children.

Yeah, so it usually goes in with our theme or if I see that there's something that they're a little more interested in, like I have noticed that they love to build with blocks and so now we have a construction site and we're learning about being a builder, what that entails.

ECCPQ Beliefs

Table 16 shows Sarah's beliefs about creative pedagogy. When looking at what was most important to her beliefs, she marked virtually all of them (21 of the 22 items) as very important or quite important. Only one item was marked fair. Sarah selected very important for all items in domain two, interpersonal exchange so this stood out as the most important domain to her. In addition, all items under domain one, self-initiated pursuits and domain three, possibility thinking were selected as very important or quite important. These domains were important to Sarah, too. In domain four, teacher oriented pursuit, Sarah selected quite important for two items. These items were directed teaching and using repeated exercises. Overall, least important to Sarah was stressing correct answers as she selected fair for this item.

Table 16

ECCPQ - Sarah's Beliefs

	Very important	Quite important	Fair	Not important	Not important at all
Domain 1: Self-Initiated Pursuit					
Encouraging creative behaviors is		X			
Giving choices is		X			
Encouraging children to express opinions is	X				
Encouraging hands-on experiences is	X				
Valuing children's interests is	X				
Encouraging children to try new things	X				
Encouraging different styles of expression is	X				

	Very important	Quite important	Fair	Not important	Not important at all
Stimulating thinking from different perspectives is	X				
Domain 2: Interpersonal Exchange					
Getting preschool children to evaluate their work	X				
Providing opportunities for discussion and cooperation	X				
Encouraging children to question and make suggestions is	X				
Letting children ask questions freely is	X				
Paying attention to individual differences is	X				
Giving sufficient time for children to think is	X				
Domain 3: Possibility Thinking					
Accepting illogical thinking is		X			

	Very important	Quite important	Fair	Not important	Not important at all
Asking open-ended questions is	X				
Accepting children's mistakes is	X				
Encouraging thinking from different perspectives is		X			
Accepting failure is	X				
Domain 4: Teacher-Oriented Pursuit					
Directed teaching is		X			
Stressing correct answers is			X		
Using repeated exercises is		X			

ECCPQ Actions

I coded classroom behaviors observed during the two lesson observations of Sarah using the 22 items from the ECCPQ as a priori codes. Table 16 and Table 17 show the observation protocol for the two lessons observed and the a priori codes. Of the 22 items, those most evidenced in Sarah's two lessons were open-ended questions, encouraging creative behaviors, and providing opportunities for discussion and cooperation. The domains most characteristic of Sarah were domain three, possibility thinking and domain one, self-initiated pursuit. Sarah engaged in play with the children during center time (interest areas). All centers (interest areas) were free play. The environment was relaxed and the children were free to move about the room in centers (interest areas) of their choice. Sarah used questioning often and showed genuine interest in the play of the children. She encouraged creative behaviors by modeling her own creativity through art and painting. During her second lesson, she used a more teacher directed approach. Kay still encouraged children to be creative. She used questioning and encouraged discussion during the book and activity. The domain least characteristic of Sarah was domain four, teacher-oriented pursuit.

Table 17

Observation #1 Protocol - Sarah

	Observations and a priori codes
Setting:	The creative activities took place in the classroom during center time (interest areas). <i>(giving choices; children were allowed to choose where they wanted to play)</i>
Introductory Activity:	No introductory activity observed; children play in centers (interest areas) upon arrival.
Whole class/group/individual activity:	<p>Sarah sat in the art center and interacted with the children. <i>(providing opportunities for discussion and cooperation; the teacher situated herself in a center so she could discuss her work and the work of the children)</i></p> <p>The materials Sarah made available in the art center included construction paper, glue, shiny sequins, artificial flower petals, and tissue paper. <i>(encouraging creative behaviors; the teacher encouraged creativity by offering a variety of materials to the children)</i></p> <p>Sarah wrote as a child dictated what he had created on his paper. <i>(providing opportunities for discussion and cooperation; the teacher provided a child with the opportunity to talk about his creation)</i></p> <p>Sarah asked, "He is a monster, is that what you said, L?"</p> <p>Sarah asked, "Will you write your name on it?"</p> <p>Sarah made room so more children (five total) had room to work in the art center. <i>(providing opportunities for discussion and cooperation; the teacher accommodated all children that wanted to do art and provided opportunities for sharing space, materials, and ideas)</i></p> <p>Sarah said, "Try to think about what you are going to make before you start gluing stuff on your paper. <i>(directed teaching; the teacher told a child how to proceed, rather than letting the child decide)</i></p> <p>Sarah began to create her own piece of art along with the children. She said, "What am I going to make today?" <i>(encouraging creative behaviors; the teacher encouraged creativity in children by modeling her own process of being creative)</i></p> <p>She said, "Maybe I'll draw a stem. What do you think?" <i>(encouraging children to express opinions; the teacher asked children to share their opinions)</i></p>

	Observations and a priori codes
	<p>Sarah said, “Oh S, what did you make? (<i>open ended questions; the teacher asked a child to describe what he made</i>)</p> <p>Sarah asked another child, “What are you going to make with that glue, L? (<i>open ended questions; the teacher posed a question to prompt a child to explain what she was doing</i>)</p> <p>A child said, “I’m going to make sprinkles and now I’m going to make a whole bunch of things.”</p> <p>A child said, “Yep, it’s a flower.”</p> <p>Sarah asked, “You knew it? All right now I have to think about what I’m going to put on here.”</p> <p>A child suggested diamonds.</p> <p>Sarah asked, “You think some diamonds on it?” (<i>valuing children’s questions and suggestions; the teacher welcomed a suggestion from a child</i>)</p> <p>Sarah asked, “What are you making there, Z?” (<i>open ended questions; the teacher asked a child to describe what he made</i>)</p> <p>The child replied, “I got shells on here.”</p> <p>Sarah asked, “You think those are shells? Yeah, they do kind of look like shells, don’t they? I like that. (<i>encouraging creative behaviors; the teacher encouraged creativity by showing interest in how a child used the materials provided</i>)</p> <p>Sarah then asked, “Do you think they feel like a sea shell? What makes them feel like a sea shell?” (<i>open ended questions; the teacher posed a question to learn more about a child’s thinking</i>)</p> <p>Sarah said, “I love it, what did you create there, H?” (<i>open ended questions the teacher asked a child to describe what he made</i>)</p> <p>One child said, “I’m done.”</p> <p>Sarah asked, “All right, what did you make S? Let’s see it. What do you want to tell me about your paper?” (<i>open ended questions; the teacher asked a child to tell her more about what she created</i>)</p> <p>Referring to her art, Sarah asked the children, “All right, what else does my flower need?” (<i>encouraging children to express their opinions; the teacher posed a question and welcomed the opinion of the children around her</i>)</p> <p>One child’s idea was to add stars.</p>

	Observations and a priori codes
	<p>Sarah asked, “Stars?”</p> <p>Sarah asked (a child in another interest area), “B, what are you adding to your house?” (<i>open ended questions; the teacher posed a question to learn more about what a child was doing</i>)</p> <p>Sarah said, “Oh stars, that’s a good idea. Should I make them in the sky?”</p> <p>Sarah asked, “What did you make L? (<i>open ended questions; the teacher asked a child to describe what she made</i>)</p> <p>Sarah said, “Okay you decorate it and let me know what it is when you are done.”</p> <p>Sarah said, “All right I think my flower is done. What do you guys think?” (<i>encouraging children to express opinions; the teacher posed a question to ask children their opinions</i>)</p> <p>A child said, “It’s like it is nighttime.”</p> <p>Sarah responded, “Nighttime on my flower. Yeah.”</p> <p>Sarah moved over to the play dough table and interacted with two children for a few minutes.</p> <p>She then cleaned one of the tables.</p> <p>Sarah moved back to the play dough table to remove some beads from the play dough.</p> <p>She returned to the art center to assist a child.</p> <p>Sarah said, “All right, a sparkly storm? I’ll write on it.”</p> <p>Sarah sat in close proximity to a child playing with the Legos.</p> <p>She asked, “How many fish do you have in your fish tank?” (<i>repeating exercises; the teacher emphasized practicing the skill of counting</i>)</p> <p>Sarah interacted with a child and asked questions while she was building.</p> <p>Another child came over to Sarah and told her he had painted a tornado. He wanted to show her. She moved over to the easel painting and asked him about his painting. She asked, “The tornado shoots fireballs? Cool. Let’s write your name on it.” She also said, “A fireball tornado?” She wrote on his painting. (<i>encouraging creative behaviors; the teacher encouraged creative behaviors by showing excitement and interest in what he created</i>)</p> <p>The child said, “I want to paint another one.”</p>

	Observations and a priori codes
	<p>Sarah responded, "Another one? Okay, you can." She helped him get another piece of paper on the easel. <i>(encouraging creative behaviors; the teacher encouraged creativity by providing easel paper and the opportunity to continue painting at the easel)</i></p> <p>Sarah moved over to the sand center because the children were having difficulties. She said, "Too many friends in our sand today. I can grab some more spoons." She got more materials for the children to use in the sand. <i>(providing opportunities for discussion and cooperation; the teacher allowed several children to play in the sand and encouraged sharing of materials, space, and ideas)</i></p> <p>Sarah asked the children how the water affected the sand. "Why do you think he (referring to her son) put water in it?" <i>(encouraging children to express opinions; the teacher posed a question to encourage children to share their ideas)</i></p> <p>Seven students played in the sand. She said, "Wow, it actually works. He did make it fun." Sarah moved back to the easel painting and asked a child questions about his painting. He was painting tornados because it was raining very hard outside and many children were talking about the weather. Sarah asked, "You want me to paint? I can paint." She paused to think about what to paint. <i>(encouraging creative behaviors; the teacher encouraged creative behaviors by painting alongside a child and being creative herself)</i></p> <p>A child suggested flowers. Sarah asked, "Should we paint flowers?" <i>(valuing children's questions and suggestions; the teacher posed a question to show that she welcomed a child's suggestions)</i></p> <p>Sarah moved back over to the sand because the children were having difficulty again. She said, "Make sure we are sharing. I will let this many friends play at the sand table as long as we are sharing. If we can't share, I'll have to limit it. <i>(providing opportunities for discussion and cooperation; the teacher did not remove children from the sand, rather, she encouraged the children to work together)</i></p> <p>Sarah moved back to the easel to paint and talked about flowers at her house as she painted.</p>

	Observations and a priori codes
	<p>A child said, "I'm going to put water on my plant. It has to have water and it has to have a sun."</p> <p>Sarah asked, "Do you have flowers at your house?" <i>(providing opportunities for discussion and cooperation; while painting at the easel the teacher engaged in discussion with a child)</i></p> <p>A child said, "I'm putting water all over it."</p> <p>Sarah said, "It is raining outside. She also said, "That is a very pretty red flower."</p> <p>The child said, "The big one is giant."</p> <p>Sarah asked, "It won't grow anymore?" (another child spoke to the teacher from across the room)</p> <p>A child said, "These two guys match pajama pants and pajama shirts."</p> <p>Sarah responded, "They do? Are they going to bed? Is it nighttime for them?"</p> <p>Sarah asked, "All right, good night. Did you name your people in your house?"</p> <p>Sarah asked, "You named them Chocolate Chips and Macey?"</p> <p>The children replied, "Her name is Flower."</p> <p>Sarah said, "Oh Flower? Even better. Those are some good names."</p> <p>Sarah said, "Oh, I need some grass. You made some grass on yours."</p> <p>A child said, "I beat you."</p> <p>Sarah responded, "You did beat me."</p> <p>Sarah asked, "What else are you going to put down there? You have a sun and everything, look at that."</p> <p>Sarah said, "Maybe some, I'll put some clouds in my sky. Mine's going to be a sunny day. You have rain and the sun?"</p> <p>She asked, "What do you think of our flowers? Do you like them?" <i>(encouraging children to express their opinions; the teacher posed a question to encourage children to share their ideas)</i></p> <p>Sarah asked a child, "Do you want to paint?" <i>(giving choices; the teacher offered a child a choice of activity)</i></p> <p>Another child came over to paint and the child already at the easel painted another picture.</p> <p>Sarah asked, "Do you know what you are doing (going to paint) this time?"</p>

	Observations and a priori codes
	<p>The teacher asked, “What are you going to make, D? Sarah moved away from the easel.</p> <p>She asked, “What do you think A, what are you going to play with now? (<i>open ended questions; the teacher posed a question that went beyond a yes or no response</i>)</p> <p>Sarah asked, “Are you going to play Legos with B and C? No? Cook in the kitchen? Build? No one’s played with that today. Be a construction worker. You can make a picture at the art table. What do you think?” (<i>giving choices; the teacher offered numerous choices to help a child choose where to play</i>)</p> <p>A child said, “Look at that one.”</p> <p>Sarah said, “I know, isn’t that pretty? I made a, I know, I made a night sky of my flower. (<i>encouraging creative behaviors; the teacher encouraged creative behaviors by modeling her own creativity</i>)</p> <p>Can you make one like that? No?”</p> <p>A child said to Sarah, “Write your name on this.”</p> <p>Sarah said, “I forgot to write my name on it.”</p> <p>Sarah said, “Is this yours? What did you make?” (<i>providing opportunities for discussion and cooperation; the teacher provided an opportunity for a child to talk about her creation</i>)</p> <p>Sarah said, “I love your flower, look at how colorful that is! A blue flower, and what’s the orange and purple stuff? They are both flowers? I love it, so colorful!”</p> <p>Sarah helped a child get a piece of easel paper to paint another picture.</p> <p>She moved over to the play dough to interact with a child and play with the play dough.</p> <p>Sarah said, “Look at the tracks.”</p> <p>(another child walked over with Legos)</p> <p>Sarah asked, “What did you build?” (<i>open ended questions; the teacher posed a question that went beyond a yes or no response</i>)</p> <p>She also said, “You have to take one of your animals to the vet? Is it sick?”</p> <p>(another child walked over with a painting)</p> <p>Sarah asked, “Oh, what did you paint, H?” The child did not appear to respond and the Sarah shifted her attention to another child.</p> <p>(another child showed her a magnet creation)</p>

	Observations and a priori codes
	<p>Sarah asked, “What did you make, B? You are being a great builder today. What is it? What are you building?” <i>(open ended questions; the teacher posed a question that went beyond a yes or no response)</i></p> <p>Sarah asked, “Is that one sick too?” (referring to a child playing with Legos)</p> <p>Sarah said, “I love it. That’s so colorful and you made a nice pattern, Z.”</p> <p>The teacher asked a child questions about his magnet creation.</p> <p>She asked, “Did you build all different rooms in here? Oh, that is awesome! They all have a ball to play with. Good thinking!”</p> <p>Sarah asked, “Whose picture is this? Yep, I’ll write your name on one of them.”</p> <p>Sarah interacted with children in the dramatic play center. She asked, “What are you building B? Are you building a house?”</p> <p>The teacher moved to the Legos and sat on the floor. A child came over because she was having difficulty in the dramatic play center.</p> <p>Sarah said, “You can all be moms together. There can only be one mom? Do you know what? I am a mom and sometimes I see my friends and they are moms. Do you do that with your mom some times? There can be more than one mom.” <i>(encouraging thinking from different perspectives; the teacher shared a situation to help a child think about a situation in a different way)</i></p> <p>A child built a three level magnet creation for his animals. Sarah helped him find Legos for use as water for the animals. She asked him questions about his creation as he explained it. <i>(open ended questions; the teacher posed questions that went beyond a yes or no response)</i></p> <p>Sarah said, “That’s awesome, C!”</p> <p>She asked, “What are you drawing, B? A butterfly? No? An ice cream cone?”</p> <p>When it was time to clean up the child who created a zoo with magnets asked if he could leave it out and Sarah said yes. <i>(encouraging creative behaviors; the teacher showed she valued a child’s creation by letting him keep it intact)</i></p>
Concluding activity:	No concluding activity observed; the children cleaned up after centers (interest areas).

Table 18

Observation #2 Protocol – Sarah

	Observations and a priori codes
Setting:	<p>The lesson took place in the classroom.</p> <p>To begin the lesson, Sarah sat in front of the children who were on their squares on the carpet. (<i>directed teaching; the teacher used large group instruction and led the lesson</i>)</p> <p>After the whole group lesson on the carpet, Sarah dismissed children to the table. Sarah facilitated the creative activity at the table with the children.</p>
Introductory Activity:	<p>(Whole class)</p> <p>Sarah began the lesson by presenting a book titled Perfect Square. She accessed prior knowledge about squares. She read the book to the children. (<i>directed teaching; the teacher used large group instruction and led the discussion of the book</i>)</p> <p>She asked the children what they thought the square was going to turn into before she turned the pages. She asked for their ideas and modeled by sharing her own ideas. (<i>encouraging thinking from different perspectives; the teacher encouraged several children to respond so the children could hear many ideas about what the square could be</i>)</p> <p>Sarah asked, “What do you think you could turn all those pieces of glass into?” (<i>open ended questions; the teacher welcomed many different ideas</i>)</p> <p>She said, “I wonder what they are doing to do.”</p> <p>Sarah repeated what a child said. “You think unicorns swim in the water? Maybe.” (<i>accepting illogical thinking; the teacher accepted a child’s response</i>)</p> <p>Sarah asked, “What do you think you could turn ribbons into?” (<i>open ended questions; the teacher welcomed many different ideas</i>)</p> <p>Sarah said the children would get a “perfect square” of their own and they would be able to make it into anything they wanted. The children started to share their ideas. (<i>encouraging thinking from different perspectives; the teacher encouraged all of the children to share their different ideas</i>)</p> <p>Sarah said, “You may, you can make it whatever you want. Whatever your mind makes. You can be creative.”</p>

	Observations and a priori codes
	<i>(encouraging creative behaviors; the teacher encouraged the children to be creative and use their own ideas)</i>
Whole class/group/individual activity:	<p>(Whole class)</p> <p>Sarah moved the children to the large table. She let the children choose from different colors of paper squares. <i>(giving choices; children chose the color of paper they wanted to use)</i></p> <p>Sarah told the children they would take their square and turn it into something else just like the square in the book. She said, “You can tear it, cut it, color it. Here is the paper you are going to glue it on.” <i>(giving choices; the teacher offered different options for working with the paper)</i></p> <p>Sarah asked, “So what are you going to do with your square?” <i>(open ended questions; the teacher posed a question that went beyond a yes or no response)</i></p> <p>A child said, “I’m going to make a volcano.”</p> <p>Sarah responded by saying, “I’m excited to see how you turn that into a volcano.” <i>(encouraging creative behaviors; the teacher encouraged creativity by showing her excitement when a child shared an idea)</i></p> <p>Sarah reminded the children, “Remember in our book they used all of the pieces.”</p> <p>A child asked, “Do I cut it out?”</p> <p>Sarah said, “You can do whatever you want.” <i>(encouraging creative behaviors; the teacher reminded the children they could do whatever they wanted with the square)</i></p> <p>When they were ready, he children received a white piece of paper.</p> <p>Sarah said, “No, we are not cutting the white paper, that is the paper we will glue your square on. <i>(directed teaching; the teacher reminded children of the expectations of the final product)</i></p> <p>Sarah asked questions while the children worked.</p> <p>“What else do you want to do with your volcano?” <i>(open ended questions; the teacher posed a question that went beyond a yes or no response)</i></p> <p>“What did you make, H?” <i>(open ended questions; the teacher posed a question that went beyond a yes or no response)</i></p> <p>One child said, “I made a bridge.”</p> <p>Sarah replied, “A bridge? Cool.”</p>

	Observations and a priori codes
	<p>Sarah asked, “What did you turn your square into?” The child said, “I don’t know.” Sarah asked, “What do you think you can make those pieces into?” (<i>open ended questions; the teacher posed a question to prompt a child to talk about what he could create</i>)</p> <p>Some of the children had trouble deciding what their squares would be. Sarah used the book to talk about the examples. (<i>directed teaching; the teacher used examples to help children think in a way similar to the book</i>)</p> <p>Sarah asked a child, “Do you want to draw anything? Do you want to draw anything in your park?” (<i>encouraging creative behaviors; the teacher made a suggestion to encourage a child to continue to be creative</i>)</p> <p>She continued to ask questions to a child who had simply cut the square and glued the pieces on the white paper. He did not know what he had created.</p> <p>“O, what can you tell me about your picture? What did you turn your strips into? (<i>open ended questions; the teacher posed a question that went beyond a yes or no response</i>) A park?”</p> <p>Sarah said, “They need to be something. It wouldn’t have been a good book if the strips didn’t turn into anything.” (<i>stressing correct answers; the teacher stressed that a product was needed at the end of the activity</i>)</p> <p>Sarah reminded the children, “You can be creative.” (<i>encouraging creative behaviors; the teacher encouraged creativity by telling children to be creative by doing whatever they wanted with the square</i>)</p> <p>More than one child asked Sarah if they could stop doing the activity.</p> <p>A child said, “Look at this.” Sarah responded by saying, “Oh, I love it C!”</p> <p>Sarah asked another child, “What do you think your strips will be? (<i>open ended questions; the teacher posed a question to get a child to share an idea about his creation</i>)</p> <p>The child said he did not know.</p> <p>Sarah offered suggestions. “If you add green stems, could they be flowers? Could they be lollipops? Could they be clouds in the sky?” (<i>encouraging thinking from different perspectives; the teacher offered ideas to get a child thinking about the possibilities for her square</i>)</p>

	Observations and a priori codes
Concluding activity:	<p>Sarah moved the children to the carpet to share their squares and talk about what they created. (<i>providing opportunities for discussion and cooperation; the teacher provided a situation where the children could share and talk about their creations</i>)</p> <p>Kay asked the children to say, "I had a perfect square and I turned it into a _____."</p> <p>The first child said, "I turned my square into a zombie."</p> <p>The second child said, "I turned it into a car."</p> <p>Sarah said, "Turn so your friends can see your car. It is a cool car."</p> <p>Another child said, "I turned mine into a field."</p> <p>Sarah asked, "It has a smiley face, is it a happy field?"</p> <p>The next child said, "I made a mountain and I even have lava."</p> <p>Sarah said, "When we are done you can add a mountain."</p> <p>Sarah told the children, "You guys did a great job making."</p> <p>The next child said, "I made strips and turned them into a park."</p> <p>Sarah responded by saying, "That looks like a really fun park to play in. You can be crazy at your park!"</p> <p>Another child made a volcano.</p> <p>Sarah said, "What is beside your volcano? A human? He had better run away. Great job, C!"</p> <p>Sarah asked the next child, "What did you make? It looks pretty cool. What do you think that is?"</p> <p>The child said, "I don't know what it is."</p> <p>Sarah responded by saying, "All right, you keep thinking." (<i>giving children sufficient time to think; the teacher provided a child with the opportunity to talk later</i>)</p> <p>Sarah asked, "Did you make anything? You just cut it into strips?"</p> <p>After the child responded she asked, "A park? What do we get to do at your park?" (<i>open ended questions; the teacher posed a question that went beyond a yes or no response</i>)</p> <p>Sarah remind the students to sit on their bottoms and hold their papers. Kay told the children they could sit and listen to their friends.</p> <p>The last child made a bridge and talked about it.</p> <p>Sarah ended the lesson by saying, "You took a regular square and made it into something new!"</p>

ECCPQ Actions and Beliefs

I used the 22 items from the ECCPQ as a priori codes to identify specific classroom behaviors that supported teacher beliefs and classroom behaviors that lacked congruence with teacher beliefs. Sarah selected very important or quite important for 21 of the 22 items. Sarah selected fair for the remaining item, stressing correct answers. During the two lesson observations, all of Sarah's actions supported her beliefs about creative pedagogy. No actions lacked congruence with her beliefs as identified by the ECCPQ.

Sarah selected very important for asking open-ended questions. There was evidence of this item in both lesson one during center time (interest areas) and lesson two, which was more teacher directed. Sarah was observed numerous times asking children what they were doing or what they had created. She asked, "All right, what did you make, S? Let's see it. What do you want to tell me about your paper?" She also said, "What did you make, B? You are being a great builder today. What is it? What are you building?" During the teacher directed creative lesson, she asked questions while the students worked. She asked, "So what are you going to do with your square?" Sarah also used open-ended questioning to help a student. She asked what he turned his square into but he did not know. Then she said, "What do you think you can make those pieces into?"

Sarah selected quite important for encouraging creative behaviors. During lesson one, I observed her during center time. The creative element she planned for the lesson was adding new materials to some of the centers (interest areas) to encourage creativity.

For example, she offered construction paper, glue, shiny sequins, artificial flower petals, and tissue paper in the art center (interest area). Sarah had not offered the children artificial flower petals before. She asked one child, “What are you making there, Z?” The child said she had shells on her paper. Sarah replied, “You think those are shells? Yeah, they do kind of look like shells, don’t they? I like that.” While in the art center (interest area), Sarah created her own piece of art along with the children. She posed the question, “What am I going to make today? Maybe I’ll draw a stem. What do you think?” By being creative herself, she was encouraging creative behaviors in the children. While Sarah was near the easel asking a child about his painting, the child asked her to paint. She willingly agreed. While she was painting she talked with a child at the easel beside her, both modeling her own creativity and encouraging his creativity.

What else are you going to put down there? You have a sun and everything, look at that. Maybe some, I’ll put some clouds in my sky. Mine’s going to be a sunny day. You have rain and the sun?

When center time was almost over, a child who had built a zoo for his animals asked if he could leave it out instead of cleaning it up. Sarah showed that she valued and supported his creative endeavors by not making him take it apart and put it away. During the second lesson observed, Sarah facilitated a lesson on the carpet and at the table. After she read a book, she gave the children a square of their own to use and make into something else. She said, “You may, you can make it whatever you want. Whatever your mind makes. You can be creative.” While they worked, she also encouraged creativity. She told one child, “I’m excited to see how you turn that into a volcano.” She

asked another child, “Do you want to draw anything? Do you want to draw anything in your park?”

Sarah selected very important for providing opportunities for discussion and cooperation and there was evidence of this in her teaching. She engaged in play with the children during center time, thus providing her with several opportunities to communicate and work with the children. A few children were working on an art project in the art interest area with Sarah. When two more children wanted to join, she did not turn them away. She moved some of the materials and made room so all five children could be in the art center. Another example involved the sand interest area. She had to intervene because some of the children were having difficulties. She said, “Too many friends in our sand today. I can grab some more spoons.” Instead of limiting the number of children, she provided more materials for the children to use and encouraged cooperation so everyone who wanted to play could stay in the interest area. While helping children with the sand, she also asked about the water added to the sand. “Why do you think he (the teacher’s son) put water in?” She listened to their ideas about how the water affected the sand and their play. While most evidence of providing opportunities for discussion and cooperation occurred in lesson one during center time (interest areas), there was an example in lesson two. After the children had worked at the table to create their perfect square, Sarah moved them to the carpet so the children could share their squares and talk about what they had created.

The only item Sarah marked as fair was stressing correct answers. Her actions supported her beliefs, as there was only one example that pointed to stressing correct

answers. In lesson two, Sarah reminded the children that the square needed to be something else other than the original square. Although the possibilities were endless and all ideas were accepted, she did stress there was one incorrect way to do the activity.

ECCPO – Lesson Reflection #1 and Lesson Reflection #2

When applied to Sarah's Lesson Reflection #1 and Lesson Reflection #2, two a priori codes stood out. She spoke of encouraging creative behaviors and valuing children's interests during her interviews. She reflected on the creative aspect of her first lesson, which involved adding different items for play in some centers.

I think just setting up like I tried to set up some more creative experiences for them to play with today. Like I added different things to the play dough for them to play with to see, yeah, like something to make different stamps or different pieces just to see what they would create with them. And then like the petals were new in the art center so it was fun that they had turned them into seashells.

Sarah's approach to encouraging creative behaviors would be in line with Leggett's (2017) definition of creativity. Adding new materials to centers encouraged children to think in different ways when using materials and the children's response to the materials showed they were useful to the children. In addition, the activity addressed social interactions and play because creativity was encouraged while children were playing and interacting with peers (Leggett, 2017).

Sarah also noted that adequate center time was important to encouraging creative behaviors. She said, "I try to have my center time to at least be a good hour, hour and a half to give them time to settle in and be able to play with the things that they want and give them time to start creating." Sarah also talked about the fact that she does not limit the number of children who play in each center due to creativity.

Usually not, unless it's, they're having a hard time, then I'll limit it, but I do not like to limit my centers as I have seen how it helps with the students learning in how to communicate with one another, problem solve with how to share materials. In dramatic play it is always interesting to see how new roles are created. I feel like it always helps with the creative process as they learn from one another and expand their creations with working together and accepting new ideas.

Sarah also mentioned valuing children's interests during her interviews. When talking about the creative additions to the centers, she talked about what interested the children the most. She said children are usually very interested in easel painting in addition to Legos and Magnatiles. She was aware of the children's interests in the classroom and responded accordingly with regard to interest areas available. This was evident when she talked about who decided on themes used in the classroom.

Kind of both. If I see that there is something that they seem really interested in, then I'll pull some stuff out for it. But I usually try to like introduce them to something and then to see where they lead it, where it goes. I mean, they're very much a part of everything that we're learning, like how I introduce it then what they already know or don't know will direct me in what we need to do next.

Five categories emerged from the dialogue with Sarah in Lesson Reflection #1 and Lesson Reflection #2. The categories included teacher understanding of and beliefs about creativity, a focus on children, environment, pedagogic strategies, and teacher response to the creativity of children. Sarah talked about her understanding of creativity, particularly how she learned about being creative as a teacher. She said, "I think just over time as I have been in the classroom you start to see what works and what doesn't." She noted seeing children's creativity also helped her to understand its place in early childhood. Sarah pointed out "usually when you let the kids have a chance to be more creative or think of ideas that will help push them in that direction, you get to see its

importance.” Even with her experiences with creativity in the classroom, Sarah felt she would benefit from training related to creativity. She felt it would provide her with new and helpful ideas and information, in addition to being a good reminder. Even though the study itself was short term, in her last interview Sarah reflected on the experience.

It’s been good, like for myself, just to like rethink like, oh yeah like it is good to see where the kids are creative wise and what am I doing that’s helping to let them express themselves differently and stuff so it’s been good.

Several beliefs surrounding creativity emerged as Sarah talked about the topic. When asked about the paradigm(s) represented in her classroom, she expressed the belief that not only can all children be creative, but they can also be creative because of their peers. She said the I-paradigm and the We-paradigm because children can learn new things from peers. She provided a specific example to illustrate her ideas.

And if someone does something really cool, like if they paint if we’re talking about trees and apples, if someone would paint like an apple tree, then I’ll, you know, make a big deal of it. Like, oh my goodness, look at this tree. Like, you know, it looks like it and they put the apples on it and it kinds of sparks the other kids then to do the same thing.

Sarah also mentioned her beliefs about materials offered to children in the classroom. She said, “The different things that I have out in the classroom definitely makes a big difference in what they’re doing and what they’re creating. Any like to spark new things in their mind.”

Sarah’s next category was a focus on children. She clearly conveyed the link between her efforts in the classroom and the interests and needs of her preschool children. As mentioned above, she considered children’s interests when planning. Sarah also followed the lead of the children. For example, during the farm unit she discovered

most of the children knew a lot about cows. She responded by focusing on animals that were not well known the children. During that same study she also said, “Students created and put together a farm in our dramatic play center. They made the animals, a field, garden, and set up the farm house.” Even though center time (interest areas) was already an hour to an hour and a half, Sarah was flexible with time. This showed the value she placed on play and creativity in the classroom.

And as I said clean up, one of the little girls was like, oh, but I didn’t have time to, you know, like she had just started building something and then of course it made me want to be like, okay, well maybe I’ll just give you like five more minutes.

The third category that emerged for Sarah was the environment. There were two sub-categories for environment including materials and the teacher’s role. Based on her reflection of lesson one, Sarah recognized the environment she created in the classroom affected children’s creativity. She talked about what she added to the centers indicating the potential exists for centers to offer more opportunities for children to be creative. Sarah was different from the other teachers in the study because she did not limit the number of children allowed in centers (interest areas). She felt by not doing so, she was encouraging the creative process that happens when children have opportunities to play and work together. This made her environment different from the other two preschool teachers in the study.

Materials was a sub-category of the environment. When asked about materials she used, Sarah indicated it depends on what the theme is in the classroom. She said changes in materials affects students, particularly new materials because interest levels are high. More specifically, she felt the morning lesson I observed went well because of

the new items she added to interest areas. Sarah identified centers that encouraged the most innovative thinking including blocks, Legos and magnets. Adding different materials to these centers encouraged thinking differently. She said, “So I try to add new things in there for them to think differently about what they’re building and what they’re creating there.” These items included maps, drawings or pictures of things they could build related to the theme and cups, foam pieces, cardboard boxes, people, animals, cars, and tractors. When asked how she as a teacher could expand her own thinking and approaches to include more opportunities for creativity, Sarah once again referenced materials. She felt she could think more purposefully about what materials she adds to the classroom.

I would think just thinking like through every center and what types of, how to expand their creativity throughout it. I don’t know, like with what I already have out, like what I could add to it to get them to think differently about what they’re doing in that center.

The teacher’s role also emerged as a sub-category of environment. Sarah was the only teacher of the three who mentioned her role as a classroom teacher in promoting creativity in young children. As she reflected on lesson one she discussed how being engaged in the children’s play affected their thinking and play. She said, “I also believe it helped that I was engaged in their play with them to help guide new thinking and show my support as they are playing.” Sarah went on to say this was not always the case because of the other responsibilities she had a teacher. She recognized the impact of her role.

Some days I am busy doing interventions or other activities at the table with a small group of students. On some of those days the students seem to get a little

wild and restless quicker than the days that I am available to engage in what they are doing.

Sarah shared excitement about the creativity exhibited by one of her children. Referring to his creation she said, “I know, that was really cool. Yeah, that was the first time he’s done that. So that was cool. That was neat to watch.” Because Sarah was engaged in the play with the children, she was able to witness this particular child’s creativity as he built a structure with the magnets. Had she been engaged in other duties within the classroom, she may have missed the opportunity to celebrate his creativity and engage in dialogue surrounding his play and ideas.

The fourth category for Sarah was pedagogic strategies. She said Creative Curriculum was the curriculum followed in her classroom. Sarah based the interest areas throughout her room on the Creative Curriculum. Sarah was not currently using additional resources offered by Creative Curriculum at the time of the study. “We do have access we have it all. We do have access. I have done the Mighty Minutes in the past. I kind of forget about those, but those are good. I should pull those back out.” She also noted the studies from Creative Curriculum provide guidance for teachers.

Beyond the curriculum, Sarah discussed different pedagogic strategies she used in her classroom. Play was very important in her daily schedule.

Yeah, I try to make it like my entire day. I mean even my small groups are pretty play directed in what they’re learning. Like I try to make it a little more hands on, interactive for them. I mean their recess is pretty open. We try to set up like some centers out on our playground, too, for them.

Lesson one occurred during center time so it was play based. For lesson two, her strategy was a read aloud. Sarah said she used the story to get the students excited and to inspire

creative thinking for the square activity. Later on in lesson two, Sarah demonstrated her ability to reflect on her pedagogy. She questioned her approach during the lesson, as she was unsure of what to do.

And I had debated like, oh do I show them? Like do I cut a square up and then turn it into something? But I didn't want them to all just copy what I had made. So I didn't know what would be the best.

The final category for Sarah was teacher response to the creativity of children. Although this category addressed pedagogy specific to lesson two, it was significant enough to count as a category. For lesson two, Sarah read the book, *Perfect Square*, to her preschool children. In the book, a perfect square is cut or ripped into many different pieces and those pieces turn the square into something else (fountain, bridge, mountain, park, etc.). The lesson did not go as Sarah planned. She felt the students did not understand the task of turning the square into something new. She was aware the children did not get the creative aspect of the lesson. Due to the children's lack of understanding of what to do with their squares, she talked about what she would do differently next time. She said, "But maybe next time I would have some different examples or actually show the process of like, oh good, you made it into strips, but now what can you do like with those strips next to create a new picture." During the lesson, it was clear to Sarah that the children did not clearly understand her expectations. She was able to recognize that her lesson may not have been developmentally appropriate. She said, "Like it definitely showed where they were at developmentally and what they were thinking. But it was funny how some of them just drew on the square and made it into something and I was like, oh." Sarah struggled with how to respond, as it was difficult

for her to not share her ideas and help the children as she tried to preserve the creative aspect of the lesson. Sarah revealed, “It was so hard for me to not like change it for them or yeah then like create something myself or like, look you can make a flower out of your square instead of drawing one.”

Contextual Factors

During the second lesson reflection interview, Sarah discussed contextual factors that supported or impeded her efforts to promote creativity in her preschool classroom. There were three categories for the contextual factors based on the questions asked including accountability, barriers, and improvements. When asked about influences of accountability, Sarah discussed GOLD, IGDIs, and data teams organized by her principal.

So I mean we follow GOLD and we follow IGDIs. And then here, like our principal does something called data teams. We meet right now once a month and we go over just student growth and we make goals for like six weeks and what we’re going to do to help the students keep growing and their needs.

When asked if use of GOLD encouraged play and creativity in young children Sarah responded, “I feel as though GOLD can help with supporting creativity and the studies they (Creative Curriculum) have created can help guide you.” Therefore, Sarah saw the curriculum and assessment piece associated with the curriculum as supportive of her efforts to promote creativity in her preschool classroom.

The next category was barriers to promoting creativity for early childhood teachers. Although Sarah’s two lessons did not reflect domain four of the ECCPQ and she did not put a strong emphasis on direct teaching, stressing correct answers, or repeated exercises, she did recognize the academic push in preschool as a barrier.

Yeah, just like the academic push and I feel like they just aren't given as much freedom, like even in their play. You know, there's a push to like, how are we going to get academics into the centers and how are we going to get them to do it like during their free play, like how are you going to put academics within there.

When asked who this push came from, Sarah identified the state and her administration. She said, "The state puts a lot more push on the older grades which then comes down to us to get them prepared for kindergarten and overly exposing them to things they may not be developmentally prepared for yet." Sarah acknowledged her principal's role in the academic push, too.

Our principal is very academic and data driven. We have meetings biweekly to discuss student growth and make six week goals for our students. These goals are based on what skills we are teaching at the time. These times are nice to keep us accountable and on track with our kids.

She pointed out positives and negatives of her principal's involvement in her work.

The support we get from our principal in those meetings is very helpful as well. However, there are times I have to remind myself that they are four and learning through play is the most important and social skills always have to come first.

Sarah also expressed GOLD is very time consuming even though it supports creativity in the classroom. It affects the work she does. "GOLD in itself is just a lot of work that takes the joy out of it."

The final category for contextual factors related to improvements for promoting creativity in early childhood classrooms. Sarah recognized she could be an advocate for both play and preschool and provide opportunities for children to create. She also felt there was a need to connect with parents related to the topic of creativity.

We have a Facebook page, like parents just talking to them about how important it is to let your children just freely create and make things and giving them the opportunities to do it as well, like in the home.

When asked what administrators could do to enhance creativity in teachers, she seemed a little unsure. She did suggest training that would assist with ways to help being more creative. In her eyes, she felt professional development might be needed for teachers in the area of creative pedagogy. As mentioned earlier, Sarah felt she would personally benefit from this type of training, specifically reminders about creativity as well as new information and ideas. As for administrator support for children, she again addressed the academic push that affected her preschool classroom. She stated, “I mean, I feel like in the upper grades, yeah, for sure. Could let there just be more play brought back into kindergarten and more free time for children to not be sitting at their desks for sure.”

Anna

Anna had a BA degree and double majored in elementary and early childhood education. Her career in teaching began over 15 years ago and she taught nine years at the preschool level. During the study, her classroom had 20 children who were four and five years old. Her setting was a learning center in the community that was associated with the local elementary school. The population of the community was close to 1,800. Table 19 shows Anna’s daily schedule. There were two opportunities within the daily schedule for centers. During these times, children were engaged in play in the ten interest areas defined by the Creative Curriculum. Anna said the first center time was approximately one hour in the morning and forty-five minutes in the afternoon. I observed for one hour on two occasions. For both lessons, I observed Anna at a small table facilitating activities with small groups of children while the rest of the class had center time and engaged in play in interest areas.

Table 19

Anna's Daily Schedule

Daily Schedule
<i>Story</i>
<i>Breakfast</i>
<i>Carpet</i>
<i>Centers</i> <i>(interest areas)</i>
<i>Outside</i>
<i>Lunch</i>
<i>Skill development</i>
<i>Rest</i>
<i>Centers</i> <i>(interest areas)</i>
<i>Music</i>
<i>Snack</i>
<i>Outside</i>

Definition of Creativity

Anna's definition of creativity was specific to young children. She said, "I think of children using their own ideas. A variety of materials. And nothing all looks like each child's looks different, not the same. Each child's work or play or whatever they're doing." Anna focused primarily on originality with regard to children's ideas and the work or play they were doing.

Pedagogic Strategies

When asked about creative pedagogic strategies that were best for developing creativity, Anna struggled to provide an answer. Two categories emerged from her dialogue: uncertainty and curriculum. She showed her uncertainty when she posed the

question, “What do you mean by this?” and pointed to the words pedagogic strategies.

She then referred to her response provided for the definition of creativity.

A lot of what I said up here (referring to her definition of creativity response). So having a variety of materials and letting them use their own ideas and they don't all have to look the same. I don't know really know how else to answer it.

After prompting, Anna again conveyed her lack of understanding. “What do you exactly, yeah I do not understand what you really need or want.” She went on to discuss use of large and small group activities, free play and outside time; however, she was very vague about creative pedagogic strategies.

Curriculum came up in Anna's response. She said she used Creative Curriculum in her setting. She also said that she, as the teacher, decided on the activities offered in the classroom. While doing the member check, Anna added additional information about activities and creativity. “I have small group and large group activities planned. The children are using more creativity in their play during interest areas.” Therefore, she saw interest area time as more conducive to creative behaviors than group activities within the day.

ECCPQ Beliefs

Table 20 shows Anna's beliefs about creative pedagogy. She marked 19 of the 22 items as very important or quite important. Eleven of the 22 items were marked as very important while eight were marked as quite important. Due to more items selected as very important, domain two, interpersonal exchange, and domain three, possibility thinking, were the most important domains to Anna. Overall, the items least important to

Anna were stressing correct answers, directed teaching, and using repeated exercises.

Therefore, domain four, teacher-oriented pursuit was least important to her beliefs.

Table 20

ECCPQ - Anna's Beliefs

	Very important	Quite important	Fair	Not important	Not important at all
Domain 1: Self-Initiated Pursuit					
Encouraging creative behaviors is	X				
Giving choices is	X				
Encouraging children to express their opinions is	X				
Encouraging hands-on experiences	X				
Valuing children's interests is		X			
Encouraging children to try new things is		X			
Encouraging different styles of expression is		X			

	Very important	Quite important	Fair	Not important	Not important at all
Stimulating thinking from different perspectives is		X			
Domain 2: Interpersonal Exchange					
Getting preschool children to evaluate their work is	X				
Providing opportunities for discussion and cooperation is	X				
Encouraging children to question and make suggestions is	X				
Letting children ask questions freely is		X			
Paying attention to individual difference is	X				
Giving sufficient time for children to think is		X			
Domain 3: Possibility Thinking					
Accepting illogical thinking is		X			

	Very important	Quite important	Fair	Not important	Not important at all
Asking open-ended questions is	X				
Accepting children's mistakes is	X				
Encouraging thinking from different perspectives is	X				
Accepting failure is		X			
Domain 4: Teacher-Oriented Pursuit					
Directed teaching is			X		
Stressing correct answers is				X	
Using repeated exercises is			X		

ECCPQ Actions

I assigned a priori codes using the 22 items from the ECCPQ to classroom behaviors observed during Anna's two lessons. Table 21 and Table 22 show the observation protocol for the two lessons observed and the a priori codes. Of the 22 items, those most evidenced in Anna's two lessons were giving choices, repeated exercises, and stressing correct answers. The domains most characteristic of Anna were domain four, teacher oriented pursuit, and domain one, self-initiated pursuit. She was in a direct teaching role during both of her lessons. Her teaching took place in small groups while the other children were engaged in play in centers (interest areas). Anna provided children with choices in each of the lessons, although there was evidence she had clear expectations for what the children would do during both activities. Repeated exercises and stressing correct answers were evident in the focus on counting and numbers, correctly making a pizza, and completing a sink or float worksheet. During lesson two Anna was observed encouraging children to express their opinions as they made predictions and encouraged cooperation and discussion during the sink or float activity. The domain least characteristic of Anna was domain three, possibility thinking.

Table 21

Observation #1 Protocol – Anna

	Observations and a priori codes
Setting:	The observation took place in the preschool classroom during center time (interest areas). (<i>giving choices; children were allowed to choose where they wanted to play</i>) Center choices included:

	Observations and a priori codes
	Pizza making (facilitated by teacher) Art (play dough, easel painting, markers, glue sticks, construction paper) Sand table with farm items Toys and games Blocks Dramatic play (pizza place) Water tub Library
Introductory Activity:	During group time (right before center time) Anna introduced the pizza making activity. She went over the three toppings available for the pizza and talked about the first letter of each of three toppings. Anna did this to help the children identify the three toppings on the paper they would be using to write the number of each topping they put on their pizza. (<i>directed teaching; the teacher told the children what was expected during the activity</i>)
Whole class/group/individual activity:	(Small groups) (3 children) Anna was seated at a table and children were asked to select one (of two) colored plates to be their pizza. (<i>giving choices; the teacher offered different colored plates for the children to choose from</i>) Each child had a small sheet of paper that had three toppings (sausage, pepperoni, and mushrooms) listed. They rolled the dice to see how much of each topping they were to put on their pizza. (<i>repeated exercises; the teacher emphasized counting during the activity</i>) There were colors of play dough to choose from (pink, yellow, green, blue, white). (<i>giving choices; the teacher offered different colors of play dough for the children to use</i>) Anna said to a child, "You can make it however you want to make your mushrooms." (<i>encouraging creative behaviors; the teacher encouraged the children to make their toppings how they desired</i>) She asked a child, "What's next, C?" The teacher facilitated the activity, including the children rolling the dice, making the correct number of toppings, and writing the numbers on their small sheets of paper. (<i>directed teaching; the teacher reminded the children of the expectations during the activity and made sure they followed each step</i>) (another child came to the table)

	Observations and a priori codes
	<p>Anna said, “You got a six. You need something to write with. Write a six on there, K. Now you need to make six pepperonis on your pizza. (<i>stressing correct answers; the teacher stressed the correct number of toppings and children writing numbers correctly</i>) What play dough would you like? (<i>giving choices; the teacher offered different colors of play dough for the children to use</i>) Yellow? Yellow pepperonis.”</p> <p>A child said, “Those are supposed to be red.”</p> <p>Anna responded by saying, “K wants his to be yellow and that’s okay.”</p> <p>Anna said, “Okay A show me your six pepperonis. Where are your six pepperonis?” The child counted the pepperonis. Anna asked, “Where are your three sausages? And how many mushrooms? You got it. (<i>stressing correct answers; the teacher emphasized counting accurately during the activity</i>) Let me write your name on here.” She taped the child’s small paper to the pizza she had made and the child was done.</p> <p>When each child was finished, Anna asked him or her to count each of the toppings and then tape his or her paper to the pizza. The children placed their pizzas in the oven (on the counter).</p> <p>Anna said, “C, I like how calmly you are making your pizza today.”</p> <p>Anna helped a child count when she had difficulty identifying the number on her dice. (<i>directed teaching; the teacher emphasized counting correctly when a child was not able to do so</i>)</p> <p>A child did not have the correct number of toppings so Anna helped him count and then helped him with writing the number four. (<i>stressing correct answers; the teacher stressed the correct number of toppings and children writing numbers correctly</i>)</p> <p>Anna asked a child, “Are you ready to make your pizza? Not yet?” She then asked another child if she was ready. (<i>giving choices; the teacher gave a child more time when he was not yet ready to the activity</i>)</p> <p>If a child rolled a number and wanted a different number, Anna allowed the child to roll the dice again. (<i>giving choices; the teacher allowed children to roll the dice again if they desired a different number</i>)</p>

	Observations and a priori codes
	<p>Anna said, “You can make them however you want, M. It’s your pizza.” (<i>encouraging creative behaviors; the teacher emphasized the children could make the toppings how they desired</i>)</p> <p>Anna commented, “L, you sure are working hard on those pepperonis.</p> <p>Anna asked, “Which one says pepperoni? The child pointed to the correct one. “How do you know that says pepperoni? It has the letter p three times. P-p-p.” (<i>repeated exercises; the teacher emphasized identification of letters and letter sounds</i>)</p> <p>Anna said, “Oh, leave your mushrooms on there. We are going to make pepperonis with a different flavor.”</p> <p>Anna said, “Are you going to make your pepperoni a different color? Are you going to make them green? You can make them whatever color.” (<i>giving choices; the teacher provided options for the colors for toppings</i>)</p> <p>Anna said to a child who was almost done with her pizza, “Why are you taking your mushrooms off your pizza? You don’t want them stuck together? (<i>stressing correct answers; the teacher stressed the correct way to do the activity based on her expectations for the final product</i>)</p> <p>It’s your pizza, you make it look how you want it to look.”</p> <p>The child began to press down and mash all toppings together. Anna continued to watch what the child was doing and asked a question. “Are you going to make this back into four mushrooms or are you going to mash them together?” (<i>stressing corrects answers; the teacher stressed the correct way or steps for creating the pizza based on her expectations for the final product</i>)</p> <p>Anna said, “You have three sausages, you squished your mushrooms together (you have four), and now you have two pepperonis to make. What are you going to make with two pepperonis?”</p> <p>Anna got up from the table for a few minutes to assist a child in another part of the room. The child who was making her pizza in a different way than her peers put some of her toppings back into the play dough containers and made a ball with some other toppings while Anna was gone.</p> <p>When Anna returned she said, “You squished all of your toppings together, M? I wanted them to stay on your pizza so I could see them. (<i>stressing correct answers; the</i></p>

	Observations and a priori codes
	<p><i>teacher stressed the way the pizza should look based on her expectations for the final product</i>) Do you want to leave them on your plate? You think about what you are going to do. I'm going to look at W's pizza and I'll be right back to you."</p> <p>The child started to make more toppings but then put them back into the container. She picked up the large ball of play dough and started making toppings.</p> <p>Anna said, "All right, M. When you are finished, I want to see your pizza. Show me your four mushrooms, your three sausages, and your two pepperonis. <i>(repeated exercises; the teacher emphasized counting)</i> "M, you worked hard on this today."</p> <p>The last child the teacher assisted needed one-on-one help counting her toppings and writing her letters. <i>(paying attention to individual differences; the teacher assisted a child based on her ability level)</i></p> <p>Anna asked, "Do you want to put anything else on your pizza or are you done? You put whatever you want on your pizza." The child added a few more toppings with the play dough she had because Sarah put all other colors away.</p> <p>All children came over to the table to complete the pizza making activity with Anna prior to the time centers ended. Toward the end of center time, Anna announced five minutes of no wristbands. A couple of the children started chanting, no wristbands, no wristbands, but not a lot of children moved between centers. <i>(giving choices; the teacher provided time for children to freely use interest areas without limiting the number of children in each area)</i></p>
Concluding activity:	Anna concluded the activity by talking with each individual child. Each child counted the toppings and showed the pizza to Anna.

Table 22

Observation #2 Protocol - Anna

	Observations
Setting:	<p>The observation took place in the preschool classroom during center time (interest areas). (<i>giving choices; children were allowed to choose where they wanted to play</i>)</p> <p>Center choices included:</p> <ul style="list-style-type: none"> Sink or float activity (facilitated by teacher) Art Sand Toys and games Blocks Dramatic play (pizza place) Water tub Library
Introductory Activity:	<p>In group time (right before center time) Anna reviewed sinking and floating as it was a topic she had previously addressed with the children. (<i>repeated exercises</i>)</p>
Whole class/group/individual activity:	<p>(Small groups)</p> <p>Anna invited the children to come over to the sink or float center during center time. A couple children did not want to do the activity and they were not required to do so. (<i>giving choices; the teacher gave the children the option of participating in the small group activity</i>)</p> <p>(Small group one = 7 children)</p> <p>Anna accessed prior knowledge.</p> <p>“We talked about sinking and floating, who can tell me again? Where is it if it is floating? Where is it if it is sinking?” (<i>repeated exercises; the teacher reviewed sinking and floating as it was an activity the children had done before</i>)</p> <p>Anna showed the children a rock and described it as heavy and hard. She said, “I think it will _____.” The children shared their predictions. (<i>encouraging children to express opinions; the teacher encouraged the children express their opinions about whether items would sink or float</i>)</p> <p>Anna handed out a worksheet. It had a line of water drawn across the middle and the word float was at the top while the word sink was at the bottom. She asked each child to get a crayon. She asked where the children were going to</p>

	<p>draw the picture of the rock. (<i>directed teaching; the teacher used a worksheet and assisted children with drawing the rock in the correct location</i>)</p> <p>Anna said, “You just do the best you can of how you want to draw it (the rock).” (<i>encouraging creative behaviors; the teacher encouraged creativity through drawing objects on the worksheet</i>)</p> <p>This part of the lesson modeled what the children would be doing for the rest of the activity.</p> <p>Each child picked an object from the drawer and returned to the table. Anna reminded them to wait before putting their objects in the water. (<i>giving choices; the teacher allowed each child to choose an object of their choice for the sink or float activity</i>)</p> <p>Anna made a comment that many of the children chose the same object.</p> <p>Each child described the object he or she chose and predicted whether it would sink or float. Anna asked each child to explain why he or she thought it would sink or float. (<i>encouraging children to express opinions; the teacher encouraged the children express their opinions about whether their items would sink or float</i>)</p> <p>After doing so, each child got the opportunity to put an object in the water and test the prediction. (<i>encouraging hands-on experiences; the teacher provided an opportunity for each child to test an object</i>)</p> <p>Anna asked, “Why do you think it will float? Are you still thinking? That’s okay.” (<i>giving children sufficient time to think; the teacher respected the fact a child needed more time to think and respond to her question</i>)</p> <p>Anna asked, “What do you think will happen with the Letter C.? Why do you think it will float?” (<i>open ended questions; the teacher posed a question that required more than a yes or no response</i>) The child said, “It’s not heavy.”</p> <p>The child put the Letter C in the water and it floated. Anna asked the children to draw a Letter C floating on top of the water on their papers.</p> <p>A child said, “It’s a bird. Birds fly.” Anna asked, “Why do you think it will float?” The child replied, “It will float because birds fly.” (<i>accepting illogical thinking; the teacher accepted all responses from children</i>)</p> <p>The bird sank and Anna asked, “Why do you think it sank? The child replied, “Because it was heavy.”</p>
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The children drew a picture (of the bird) in the correct location on the worksheet. *(stressing correct answers; the teacher emphasized accuracy of the placement of objects on the worksheet)*

A child thought a stone would not sink because it was not heavy, but it sank. “Anna said, “It must have been heavy enough to sink.” *(accepting children’s mistakes; the teacher accepted inaccurate predictions)*

Anna asked if anyone had thrown rocks in water or the river. She asked what happened to the rocks. There was discussion about the rocks splashing and sinking to the bottom of the water. *(providing opportunities for discussion and cooperation; the teacher provided an opportunity for children to share their experiences)*

Anna encouraged the children to get more objects out of the drawer and put them in the water table during center time. *(encouraging hands-on experiences; the teacher encouraged children to continue the sink or float activity on their own during interest area time)*

A couple more students had stones and they sank to the bottom. Anna had the children count the stones in the container. *(repeated exercises; the teacher emphasized counting)*

Anna had additional items to test. She had a small letter K and asked the children to describe how it felt. They said it was not heavy.

The small letter K floated and the children drew it on their worksheets.

The teacher asked the children if they wanted to try more objects and they said yes. *(giving choices; the teacher gave the children the choice to continue testing objects or stopping the activity)*

The next object was a duck. The children shared their ideas and reasoning. *(encouraging children to express opinions; the teacher encouraged the children to state their opinions about the duck sinking or floating)* The duck floated and they drew it on their worksheets.

Anna said she had one more stone to try. The children wanted their own stones so she said they could each get one more.

Anna said, “We all know it’s going to sink.”

Anna and the children counted the stones to see how many would be in the container. *(repeated exercises; the teacher emphasized counting)* One child counted them after all

stones were in the water. Anna and all of the children counted the stones again to make sure there were 12. The children wrote their names on their papers and Anna dismissed them to centers.

(Small group two = 6 children)

Anna called individual children to come over to the sink or float activity.

She asked, “What does it mean when something floats? What does it mean if it is sinking? Where does it stay, at the top of the water or the bottom?” (*repeated exercises; the teacher reviewed sinking or floating as it was an activity the children had done before*)

Anna did the same activity as above with the second group of children.

One child shared that he had a pond and when he threw rocks in the water, they went to the bottom. Another girl shared her experience with throwing rocks in the water, too. (*providing opportunities for discussion and cooperation; the teacher provided children with an opportunity to share their experiences*)

A child had a cup and he described it. He said it had a hole in it (because it was open). Anna asked, “Do you think it will sink or float? How will we find out?”

Anna talked about how the cup was floating, but half was above the water and half was below the water. A child said it was under and above the water. (*providing opportunities for discussion and cooperation; the teacher provided an opportunity for the children to discuss how the cup was different from other objects*)

Anna shared a picture of the cup one of the children had drawn to illustrate how the cup looked in the water when drawn on the worksheet. (*stressing correct answers; the teacher emphasized the correct way to draw the cup on the worksheet*)

A child pointed out her object (a cheetah) had a tail that looked like the letter s. Anna emphasized this when the children drew their pictures of the cheetah on their worksheets. (*repeating exercises; the teacher emphasized recognition of the letter s*)

Two children talked about the ducks and some ideas were that there were no holes and there was a top and a bottom so it would float. Anna restated these ideas for the other children. (*providing opportunities for discussion and cooperation; the teacher provided an opportunity for the*

children to discuss their ideas about what would happen to the ducks and why)

Anna asked how many ducks were in the container and on the papers of the children. She also pointed out there were shapes on the bottom side of each duck. ***(repeated exercises; the teacher emphasized counting and shapes)***

Anna showed the small letter K to the group. Some children thought it would float because it was not heavy and one child thought it would sink because it was not heavy. ***(encouraging children to express opinions; the teacher accepted all opinions about whether an object would sink or float)***

Anna again asked if the children were done or if they wanted to do more. They wanted to do more so she gave each of them a stone. ***(giving choices; the teacher gave the children the choice to continue testing objects or stopping the activity)***

She encouraged the children to think about the rock to help them decide whether the stones would sink or float.

A child accidentally dropped her crayon into the water container. Anna took advantage of the situation and talked about the fact that it sank to the bottom. ***(providing opportunities for discussion and cooperation; the teacher provided the opportunity for the children to discuss what happened to an object)***

(Small group three = 3 children)

Anna asked, “What does it mean when something floats? Do you remember? What does it mean if it’s sinking?”

(repeated exercises; the teacher reviewed sinking and floating as it was an activity the children had done before)

Anna did the same activity as above with this group of children.

The first child had a pokey ball and he said it would float. The ball sank to the bottom. In response Anna said, “I want to feel this because it surprised me. I thought it was going to float at the top.” ***(providing opportunities for discussion and cooperation; the teacher encouraged discussion by talking about her own prediction)***

A child threw his bird in before it was his turn. Anna took it out until it was his turn. She gave him another turn and stopped his hand before he could throw the bird in the water again. She wanted him to share his prediction before he put it back in the water.

	<p>Anna showed the small letter K. She said, “D thought his object would sink because it was flat.” She pointed out the letter K was flat and not very heavy. She asked the children what they thought would happen. (<i>encouraging children to express opinions; the teacher accepted all opinions about whether an object would sink or float</i>) She asked a child to put it in the water very carefully and softly.</p> <p>Anna said, “C, you put it in too hard! It sank to the bottom. Can I try? Look what happens when I do it. It floats. Sometimes science does not go the way we want it to. What happens when you put it in very softly and carefully? It floats. It was flat and very, very light.” (<i>directed teaching; the teacher had expectations for how this part of the activity would go and did it her way after a child tried his way</i>)</p> <p>Anna asked if stones would sink or float. She passed one around to each child and asked what they thought might happen when they were dropped in the water. (<i>encouraging children to express their opinions; the teacher provided the opportunity for children to express their opinions by modeling her own opinion</i>) She asked them to think. She said, “I know that when I put rocks or stones in a puddle they usually sink. So I think it is going to sink.”</p> <p>A child said he thought they would float.</p> <p>Anna said, “Sometimes things don’t work out the way we think. That is science!”</p> <p>The students put names on their papers.</p>
Concluding activity:	<p>The concluding activity for each group was the additional objects Anna shared after each child had a turn. Anna used the objects to challenge the thinking of the students (the small letter K being flat) and to check for understanding (what happened to the stones when compared with the rock and links to personal experience).</p>

ECCPQ Actions and Beliefs

I used the 22 items from the ECCPQ as a priori codes to identify specific classroom behaviors that supported teacher beliefs and classroom behaviors that lacked congruence with teacher beliefs. Anna selected very important or quite important for 19

of the 22 items. She selected fair for directed teaching and using repeated exercises and she selected not important for stressing correct answers.

Several classroom behaviors observed supported Anna's beliefs about creative pedagogy. She selected providing opportunities for discussion and cooperation as very important. During lesson two she facilitated a sink or float activity. During that lesson, she held up a small plastic letter K and asked the children what would happen when she placed it in the water. She provided children with an opportunity to share and discuss their ideas. They were encouraged to do this on several occasions during the lesson with different objects. Children shared their ideas and personal experiences. One child said he had a pond and when he threw rocks in the water, they sank to the bottom. After he shared, another child talked about her experience with throwing rocks in the water, too. Anna engaged the children in discussion when a cup floated, but half of it was above the water and half was below the water. Two children selected ducks as the objects they were going to put in the water. They talked about the ducks and shared their ideas about whether they would sink or float. Anna restated those ideas to the other children before they placed the ducks in the water. At the end of each small group, Anna passed out small stones and asked if they would sink or float. The children used their knowledge from the other objects they experimented with to discuss their predictions about the stones.

Anna selected very important for giving choices. Although some were limited, Anna provided children with choices during the two lessons observed. To begin the pizza making activity in lesson one, Anna offered the children the choice of two colored

plates to use as their pizzas. Next, the children were able to choose the colors of play dough they wanted to use for their pizza toppings. The color options for the pizza toppings were pink, yellow, green, blue, and white. While Anna was working with a student she said, "You got a six. You need something to write with. Write a six on there, K. Now you need to make six pepperonis on your pizza. What play dough would you like? Yellow? Yellow pepperonis." Another child said, "Those are supposed to be red." Anna responded by saying, "He wants his to be yellow and that's okay." In that instance, she respected the child's choice. During the pizza activity, Anna asked individual children to come to the table and make a pizza. She asked one child if he was ready to make a pizza and he replied no. She accepted that he was choosing not to do the activity at that time and moved on to another child. During the pizza activity children rolled dice to see how many of each topping they were to put on their pizza. Anna gave them the choice to roll the dice again if they wanted a different number than the one they had rolled. Anna announced five minutes of "no wristbands" at the end of center time. Wristbands identified the number of children allowed to play in each center. A few of the children started chanting in response; however, not much movement of children between centers occurred. During the sink or float activity Anna invited children to come over and participate during center time. A couple children were not interested and they were not required to do the activity. Anna indicated some small group activities are required of all children, but that was not the case for the sink or float activity. For the sink or float activity, children were able to go to the drawer and choose one object they wanted to test to see if it would sink or float. After each child had an opportunity to test

an object, Anna asked if the groups were interested in testing more objects. She gave them the choice of ending the activity or continuing it based on their interest.

Anna only marked fair for using repeated exercise; however, there was evidence of this often in her teaching. In the introductory step of lesson one, Anna went over the three toppings the children were going to make so she could talk about the first letter in the name of each topping. She did this to help the students identify the three toppings on their paper and reinforce letter recognition. For the activity the children rolled the dice to determine how many of each topping they would put on their pizza and what number they would write on their papers. The focus was on counting and writing letters correctly. While working with a child Anna asked, “Which one says pepperoni? How do you know that it says pepperoni?” She then proceeded to point out the three instances of the letter p in the word. During the sink or float activity, Anna reviewed what the children had learned previously about the topic.

Anna selected fair for directed teaching and there was evidence in her teaching. One of the two domains most characteristic of Anna was teacher oriented pursuit and this item falls under this domain. For both lessons observed, Anna used directed teaching as she facilitated two small group activities with the children. For the first lesson, she monitored students as they rolled the dice, counted, wrote numbers, and created their toppings. Each child counted and showed his or her pizza when finished with the activity. When a child struggled, she used directed teaching to provide assistance. For the second lesson, Anna monitored each child’s turn. She asked questions and facilitated the placement and drawing of each of the objects on the worksheet.

There was evidence of beliefs that were not congruent with actions in the two lessons observed. Anna selected not important for stressing correct answers although there were instances observed while she was teaching. She made sure the children had the correct number of toppings of their pizzas based on the numbers they rolled on the dice. She also made sure they wrote their numbers correctly. In lesson two, there was an emphasis on the correct location to draw each object on the paper (above the water or below the water). Anna showed the paper of one child to the other children to illustrate the correct placement of the cup on the worksheet. There was evidence of stressing the correct way to do something in the lessons, too. When a child was making her pizza, she began to take the mushrooms off. Anna responded by saying, “Oh, leave your mushrooms on there. We are going to make pepperonis with a different flavor.” That same child began to mash all of her toppings together. Anna watched what she was doing and asked, “Are you going to make this back into four mushrooms or are you going to mash them together?” A few minutes later she said, “You squished all of your toppings together, M?” I wanted them to stay on your pizza so I could see them. Do you want to leave them on your plate? You think about what you are going to do.” Anna focused on her expectations associated with the final product, rather than the child’s way of making a pizza.

ECCPQ – Lesson Reflection #1 and Lesson Reflection #2

When I applied the 22 items from the ECCPQ to Anna’s Lesson Reflection #1 and Lesson Reflection #2, two a priori codes stood out. Those two codes were valuing children’s interests and stressing correct answers. Anna referred to valuing children’s

interests on several occasions during her interviews. She said her centers changed depending on how long the children were interested in them. Sometimes the children ask to change the centers so it was easy to respond to their interests. She said, “I have kids that say we don’t play with this anymore and they know they can tell me that and then we’ll switch it out. They like to go helping in the storage room and get stuff, too.” She also talked about following the interests of the children when themes were concerned. Themes can last a week or longer and for some themes, materials can be out for two or three weeks. She based this on loss of interest displayed by children. Although the students did not necessarily help with the themes, Anna considered their interests for centers. The themes Anna chose did not limit student involvement. She said, “They just help bring things into the centers. The kids bring items into the centers that don’t always go with our theme for the week (or longer).” Stressing correct answers also surfaced in the interviews. When Anna reflected on lesson one she said the children had been working on writing numbers. Although the lesson had a creative aspect, the purpose was still an academic focus. She also reflected on a student who did the pizza activity differently than the rest of the children and in a way that was different than Anna intended. She reflected on the experience and in doing so, went back to the academic focus of the lesson. She said, “So really the point of it was to see if she could count them out (toppings) and write the number and she did that.”

The categories that emerged from dialogue with Anna in her interviews included curriculum and materials, children’s interests, beliefs about creativity, and creativity in the classroom. Anna said she used Creative Curriculum in her classroom. She pointed

out the curriculum was used mostly for centers, rather than for her small or large group activities. Anna was unsure of the availability of additional Creative Curriculum resources in her setting. Therefore, she said she chose her own themes. Though chosen by the teacher, she said she based the curriculum on the interests of the students. She also talked at length about her daily schedule and opportunities children have for center time and outside or gym time. She said she felt the amount of time children have to be creative is adequate. She also noted play takes up a large portion of the day, more specifically, over half the day. “Small and large group time (structured activities) takes up a small portion of their day.”

The next category addressed the interests of the children. Anna discussed the centers that stimulated the most thinking in her preschool children. She referred to centers that were most popular with children.

The art center has been very popular this year and the blocks have been very popular. The dramatic play has been more popular this week. We had taken out most of the fun stuff out of it with the pizza, the pizza shop we had (due to lice). But really they do, like I’ve put Legos in two of the centers because they really like the Legos.

Although Anna did not specifically address innovative thinking in her interview response, during the member check she added additional information.

I would like to say all the centers do (stimulate the most innovative thinking), but I feel the discovery center is lacking. The blocks center and art center were mentioned as most popular and the kids do find many ways to use the materials in these centers and are able to build on their thinking.

Anna said she changed centers based on how long children stayed interested in them.

She used the children’s cues to determine that. She noted, “When they seem to get bored

and actually the kids this year sometimes ask to switch things out.” On the other hand, some materials are always available to children.

We have had things out the whole year in some centers, too. Like the Magnatiles have stayed out all year. Or if I see a center that’s just not being played in a lot, we recycle that out and we put the Legos out before Christmas and they’ve kept those out the whole time, too.

Anna’s beliefs about creativity emerged as the next category. When asked about the creativity paradigms, Anna revealed her beliefs about creativity and the environment.

I think it’s a little bit of the last two you said (I-paradigm and We-paradigm). I think they can all be creative. And then I think it is part of what they are given in their environment to be able to be creative, too. Well, when you think of creativity, a lot of people might just think of just like what’s happening over in the art center and it has to be artsy or something like that. I don’t think it’s that, I mean it’s, you could be reading a book and asking questions about it and finding things about that or it could lead into what you’re talking about with that book to hear their stories that they have. It could be their play in the blocks, the way they manipulate the toys, what they’re doing with the toys, the interactions they’re having together.

Anna referenced materials on more than one occasion in her interviews. Materials appeared to very important to the environment she offered to preschool children.

Any materials can promote creativity. However, when the children do not show interest in materials that are offered it is nice to be able to get different materials in the classroom. We have many materials in storage and parents are great with helping get any art supplies that are needed.

Anna discussed how the Creative Curriculum encouraged or discouraged creativity in the classroom.

I think it encourages creativity because it is play based. I use Creative Curriculum more in my centers but not so much during small groups or large group activities. I do not think it discourages creativity when used to its fullest.

The final category that emerged for Anna was creativity in the classroom. She reflected on the creativity of one child during lesson one. Anna conveyed the purpose of that

lesson was to work on counting and writing numbers, a skill her children had been working on. The creative aspect of the activity was for children to make play dough toppings (sausage, pepperoni, and mushrooms) any way they desired. One child's ideas about the activity were different from Anna's ideas.

I had one kid that kept smashing up hers. And is that how you want your toppings to look? She had had like four of them lined out for the pepperonis, we'll say, I don't remember what it was and then she mashed it all up. But she was okay with that because that's how she wanted her toppings to look and then she did divide it back out.

Anna commented the purpose of the lesson was to count and write the numbers and because that is what the child did, it was okay.

It's not what I thought it would look like, but that's how she thought it should look like. I don't feel that this was something that needed improved, but I had a difficult time watching her smash up the four pepperonis that she had made individually.

Anna admitted she was unsure of how to respond to the child. "I wasn't expecting that, I guess. So I didn't know how to take that, but she took it and went with it." When asked about what she might do as a teacher to expand her thinking and approaches to include more opportunities for students to be creative, Anna's response suggested this is something she had not thought about a great deal.

That's a good question. Well, like I could say with the one little girl who was smashing her play dough back up and the toppings and it didn't look like she had five of something. It took me, I had to wrap my head around that, that that's okay because that's how her toppings were. So just that it might not always look like what I think it's going to look like. Even with them being creative with it or even with rolling the dice today. Some of them didn't want the number that they rolled, so, okay. What number do you want? You know, they took it, let their ideas be involved, too.

Anna's attention to this experience allowed her to recognize children have different ways of thinking and doing and that she might need to be more open to those ideas and approaches.

Lesson two, a sinking or floating activity done in small groups illustrated Anna's value of the thoughts of individual children and acceptance of their ideas.

Well, we were working on sinking and floating. It worked that they were all able to give a reason on why they thought it would sink or float, whether the reason was right or wrong didn't matter, but they had some thinking behind it. I had done this activity as a large group before and I think it worked much better as a small group. I was able to hear from all of the kids and got a better understanding of their thinking.

Contextual Factors

During the second lesson reflection interview, Anna discussed contextual factors that supported or impeded her efforts to promote creativity in her preschool classroom. There were three categories for the contextual factors based on the questions asked including accountability, barriers, and improvements. With regard to accountability in her preschool classroom, Anna was very unclear on the term and the question. After more clarification, Anna was able to respond.

I mean I have to be able to put in what they need for GOLD. And then we do align with the school so the kindergarten teachers are letting us know, you're doing well in this area, but hey, we're seeing they might need a little more in this area from what we saw last year or something like that so the kindergarten teachers do let us know.

Therefore, assessment related to GOLD and preparing children for kindergarten appeared to be the major accountability pieces affecting Anna's work in her preschool classroom.

The next category was barriers in promoting creativity education for early childhood teachers. Anna felt money and materials helped to promote creativity and lack

of either could be a barrier. She said she was fortunate in her setting to have the funds to get materials, but she felt that was a barrier in a previous position. Anna also expressed parent perceptions of learning through play was a barrier.

I think some other barriers are, and you hear this from parents a lot at the beginning of the year, they want their kid to learn a certain thing and they see that by sitting, you know, and writing something, they don't see it through play. We have to have a lot of conversations with parents about play. They are learning through play.

Ensuring that parents understand play and its benefits in an early childhood classroom seems to be an important piece for early childhood teachers. Anna referenced GOLD as an accountability piece and recognized that although it supports creativity and play efforts, it can hinder those efforts, too.

GOLD does both. They want to know certain things that you can only observe during creative play time. The objectives that cover socializing with others. Then there are also objectives that you may see during creative play time, such as counting or letter recognition/sounds. However, if a child does not show that they can count or produce letter sounds during creative play then to get the documentation you have to pull them away from their creativity to get it.

Therefore, GOLD could be a barrier, too.

Anna offered several suggestions for improvements in promoting creativity in early childhood classrooms, the final category. Anna recognized a need for others, in addition to parents, understanding the value and benefits of play.

And so for the areas of improvement, the next question got me thinking on that too was just again, along with that of getting people to see that it's through their play and through their interactions that they are learning as well. It doesn't have to just be sitting and writing or listening to a story or always teacher directed.

She acknowledged administrators might be individuals who would benefit from this information. "Administration. My administrator gets it, but not all administration does.

I think it is sad to see how little the kids play in kindergarten. It is a huge jump from preschool.” Anna’s administrator had an early childhood background, but for other administrators who lack the experience, she suggested time in early childhood classrooms would be beneficial.

Yes, but there are some administrators who, I think it needs to be teacher directed and not just the creative play and it would benefit for them to see and experience if they haven’t experienced early childhood classrooms. And then allow the students and allow the teachers to be creative in the classroom and not just directed like, not just teacher directed learning. I’m sure there’s classes you can take.

Dialogue with Teachers

Several themes emerged from the interviews with each of the three preschool teachers regarding creative pedagogy. One of the a priori codes, valuing children’s interests, surfaced in interviews and was very important to all three teachers. Cheung (2017) found teachers recognized children’s interests as significant when planning for creativity. The teachers talked about catering the curriculum to the interests of the children. They all conveyed a desire to teach topics and select themes that were appealing to the children. Also mentioned was following the lead of the students, meaning the teachers would take lessons and themes in the direction the children were leading them. If the teachers observed engaged children, they would continue and if the children lost interest, they would respond accordingly. There was also an association with centers and interests of the children. All three teachers talked about centers that encouraged the most innovative thinking and those most popular with preschoolers. Teachers mentioned dramatic play and Legos most often in addition to blocks, Magnatiles, easel painting, discovery, and library. Centers changed based on popularity

with the children and teachers followed their cues. If children stopped playing in a center, the teachers would change it. Anna mentioned her children were comfortable asking her to put something new in a center and they helped with physically picking out different items to add. Robson and Rowe (2012) found child-initiated activities had the most involvement by children when compared with activities initiated by adults. These examples support the idea that the teachers in the study were very in tune to the interests of the children and there was a connection between those interests and the curriculum, themes, and centers.

The next theme was Creative Curriculum supports creativity. The preschool teachers all identified Creative Curriculum as the curriculum used in their classrooms. They mentioned the IQPPS and IELS. They also discussed GOLD, the assessment piece associated with the Creative Curriculum. All three teachers spoke positively with regard to creativity, the Creative Curriculum, GOLD, and the standards. Anna felt it encouraged creativity because it was play based. She said she used the curriculum primarily for centers, rather than her small or large group activities. Kay and Sarah discussed use of additional materials offered by Creative Curriculum, but Anna was unsure of the availability of those resources in her particular setting. Kay acknowledged her use of IQPPS, IELS, and GOLD supported play and creativity in her classroom. She said the Creative Curriculum gave her ideas and provided a guideline for her teaching. She felt it was flexible enough to allow her the opportunity to be creative as a teacher and develop curriculum to meet objectives. Sarah held a similar view. There was consensus among teachers that the curriculum, standards, and assessment piece supported their creativity

efforts. This finding was positive, as other studies have revealed the challenges of curriculum identified by some teachers. In a study by Cheung (2017), three teachers felt the curriculum required in their settings was rigid and overloaded. This was not the case with the teachers in this study.

The next theme identified was children have creative potential. Glăveanu (2010; 2011) identified three different paradigms associated with creativity. The He-paradigm is the view that only some individuals are creative. The I-paradigm is the view all individuals have the capacity to be creative. The We-paradigm focuses on creativity as the result of the environment and interactions among individuals within the environment. All three teachers said their classrooms were representative of two paradigms, the I-paradigm and the We-paradigm. The teachers agreed that all children have the potential to exhibit creativity and that creativity is a result of interactions children have with each other and the environment set up by the teacher. The teachers conveyed an understanding of creativity of young children. They felt all children have potential in this area and realized the environment they offered and interactions among peers were key to promoting creativity in their classrooms. These findings were similar to that of Kamylyis et al. (2009). Use of the TCCQ revealed over 80% of teachers, both inservice and preservice, agreed all children have the ability to develop creativity. The teachers were in also in complete agreement “that sociocultural and environmental factors influence creative potential” (p. 21).

Environment matters emerged as another theme. One part of the environment the teachers referred to often was materials. Anna noted materials were very important to the

environment, particularly new materials. Sarah agreed and said materials make a difference in what children are doing and what they are creating. She felt new materials were key too as they encourage children to think differently within the centers. Kay said that new materials sometimes resulted in play she had not seen before.

Another aspect of the environment discovered during observations and discussed during interviews was choice during play in interest areas. Kay limited the number of children allowed to play in each interest area or center. Each child had a name stick with Velcro on the back. They placed the stick in the center of their choice. When a center was full, no more children could play in that area. Anna used a similar strategy in her classroom. The children wore wristbands depending on the center they chose. The number of children allowed to play in centers was limited. The situation was different in Kay's room. She did not have a strategy for managing centers. On two occasions, she made accommodations when children needed more space and materials. She made sure all children could play. She said not putting limits on centers "helps students learning in how to communicate with one another, problem solve with how to share materials." She also noted, "I feel like it always helps with the creative process as they learn from one another and expand their creations with working together and accepting new ideas." Vygotsky's sociocultural theory states that cognitive development has a social foundation, thereby emphasizing the importance of encouraging young children to communicate, collaborate, and cooperate (Berk & Winsler, 1995). Robson and Rowe's (2012) findings also support Sarah's reasoning. They found teachers often offer activities that help children to be successful. While positive, children miss the opportunity to

experience challenge and solve problems in situations where they initiate play and activities. Furthermore, Alkus and Olgan (2014) suggested rules in early childhood settings might have a negative impact on creativity. If children cannot choose and freely use materials available to them, including mixing materials, this might affect their creativity.

A final aspect of the environment was the teacher's role. Sarah was the only teacher who referenced her role in the environment with regard to creativity. She said her engagement in play with the children helped with their thinking and showed her support of their efforts. Teachers can encourage creativity in young children by exhibiting their own creativity and communicating its importance in the classroom (Rubenstein et al., 2018). Kay did recognize that her responsibilities as a teacher sometimes affected her ability to be engaged in children's play. Other teachers experienced this same challenge. Although teachers have the desire to promote creativity in their classrooms, the burden of other tasks and responsibilities, including academic needs of children, become a priority (Aljughaiman & Mowrer-Reynolds, 2005). The other two teachers did not address their role within the environment beyond the curriculum and setting up the materials to offer to the children. The theme of environment matters suggests that teachers understand the role materials play with the environment; however, some may be unclear on how limiting choices and situating themselves within that environment affect the creativity of young children.

Play is needed was the next theme. In Anna's classroom, children had an hour of center time (interest areas) in the morning and about 45 minutes of center time (interest

areas) in the afternoon. Anna said play was a large portion or over half of the day. She discussed children learning through play and referenced the importance of play more than once. In Sarah's room, children played in centers for an hour to an hour and a half upon arrival at school and they had more time in the afternoon, too. She was flexible if children needed more time to play or be creative. Sarah conveyed a strong understanding of the importance of play and tried to make play her entire day, even ensuring her small groups were play directed. Kay gave children two opportunities per day for interest areas with a full hour for those times; however, her busy daily schedule sometimes affected this. Choice time (interest areas) was when she tried to incorporate a great deal of creative opportunities. She said she tried to incorporate play as much as possible because children want to play. One example was when children rush through a group activity so they can get back to playing in interest areas. The key to encouraging creativity behaviors in young children is play because they can be independent and have the freedom to make decisions about what to do and how they will do it (Cheung, 2018). These findings suggest that although these teachers had busy daily schedules that included structured activities, they were attempting to incorporate play and provide as many opportunities as possible for children to play freely and be creative. They recognized play is developmentally appropriate and needed at the preschool age in order for children to grow and learn.

Another theme that emerged was responses to children's creativity. A study by Kettler et al. (2018) found teachers may not view creative students in a positive light and that teachers may need creativity training to understand how to interact with creative

students. Kay interacted with children while they were drawing pictures on a journal page. She said, “Oh, cute! T, that’s awesome!” and “Oh, that’s good.” Her response to the creativity of children was primarily providing praise. Sarah’s children did not grasp the creative concept of turning a square into something else. Her response was asking open-ended questions and continuing to encourage them to be creative. For this particular activity, the children struggled despite her efforts. Anna struggled when one child showed her creativity by doing the activity differently than the other children. Anna’s response to this was to question the child and her approach. These examples illustrate that although these teachers were willing to offer creative experiences to children, they struggled to understand how to respond to the creativity or lack of creativity exhibited, similar to the teachers in Kettler et al.’s (2018) study.

A final theme for the teachers was there is more I can do. All three mentioned there were more things they could do to promote creativity in their preschool classrooms. Kay said she could change out the materials in the discovery center more often and if she had more time to tend to the other centers, they would be different all the time. When referencing improvements, Kay wanted to collaborate more with other teachers. Sarah felt she could think more purposefully about what materials to add to each center to encourage thinking differently. She also said she would like to get out additional Creative Curriculum resources and use them again. Sarah said she might benefit from creativity training because new information and ideas would be helpful. She also appreciated the opportunity this study gave her to think about what she was doing and how it was helping her preschoolers. These findings suggest creativity may not be at the

forefront of what early childhood teachers are doing in their classrooms. They may benefit from more time and a stronger emphasis specifically on the topic of creative pedagogy and what they can do in their early childhood classrooms to promote creativity.

CHAPTER 5

DISCUSSION

Creative Practice in Preschool Classrooms

Three categories emerged in response to the research question, “What constitutes creative practice in preschool classrooms?” These three categories were teacher understanding, characteristics of the environment, and behaviors of children. With regard to teacher understanding, two of the three teachers referred to preschool or children while the third referred to dance, play, or art, which points to children, too. Each teacher’s definition was specific to early childhood, rather than a general definition of the concept of creativity. Two teachers verbally struggled with the definition and the third paused two times while thinking and articulated her thoughts more clearly through the member check.

Characteristics of the environment also surfaced in teacher definitions. In all three definitions, teachers mentioned stations, materials, or media indicating these teachers felt children needed things to help with being creative. The environment being child directed and open-ended while giving children freedom was also associated with creativity. Rubenstein et al. (2018) found most elementary and secondary inservice teachers and preservice teachers overlooked the environment when defining creativity. Duffy (2006) also suggested definitions of creativity recognize the significance of the environment in promoting creativity. This finding was positive as all three preschool teachers acknowledged something in the environment when defining creativity.

Finally, also mentioned was behaviors of children associated with creativity. Expression of self was stated by two teachers and the third stated use of own ideas. These elements of the definition were aligned with Isbell and Yoshizawa (2016) who stated, “Creativity refers to children actively producing ideas, inventing or making something for the first time, or coming up with unique and different ways of expressing their thinking” (p. 6). Materials surfaced again, specifically the use of materials by children. Rubenstein et al. (2018) found teachers emphasized behavior, including actions or products when defining creativity. Children creating and using their imaginations were also key to the definition of creativity. Imaginative activity is included in the recognized definition from The National Advisory Committee on Creative and Cultural Education (1999). One teacher referred to originality, or each child’s work or play looking different from peers. The preschool teachers did not refer to effectiveness, usefulness, or value in their definitions of creativity. These are common terms associated with the concept of creativity (Plucker et al., 2004; Kampylis et al., 2009; Runco & Jaeger, 2012).

The findings revealed some difficulty and uncertainty associated with defining creativity for these three preschool teachers. A systematic literature review by Mullet et al. (2016) revealed efforts to identify creativity in their classrooms challenged teachers and many struggled to define it. Findings suggest defining the concept of creativity was something not previously asked of teachers so they had not given it much thought. Although the teachers in the study had difficulty providing a definition, all three had the ability to recognize what creativity looked like in young children and in the classroom.

The teachers provided examples of children being creative and talked about what was necessary to encourage creativity. Leggett's (2017) finding was similar in that teachers often described how children's actions were creative, rather than providing a definition for what creativity is.

To researchers, a conceptual definition is of great importance, but an operational definition may be more beneficial and practical for teachers of young children. Clearly defining what creativity looks like in an early childhood setting is an important step in ensuring effective promotion of creativity in those settings. Leggett (2017) also stressed this need in early childhood. A definition of creativity that is specific to young children and what young children do in early childhood settings to be creative may be a more important focus than the emphasis on a consistent conceptual definition. Concerns surrounding the inability of teachers being able to define creativity may be less of a concern with regard to the work of early childhood teachers.

When asked about pedagogic strategies that are best for promoting creativity in a preschool classroom, the teachers did not consistently articulate specific strategies. One teacher did not understand pedagogic strategies during the initial interview. The other two teachers referred to Creative Curriculum, interest areas or centers, and materials. Of the items on the ECCPQ, those referred to by the teachers included giving choices, valuing children's interests, encouraging different styles of expression, and valuing children's questions and suggestions. With regard to the topic of effective creative pedagogy, teachers were limited in their awareness of strategies (Cheung, 2017). Similar to Cheung (2017), creative pedagogy may not be a topic addressed often in preschool

classrooms outside the use of Creative Curriculum, the curriculum used by teachers in all three classrooms in the study. All three teachers relied on the Creative Curriculum and interest areas defined by the curriculum to set up their classrooms. The teachers indirectly referred to two more items, encouraging creative behaviors and hands on experiences, in their responses. The teachers did not mention the role of the teacher including strategies such as asking open-ended questions, stimulating multiple ways of thinking, providing opportunities for discussion and cooperation, and many others.

These findings revealed that during the initial interview the teachers had limited awareness of specific behaviors associated with creative pedagogy. However, they made clear their belief that creativity is important in early childhood classrooms as evidenced by the ECCPQ, completed after the initial interview. Of the 19 items from domains one, two, and three (domain four, teacher oriented pursuit was omitted), all three teachers selected very important or quite important for 17 of those items. Similarly, Alkus and Olgan (2014) conducted focus groups with 21 early childhood preservice and inservice teachers in Turkey and found those teachers recognized the value of creativity and had an awareness of creativity's association with the development of young children, too. What may be the issue is lack of awareness of strategies available to teachers that promote creative behaviors in young children. Teachers value creativity and focus on the environment and materials they offer to young children; however, many may also lack understanding of what their role is in the environment they create. Leggett (2017) found the role of the teacher was not an aspect of creativity while children are engaged in play. Her study revealed a lack of evidence associated with teachers engaging with children to

encourage their thinking. Although one teacher in the study mentioned her role and her behavior in the classroom supported her understanding of that role, all three teachers in this study may benefit from more training associated with creative pedagogy. The ECCPQ also revealed the three teachers identified some of the items as quite important or very important, but those items were not evident in their teaching and not mentioned in dialogue during interviews. This also suggests creative pedagogy training may benefit the teachers and be a way to support the teachers as they address creativity in their classrooms.

Cheung (2012) was interested in examining how behaviors in the classroom aligned with teacher beliefs. This research was of interest because of the uncertainty surrounding the relationship between behaviors and beliefs. Evidence from this study revealed many instances where the beliefs of all three teachers were congruent with actions or behaviors in the classroom. For Sarah, all of her beliefs supported the actions observed during her two lessons. Asking open-ended questions was very important to her and encouraging creative behaviors was quite important to her. There was evidence of both in her teaching. Stressing correct answers was fair to Sarah and this behavior was rarely evident during her two lessons.

Cheung's results revealed use of teacher centered pedagogy with an emphasis on knowledge and management of the children. Direct instruction was the chosen method of teaching, teachers used large group instruction, and teachers did not use open-ended questioning as a strategy. In this study, Kay deemed directed teaching as quite important and both of her lessons were teacher directed and facilitated. Although her actions

aligned with her beliefs for both of these items, her preferred method of teaching was consistent with the teachers in Cheung's study (2012). She selected using repeated exercises as quite important and there were instances of this in her lessons, too. Again, her beliefs aligned with her teaching although the behavior did not necessarily support creative pedagogy. The domain most characteristic of her teaching was domain four, teacher-oriented pursuit. Both lesson number one and lesson number two for Anna were teacher directed and facilitated, similar to Kay and the teachers in Cheung's (2012) study.

Actions not congruent with beliefs was characteristic of the other two teachers, similar to the teachers in Cheung's (2012) study. Kay selected not important for stressing correct answers. However, there was evidence of this behavior in her teaching. She selected very important for encouraging creative behaviors, but the creative activities observed offered little opportunity for imagination and children were not encouraged to think in different ways (Leggett, 2017). Anna also exhibited behaviors not congruent with her beliefs. She selected not important for stressing correct answers, but there were instances of this behavior in her teaching. Lesson number one focused on counting and writing numbers, in addition to children meeting the expectations she had in mind for the pizza making activity.

This study was a partial replication of Cheung's (2017) study. Some findings in this study were consistent with the teachers in the replicated study. Two of three teachers in both studies held beliefs that were not displayed or congruent with their teaching. Both Kay and Anna's teaching was representative of this incongruence. In addition, all three teachers held beliefs about creativity that were not evident in their teaching or

mentioned in dialogue in interviews. Observations during some of the lessons also had similarities. Comparable to Anna, one teacher in Cheung's study focused on outcomes rather than creativity. The same was true for Anna's pizza making activity where the children made toppings how they desired, but the purpose of the lesson was counting and writing numbers. Comparable to Sarah, one teacher in Cheung's study stressed creativity, but did not facilitate the experience in a way for the children to understand. Sarah's experience of encouraging children to be creative and turn a square into anything they wanted did not go as she planned because the children did not understand and she did not know how to respond. Sarah's first lesson somewhat mirrored the guided approach used by a teacher in Cheung's study (2017). Sarah's lesson took place during center time when the children freely chose play and moved around the room. There were no limits placed on the number of students in centers. She supported and guided the learning of the children by asking questions and engaging in play herself. This approach seemed to be the most beneficial for encouraging and supporting creativity. Cheung's conclusion about teacher beliefs being similar with regard to creative pedagogy but being different when actualized in the classroom was true for the teachers in this study, too.

Contextual Factors

In response to the research question "What contextual factors do teachers report that support or impede efforts to promote creativity in their classrooms?" the teachers identified several factors that influenced creativity in their settings. All three teachers mentioned GOLD documentation in their interviews. Although they agreed GOLD supported creativity in the classroom, the teachers noted that time was a factor with

regard to documenting. Anna also pointed out sometimes children have to be taken away from play to secure the necessary information needed to assess each objective.

All three teachers mentioned colleagues, administrators, or the state. Anna felt she was accountable to the kindergarten teachers in her district as they communicated what children were doing well and what areas she should focus on as a preschool teacher. Sarah also acknowledged this pressure. Although academics was not a focus in her two lessons, she recognized the academic push as a barrier, too. She noted the emphasis in the upper grades pushes down to preschool. Sarah said an emphasis on data sometimes affected creativity and developmentally appropriate practice. She had to remind herself that although goals keep her accountable, play and social skills are most important at the preschool level. Kay was accountable to another preschool teacher in her district as part of her involvement with a PLC team. Due to the IQPPS, Kay was also involved in a desk audit. There is an understanding that over time preschools and kindergartens have shifted to an academic focus and moved away from an emphasis on play and social skills (Bassok et al., 2016, p. 2). Growing amounts of academic expectations push teachers into using direct instruction more often and away from opportunities to play (Russo, 2012).

All three teachers recognized the lack of value and lack of understanding of the importance of play for adults outside the classroom. Kay acknowledged working in an elementary setting was challenging because parents and the outside community do not necessarily understand play. Anna and Kay held similar feelings about the topic of play. Anna felt the need for others to understand play and its benefits as there is a perception

that children should learn through sitting or writing. Anna and Sarah both expressed the need for more parent understanding of play, too. Sarah said it was necessary to communicate with parents so they understood the importance of children playing and creating. Anna recommended that administrators who lack early childhood experience spend time in the classroom and Sarah felt training related to creativity would benefit her and other teachers, too. Alkus and Olgan's (2014) research revealed administrators were more interested in products for parents to see rather than creativity. One suggestion was the need for teachers to collaborate with both administrators and parents, as all play a necessary part in promoting the creativity of young children. The same appears to be true with regard to what the teachers in this study reported about parents and other stakeholders. The findings revealed challenge experienced by these preschool teachers in the area of creative pedagogy, especially with the push for academics and the lack of knowledge of parents and stakeholders with regard to the benefits and value of play for young children.

Comparisons Among Teachers in Other Contexts

The studies of Cheung (2017), Kamylyis et al. (2009), and this study enable comparisons of teachers' perceptions of how to nurture creativity in three different cultural contexts: Chinese, Greek, and American. There was evidence of similarities and differences among the contexts in teachers' statements of beliefs and actual practice, student-centered pedagogy resulting in creativity, curriculum, and daily schedule.

Disconnect in Beliefs and Practice

Cheung's (2017) study of three Hong Kong teachers revealed that although the teachers had similar thoughts about creative pedagogy, the teaching that occurred in each of their classrooms looked very different. One teacher focused on objectives for the lesson and a creative product at the end while another teacher promoted exploration and allowed for freedom, which did not work well for the children. The last teacher used a guided approach that seemed most beneficial for the children. Again, all had similar views of creative pedagogy, but their approaches were not similar. In addition, two of the three Hong Kong teachers' beliefs were not consistent with their teaching practices. The same was true for the American teachers in this study. Some beliefs of the American teachers as evidenced by the ECCPQ lacked congruence with classroom behaviors when they observed in the classroom. It appears regardless of context a teacher is in, many struggle with aligning their beliefs about creativity with their daily teaching practices.

Student-Centered Pedagogy and Creativity

Although teachers in Greek settings received little direction, developing creativity in students was the expectation. The same study revealed over 98% of teachers agreed that promoting creativity was part of their responsibility as teachers although over 50% felt unprepared to facilitate the creative development of students (Kampylis et al., 2009). In Chinese contexts, the teacher as a role of a facilitator using a guided approach was most effective for the Chinese children. This was due to the shift from teacher-centered classrooms to child-focused classrooms that stress creativity (Cheung, 2017). Based on the six lessons observed of the American teachers, the use of interest areas and play

resulted in the most opportunity for creativity. There was engagement displayed by children when they chose activities and interest areas. There were instances of children building, painting, creating, and engaging in play with peers. In one teacher directed lesson, children had the opportunity to be creative, but experienced difficulty doing so. This may be due to the fact the activity was creative in the eyes of the teacher, rather than creative in a way that made sense to the children. One teacher noted interest area time is when she incorporates creative opportunities.

Daily Schedule

In the Chinese context, teachers reported a conflict between creativity and a daily schedule that was very structured (Cheung, 2017). For these teachers, time influenced their pedagogy related to creativity. According to Kamylyis et al. (2009) over 70% of Greek teachers felt there were limited opportunities for young children to engage in creative behavior in the primary school setting. Unlike the Chinese and Greek teachers, American teachers reported having enough time to address creativity and play within the day. All three teachers spoke of daily schedules that included two opportunities for children to engage in play in centers or interest areas. All teachers had a daily schedule with group time, small group time, and other structured activities. One teacher noted how the schedule was challenging at times, but said she tried to ensure children had a full hour for interest areas and play. Sarah offered an hour to an hour and a half for interest areas upon arrival and was flexible if children wanted to play longer. Anna stated children had enough time to be creative and mentioned if they had extra time, the children got more time to play.

Although context matters with regard to creativity expectations and promotion in early childhood classrooms, the study revealed many similarities among Greek, Chinese, and American contexts. Cheung and Leung (2013) found evidence of cultural factors influencing creative pedagogy in early childhood settings. They felt there was a connection between the occurrence of teacher-oriented pursuit in settings in Hong Kong and the expectation of conformity in education. However, occurrence of teacher-oriented pursuits was characteristic in an American context, too. These comparisons show regardless of context, early childhood teachers often feel pressured to help young children achieve academic goals and struggle to align their beliefs about creativity with daily classroom practices.

Implications in Early Childhood Settings

Leggett (2017) recognized a need for a clear and consistent definition of creativity appropriate for early childhood.

Creativity for young children involves cognitive processes that develop through social interactions, play and the imagination. Creative thinking is a transformative activity that leads to new ways of thinking and doing that are novel for the child or useful to children's communities. (p. 851)

This study's findings revealed there is a need for careful consideration of what is necessary for nurturing creativity in early childhood settings. All children are capable of exhibiting creativity (Duffy, 2006; Vygotsky, 1930; 2004) and have a need to explore their ideas. The environment plays an essential role in enabling this (Duffy, 2006). The most common means for young children to do so is through play. The principles of child development and learning identified by NAEYC (2009) remind early childhood teachers of the influence of multiple social and cultural contexts, the fact children are actively

trying to make sense of the world around them and they learn in many ways, and children learn when challenged at a level appropriate for their development. These ideas form the basis of current ideas about creativity. As more research on creativity in early childhood settings becomes available, it is necessary to consider how the recent findings can contribute to the field of early childhood creativity.

Practicing Teachers

The preschool teachers in the study focused primarily on the Creative Curriculum and interest areas in their classrooms. There was a strong emphasis on the environment and materials, and less emphasis on specific pedagogic strategies utilized to promote creativity. Exposing early childhood teachers to the specific strategies linked to creative pedagogy would increase awareness of the strategies and may help them to be more intentional with those strategies in the classroom.

Parents, Administrators, and Community

All three teachers recognized a lack of knowledge surrounding the benefits and value of play in early childhood. This involved parents, the outside community, and in some instances, administrators. An implication is the promotion of play not only within early childhood settings, but also with others associated with young children. Teachers need the support of those around them to promote developmentally appropriate practice and ultimately, encourage the development of young children. Sarah remarked, “When you provide opportunities for children to be creative, you see its importance.” Teachers need others to realize this importance, too. Administrators and parents need knowledge so they understand the curriculum and approaches teachers are using in their classrooms.

Implications for Preservice Teaching

As a professor, I saw implications related to my work. Teaching an early childhood methods course is an appropriate avenue for addressing creativity. I reach both preservice and inservice early childhood teachers because I teach a course with undergraduate and graduate students. First, the need for defining creativity in a way that is appropriate to early childhood settings exists. Dialogue among students can determine understanding of creativity and offer an opportunity to expand on that understanding. Mullet et al. (2016) advised teachers have access to “rigorous preparation and training” to ensure their understanding of creativity is based on the most up to date research and theory (p. 29).

Awareness of creative pedagogy is another area to address. Cheung and Leung (2013) suggested that recognition of teacher beliefs surrounding creative pedagogy could assist those individuals in teacher education as they focus on the needs of teachers. While the students are taking their methods course, they complete a 40-hour practicum in a preschool setting. Sharing the ECCPQ with the students may provide a valuable opportunity to explore their own beliefs about creativity and the chance to use it to observe and reflect on their own creative pedagogy in addition to strategies used by the teacher in the practicum setting.

Finally, the observations of lessons caused me to think about the early childhood lesson plan in my course. The lesson plan is structured, similar to the lesson plan used in elementary methods courses. I may need to reexamine some aspects of the lesson plan. An emphasis on standards and steps within the plan often leads to planning of teacher

directed activities with play and exploration emphasized in centers on the unit planning form. This was similar to the preschool teachers in the study as they emphasized creativity mainly during interest area time, too. Recognition of how play and exploration can be included in daily lessons plans is key. One example of a change I can make is the reflection section of the lesson plan. Questions related to creative pedagogy such as, “How did you use open-ended questioning within the lesson?” or “What opportunities did children have to cooperate and engage in discussion with peers?” Posing these types of questions might make students more aware of strategies during the planning of lessons and while reflecting after teaching a lesson. Making changes such as this to the lesson plan format provides me with an opportunity to continue to promote developmentally appropriate expectations of young children along with strategies associated with creative pedagogy.

Future Research

One limitation of the study was the participants. I used convenience and purposeful sampling. Selection of participants was due to their position geographically to ensure access for interviews and observations. The sample size was small with three participants, similar to Cheung’s (2017) study. These studies have laid the groundwork and therefore, future research might consider a more representative sample of preschool teachers in the United States to support the findings.

Another limitation of the study was the use of a priori codes assigned to classroom practices in Lesson Observation #1 and Lesson Observation #2. Due to the study being a partial replication of Cheung (2017), I only used the 22 items as a priori

codes. I completed the coding based on my early childhood background and knowledge of early childhood teaching. I also solicited feedback from my committee members. In the future, other observation coding systems might offer another perspective to compare with Cheung (2017). Future research involving classroom observations would also benefit from the use of a second rater to establish inter-rater reliability.

Use of the ECCPQ in this study was very beneficial for the examination of beliefs and classroom practices. Future research might involve a study with a more focused and in depth use of the ECCPQ. Early childhood teachers could not only use the ECCPQ to examine their beliefs, but after doing so examine and reflect on their use of the strategies in the classroom and the impact on creativity and young children.

The challenge of educating others on the importance and value of play was a reality for the teachers in the study. Future research to address this might be an examination of the ways in which early childhood teachers advocate for play and creativity in their settings and beyond. Research that examines how they work with parents, administrators, elementary colleagues, and the larger community may provide valuable information related to this issue.

All three preschool teachers in the study felt the curriculum supported their efforts to promote creativity in the classroom and children had opportunities to play within the school day. Future research might explore creativity in settings where use of Creative Curriculum is not the case to see if other types of curriculum also support creativity.

All three teachers mentioned many opportunities for children to play, although this was not the case in the upper grades. Two teachers mentioned children needed to

play more in kindergarten. Future research might consider replication of the study with kindergarten teachers to see how findings compare between the two early childhood settings.

REFERENCES

- Aljughaiman, A., & Mowrer-Reynolds, E. (2005). Teachers' conceptions of creativity and creative students. *Journal of Creative Behavior, 39*(1), 17-34. doi: 10.1002/j.2162-6057.2005.tb01247.x
- Alkus, S., & Olgan, R. (2014). Pre-service and in-service preschool teachers' views regarding creativity in early childhood education. *Early Child Development and Care, 184*(12), 1902-1919. doi: 10.1080/03004430.2014.893236
- Bassok, D., Latham, S., & Rorem, A. (2016). Is kindergarten the new first grade? *AERA Open, 1*(4), 1-31. doi: 10.1177/2332858415616358
- Beghetto, R. A., & Kaufman, J. C. (2014). Classroom contexts for creativity. *High Ability Studies, 25*(1), 53-69. doi: 10.1080/13598139.2014.905247
- Berk, L. E., & Winsler, A. (1995). *Scaffolding children's learning: Vygotsky and early childhood education*. Washington, DC: National Association for the Education of Young Children.
- Bronson, P., & Merryman, A. (2010). Creativity in America. *Newsweek*, 44-49.
- Center on Education Policy. (2017). *The legacy of more & better learning time: Grantee and stakeholder reflections*. Policy Report Retrieved from https://www.cep-dc.org/cfcontent_file.cfm?Attachment=FrizzellRentnerKoberBraunFerguson%5FReport%5FLegacyMBLT%5F1%2E24%2E17%2Epdf
- Cheung, R. H. P. (2012). Teaching for creativity: Examining the beliefs of early childhood teachers and their influence on teaching practices. *Australasian Journal of Early Childhood, 37*(3), 43-51. doi: 10.1177/183693911203700307
- Cheung, R. H. P. (2017). Teacher-directed versus child-centred: The challenge of promoting creativity in Chinese preschool classrooms. *Pedagogy, Culture, & Society, 25*(1), 73-86. doi: 10.1080/14681366.2016.1217253
- Cheung, R. H. P. (2018). Play-based creativity fostering practices: The effects of different pedagogical approaches on the development of children's creative thinking behaviours in a Chinese preschool classroom. *Pedagogy, Culture, & Society, 26*(4), 511-527. doi: 10.1080/14681366.2018.1424725
- Cheung, R. H. P., & Leung, C. H. (2013). Preschool teachers' beliefs of creativity pedagogy: Important for fostering creativity. *Creativity Research Journal, 25*(4), 97-407. doi: 10.1080/10400419.2013.843334

- Chien, C., & Hui, A. N. N. (2010). Creativity in early childhood education: Teachers' perceptions in three Chinese societies. *Thinking Skills and Creativity, 5*(2), 49-60. doi: 10.1016/j.tsc.2010.02.002
- Duffy, B. (2006). *Supporting creativity and imagination in the early years*. Maidenhead, UK: Open University Press.
- Eckhoff, A. (2011). Creativity in the early childhood classroom: Perspectives of preservice teachers. *Journal of Early Childhood Teacher Education, 32*(3), 240-255. doi: 10.1080/10901027.2011.594486
- Eckhoff, A., & Urbach, J. (2008). Understanding imaginative thinking during childhood: Sociocultural conceptions of creativity and imaginative thought. *Early Childhood Education Journal, 36*, 179-185. doi: 10.1007/s10643-008-0261-4
- Gajda, A., Karwowski, M., & Beghetto, R. A. (2017). Creativity and academic achievement: A meta-analysis. *Journal of Educational Psychology, 109*(2), 269-299. doi: 10.1037/edu0000133
- Glăveanu, V. P. (2010). Paradigms in the study of creativity: Introducing the perspective of cultural psychology. *New Ideas in Psychology, 28*(1), 79-93. doi: 10.1016/j.newideapsych.2009.07.007
- Glăveanu, V. P. (2011). Creativity as cultural participation. *Journal for the Theory of Social Behaviour, 41*(1), 48-67. doi: 10.1111/j.1468-5914.2010.00445.x
- Holmes, R. M., Romeo, L., Ciraola, S., & Grushko, M. (2015). The relationship between creativity, social play, and children's language abilities. *Early Childhood Development and Care, 185*(7), 1180-1197. doi: 10.1080/03004430.2014.983916
- Hong, S. Y., Torquati, J., & Molfese, V. J. (2013). Theory guided professional development in early childhood science education. *Faculty Publications from Children, Youth, Families & Schools, 29*, 1-32. doi: 10.1108/S0270-4021(2013)0000017005
- Iowa Department of Education. (2017). Iowa quality preschool program standards. Retrieved from <https://educateiowa.gov/sites/files/ed/documents/IQPPSandCriteria2017withformnumbering.pdf>
- Iowa Department of Education. (2018). Iowa early learning standards. Retrieved from <https://educateiowa.gov/documents/early-childhood-standards/2019/01/iowa-early-learning-standards-3rd-edition>

- Iowa Department of Education. (2019). Education statistics. Retrieved from <https://educateiowa.gov/education-statistics>
- Iowa Department of Education. (n.d.-a). Early childhood standards. Retrieved from <https://educateiowa.gov/pk-12/early-childhood/early-childhood-standards>
- Iowa Department of Education. (n.d.-b). Statewide voluntary preschool program for four-year-old children. Retrieved from <https://educateiowa.gov/pk-12/early-childhood/statewide-voluntary-preschool-program-four-year-old-children>
- Isbell, R., & Yoshizawa, S. A. (2016). *Nurturing creativity: An essential mindset for young children's learning*. Washington, DC: National Association for the Education of Young Children.
- Kampylis, P., Berki, E., & Saariluoman, P. (2009). In-service and prospective teachers' conceptions of creativity. *International Journal of Thinking Skills and Creativity*, 4(1), 15-29. doi: <https://doi.org/10.1016/j.tsc.2008.10.001>
- Katz, L. G. (2015). *Lively minds: Distinctions between academic versus intellectual goals for young children*. Defending the Early Years. Retrieved from <https://deyproject.files.wordpress.com/2015/04/dey-lively-minds-4-8-15.pdf>
- Kettler, T., Lamb, K. N., Willerson, A., & Mullet, D. R. (2018). Teachers' perceptions of creativity in the classroom. *Creativity Research Journal*, 30(2), 164-171. doi: 10.1080/10400419.2018.1446503
- Kim, K. H. (2011). The creativity crisis: The decrease in creative thinking scores on the Torrance tests of creative thinking. *Creativity Research Journal*, 23(4), 285-295. doi: <https://doi.org/10.1080/10400419.2011.627805>
- Leggett, N. (2017). Early childhood creativity: Challenging educators in their role to intentionally develop creative thinking in children. *Early Childhood Education Journal*, 45, 845-853. doi: 10.1007/s10643-016-0836-4
- Lowenfeld, V., & Brittain, W. L. (1975). *Creative and mental growth*. London: Collier-MacMillan.
- Makel, M. C. (2009). Help us creativity researchers, you're our only hope. *Psychology of Aesthetics, Creativity, and the Arts*, 3(1), 38-42. doi: 10.1037/a0014919
- Marshall, C., & Rossman, G. B. (2016). *Designing qualitative research*. Thousand Oaks, CA: Sage.

- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.
- Miller, E., & Almon, J. (2009). *Crisis in the kindergarten: Why children need to play in school*. Retrieved from <https://files.eric.ed.gov/fulltext/ED504839.pdf>
- Mullet, D. R., Willerson, A., Lamb, K. N., & Kettler, T. (2016). Examining teacher perceptions of creativity: A systematic review of literature. *Thinking Skills and Creativity, 21*, 9-30. doi: 10.1016/j.tsc.2016.05.001
- myIGDIs. (n.d.). Research-based, preschool assessments. Retrieved from <https://www.myigdis.com/preschool-assessments/>
- National Advisory Committee on Creative and Cultural Education. (1999). *All our futures: Creativity, culture, and Education*. Retrieved from <https://www.creativitycultureeducation.org/publication/all-our-futures-creativity-culture-and-education/>
- National Association for the Education of Young Children. (2009). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8: Position statement*. Retrieved from <https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/PSDAP.pdf>
- Piaget, J. (1953). *The origins of intelligence in children*. New York, NY: Basic Books.
- Piaget, J. (1971). *Biology and knowledge: An essay on the relations between organic regulations and cognitive processes*. Chicago, IL: University of Chicago.
- Plucker, J. A., Beghetto, R. A., & Dow, G. T. (2004). Why isn't creativity more important to educational psychologists? Potentials, pitfalls, and future directions in creativity research. *Educational Psychologist, 39*(2), 83-96. doi: 10.1207/s15326985ep3902_1
- Powell, K. C., & Kalina, C. J. (2009). Cognitive and social constructivism: Developing tools for an effective classroom. *Education, 130*(2), 241-250.
- Prentice, R. (2000). Creativity: A reaffirmation of its place in early childhood education. *The Curriculum Journal, 11*(2) 145-158. doi: 10.1080/09585170050045173
- Robbins, R. (2005). 'Brown paper packages'? A sociocultural perspective on young children's ideas in science. *Research in Science Education, 35*, 151-172. doi: 10.1007/s11165-005-0092-x

- Robson, S. (2014). The analysing children's creative thinking framework: Development of an observation-led approach to identifying and analysing young children's creative thinking. *British Educational Research Journal*, 40(1) 121-134. doi: 10.1002/berj.3033
- Robson, S., & Rowe, V. (2012). Observing young children's creative thinking: engagement, involvement and persistence. *International Journal of Early Years Education*, 20(4), 349-364. doi: 10.1080/09669760.2012.743098
- Rubenstein, L. D., Ridgley, L. M., Callan, G. L., Karami, S., & Ehlinger, J. (2018). How teachers perceive factors that influence creativity development: Applying a social cognitive theory perspective. *Teaching and Teacher Education*, 70, 100-110. doi: 10.1016/j.tate.2017.11.012
- Rubin, H. J., & Rubin, I. S. (2012). *Qualitative interviewing: The art of hearing data*. Los Angeles, CA: Sage.
- Runco, M. A., & Jaeger, G. J. (2012). The standard definition of creativity. *Creativity Research Journal*, 24(1), 92-96. doi: 10.1080/10400419.2012.650092
- Russo, L. (2012). "Standardized" play and creativity for young children? The climate of increased standardization and accountability in early childhood classrooms. *Counterpoints*, 425, 140-156.
- Sakr, M., Trivedy, B., Hall, N., O'Brien, L., & Federici, R. (2018). *Creativity and making in early childhood: Challenging practitioner perspectives*. New York, NY: Bloomsbury.
- Saracho, O. N. (2012). *Contemporary perspectives on research in creativity in early childhood education*. Charlotte, NC: Information Age.
- Teaching Strategies. (2016). The creative curriculum for preschool: Setting up a classroom for 20 preschool children. Retrieved from <https://teachingstrategies.com/wp-content/uploads/2016/04/Setting-Up-a-Preschool-Classroom-for-20.pdf>
- Teaching Strategies. (2017). The creative curriculum for preschool touring guide. Retrieved from https://teachingstrategies.com/wp-content/uploads/2017/08/TeachingStrategies_CC-for-Preschool_TouringGuide_2017.pdf
- Teaching Strategies. (2019a). GOLD. Retrieved from <https://teachingstrategies.com/solutions/assess/gold/>

Teaching Strategies. (2019b). The creative curriculum for preschool: Objectives for development and learning. Retrieved from <https://teachingstrategies.com/our-approach/our-38-objectives/>

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Vygotsky, L. S. (2004). Imagination and creativity. *Journal of Russian and East European Psychology*, 42(1), 7–97.