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DEVELOPING CREATIVITY FROM SCHOOL AND HOME EXPERIENCES: HOW
PARENTS AND EDUCATORS INFLUENCE STUDENTS' CREATIVE LITERACY
PRACTICES

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ABSTRACT OF THE DISSERTATION

DEVELOPING CREATIVITY FROM SCHOOL AND HOME EXPERIENCES: HOW PARENTS AND EDUCATORS INFLUENCE STUDENTS IN DEVELOPING THEIR CREATIVE LITERACY PRACTICES

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This dissertation looks at the nature of creativity and what it takes to create a creative environment between the home environment and the elementary classrooms. Children make meaning best through play, creativity and problem-solving; this theory is built on Vygotsky's zone of proximal development (1978) alongside schema theory and Sternberg and Lubart's Investment Theory (1991). Vygotsky's theories have also been mediated with Kress (1997) and with Csikszentmihalyi (1996).

This ten-month-long qualitative case study of administrators, teachers, parents, and students utilized interviews, artifacts, and focus groups. It studied the phenomenon of creativity (Patton 2002) while taking an ethnographic approach (Green & Bloome 1997). The observational work took place in families' homes and at a school in a suburban school district in an upper-middle class community. Part of the interview work took place in the participants' homes and at school. Focus groups and interviews with teachers and administrators were conducted about how they define, identify, and apply creativity in their planning, teaching, learning, and assessing.

Coding was established using the research questions and interview protocol to organize data. Coding schema meant that as codes were created, the goal was to capture the perceptions and beliefs of the participants. Grounded theory combined with discourse theory was used to track terms, concepts, and ideologies that recurred in the data. They were drawn them together into an integrated framework that was offered in the final chapter.

My data reveal the findings of the teachers and administrators, coded into five major categories, with corresponding subcategories: the classroom environment, the role of the teacher, the home connection, and difficulties. The major categories that emerged from the family participants were how the children and their families make creative use of space, time, and materials in their quest to observe, question, learn, and explore the world around them.

This dissertation contributes to the growing research bridging creativity and critical thinking, implications for standardized testing, and creative literacy practices.

DEDICATION

To my friends and family: your interest, support, encouragement, and sense of humor
have sustained me throughout the years.

And, to Mom and to Dad, who always knows how to make something amazing out of
nothing; thanks for inspiring my creativity.

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To Him be the glory.

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CHAPTER 1

Introduction

In April, 2011, I sat with a kindergarten teacher in Chalang, a community on the northern tip of the island of Sumatra, Indonesia, which had lost eighty percent of its population in the 2004 tsunami. While it was a beautiful drive up the coast, effects of the tsunami were easy to spot. Rows and rows of cement houses stood along the roads, built by various organizations to replace the fragile wooden structures that had washed away. Originally from Australia, this particular teacher works developing kindergartens in the community, teaching some classes while also training parents to teach others. She spoke a lot of the challenges I had seen during my time in Indonesia and discussed the need to foster creativity in the children and the families. She shared some of her triumphs and struggles, from training parent volunteers to teach and watching them take ownership of their “classes,” to teaching teachers the importance of fostering creativity in children and encouraging them to utilize natural resources. I love when she shared that rice was not a good material to use in the classroom (because mice eat it!) but that dried leaves, shells, and sand work wonders as materials for art, math, and science. Through trial and error, this teacher, the parents, and students are working together to utilize the resources they have. Here, necessity is the mother of invention, and perhaps creativity.

Creativity is the birth of something new into being: an idea, painting, piece of music, invention, or mathematical proof. Creative people find excitement and pleasure in exploring new ideas, with this pleasure outweighing the risk of failure. Trying something new means taking the risk that what is created may not be successful, valuable, or necessary. Being willing to take those risks requires a unique set of characteristics, and a

particular environment. The notion of newness and originality within a certain kind of environment is what will be explored in my dissertation.

Research on creativity has been scattered, partly because the word *creativity* has been used in so many different ways and in various different contexts. Providing an exact definition has also posed a problem, since it tends to be associated with the arts, is complex, and has been explained through a variety of theories. Various definitions have attributed creativity to intelligence, personality, and the environment (MacKinnon, 1962; Gardner, 1983; Perkins, 1988; Sternberg, 2001; Piirto, 2004), leading Getzels to determine that there is no universal definition for creativity (1975).

It was during the Romantic period that Galton set out to examine the extent to which genius is hereditary. In 1869, this research led to the publication of *Hereditary Genius*, the aim of which was, “to show...that a man’s natural abilities are derived by inheritance, under exactly the same limitations as are the form and physical features of the whole organic world,” (Galton, p. 1). The search for the significance of creativity can be traced back through a continually changing environment, with research demonstrating that knowledge alone is not substantial. There is a growing body of literature that represents progress in understanding the nature of creativity (Guilford 1950, Dacey 1989, Balkin 1990, Feldhusen & Goh 1995, Cray- Andrews & Baum, 1996, Csikszentmihalyi 1996, Craft 2001, Feldhusen & Westby 2003, White 2004, Gladwell 2008). Discovering new and better ways to solve problems is a necessity, and skills relevant to creativity are also useful in coping with life’s challenges. In addition, the idea that creativity is based on social or environmental circumstances, rather than simply intelligence, has been explored by a number of researchers throughout the past six decades (Terman 1947,

Guilford 1950, MacKinnon 1962, Treffinger 1980, Davis, & Rimm 1985, Sternberg & Lubart 1991, Sternberg 2001, Esquivel & Hodes 2003).

Increasingly, the problems faced in society are complex and open-ended. All disciplines, from chemistry to engineering, education to computer science, and sociology to business, bring up new and changing problems that require innovative solutions. Using creativity as a means of broadening areas other than the arts has been explored (Hickey & Webster 2001, Safford & Barrs 2005, Runco 2010). In addition, discussing the role of play is essential when examining an environment that encourages autonomy. Research supports the influence of imaginative play on child's ability to learn as they play, explore, and ask questions (Vygotsky 1978, Kress 1997, Wink and Putney 2002). Creative individuals are recognized more for their interests and attitudes than by their intellectual abilities. Therefore, discussing aspects of personality with regards to creativity (Allport 1937, Dacey 1989, Csikszentmihalyi 1996, Eisner 1996, Esquivel & Hodes 2003, Houtz 2003, Runco 2010) is as important as discussing the environment.

Some people doubt that creativity can be taught at all, thinking that it is a strictly natural ability that cannot be improved through education. However, there is little existing research devoted to the idea of developing creativity, and how specifically to do so. My dissertation focuses on the idea that creativity can be developed through home and school practices. This will include environmental qualities that allow for and encourage creativity, and specific strategies for developing it from teachers, administrators, and parents. Several definitions of creativity will be explored, and the implications for promoting the creative development of children will be included. This work will be viewed primarily through a lens of literacy, although other academic areas,

such as mathematics and science, may be factored in as well, depending on the nature of participants' responses. Taking these factors into consideration, this research is guided by specific questions.

These research questions aim to define the roles that parents, teachers, and administrators play in developing students' creativity, and examine examples of students' creative literacy practices.

1. What perceptions do teachers have about creativity?
 - a. How do these conceptions shape teaching practice?
 - b. What do teachers think they can do to improve students' creativity in relation to literacy teaching and learning?
2. What perceptions do administrators have about creativity?
 - a. How do these conceptions shape administrative practice?
 - b. What do administrators think they can do to improve students' creativity in relation to literacy teaching and learning?
3. What perceptions do parents have about creativity?
 - a. How do these conceptions shape rearing practice?
 - b. What creative literacy practices take place at home, and how do parents view their significance?

By including four administrators, eight elementary school teachers, ten parents, and nine students, this qualitative study contributes to the discussion of developing creativity in elementary-age children. Knowledge of the factors that may influence students' creative practices may give other educators a better understanding of an environment conducive to creativity, as well as strategies that can affect students both

inside and outside of school. Therefore, as my dissertation homes in on how creativity provides a platform for creating optimal classroom and home environments, it contributes to the growing research bridging creativity and critical thinking, implications for standardized testing, and creative literacy practices.

Impetus

My interest in creativity stems from involvement in Odyssey of the Mind, an international creative-solving program that I had been involved as a spectator, student participant, judge, coach, and board member. Seeing the program from so many different perspectives, and watching it evolve and change over the course of twenty years has helped me to develop a personal interest in and philosophy for creativity. In addition, serving as a first grade teacher who played a major role in students' early literacy, a third grade "Academically Talented" teacher who worked with a district- selected very bright group of students, and currently a fourth grade teacher working with the mainstream intermediate population has helped me to see literacy and creativity as a developmental continuum, and to acknowledge and appreciate the triumphs and struggles of the different ages and populations.

Having been in touch with my own "creative side," I had never thought about what it would be like *not* to feel creative. When I first began teaching, other teachers would often compliment on my own creativity both as a teacher and a coach and applaud my desire to work with the Odyssey of the Mind program. Many stated that they could never do it because they did not feel they were creative. It made me ponder what it means to be creative as a person, but especially as an elementary teacher. My own ideas about creativity have helped me to design lessons and activities to meet the varying needs of

three different grade levels of students, and I knew the same was true of my colleagues, even if they did not recognize it in themselves. Likewise, I was accustomed to working with a team of seven students each year as part of the program, in addition to a class of students, and I was always interested in hearing stories about students' home lives. I saw parents of my students compliment their child's abilities and openly wonder where their child "got it" from. What made them creative? How could they write, paint, design, or answer the way they had? If parents and teachers don't think of themselves as creative, where do our children "get" it from? How can it be developed? Hence, I realized a qualitative exploration of students' creative practices, both inside and outside of school, and educators' teaching practices, could help us to understand the various ways of interpreting creativity, and determine which strategies are effective in its development. With this knowledge, educators would be able to capitalize on the roles of the teacher and student, and the school and home environment.

Conceptual Frame

By drawing upon both schema and learning theory, I look to two different disciplines to examine participants' perceptions and responses. Schema theory helps me to examine how the participants' past experiences shape the way they interpret creativity. Learning theory allows me to see how learning in pursuit of a goal makes the learning purposeful. For example, through schema theory, I see how one family's love of play and games has influenced their children's choice of leisure play and activities. When the kids' friends come over, the parents find that their children imitate what they do by organizing games and events for their friends. Further, learning theory helps me to understand how one child in this same family was expected to give a school presentation for 12- 15

minutes. Her selected topic was movies, and she planned to present her information like an award show. She arranged her information into categories, including classic films, humor, famous actors and actresses, and series. Her goal of a successful presentation, coupled with a self-selected topic, helped her to find a way of presenting the necessary information in a format that was unique. Therefore, schema and learning theories work together to provide a clearer, richer lens to see how each of the participants perceive and connect creativity and find relevance in their own lives.

It is important to note that the relationship between intelligence and creativity is dependent upon the definition and measures used of both intelligence and creativity. It has long been thought that it takes a highly intelligent individual to produce creativity. However, there is significant research by Terman (1920) and Guilford (1950) indicating that creativity and intelligence are much less dependent on each other. The research on the relationship between creativity and intelligence can be divided into two conclusions: the idea that there is little correlation between the two, and the notion of a threshold, where a minimum IQ is required in order to produce creativity (qtd. in Esquivel & Hodes, 2003). The threshold theory states that below a certain threshold (an IQ of approximately 120), there is a strong, positive correlation between intelligence and creativity. Therefore, an intelligent person is more likely to be creative. However, above the threshold, there is a weaker relationship between the two; a highly intelligent person may be highly creative, but is just as likely to be moderately creative. In this section, theories examining creativity as one aspect of intelligence will be explored.

Guilford's Structure of the Intellect

In 1950, J. P. Guilford noted the lack of attention to creativity. He felt that creativity was necessary for the survival of the human species, yet little research was being done to learn about creativity and its development. In a 1950 address to the American Psychological Association, Guilford stated that all people possess creative abilities to varying degrees. He defined creativity as, “a distinct construct involving originality and divergent thinking, but also as a mental process that may be influenced by personality factors such as motivation, needs, interests, attitudes, and emotions,” (qtd. in Esquivel and Hodes, 2003, p. 148). The focus of his subsequent research was his Structure of Intellect (SOI) Research in 1967, where he noted that humans had more abilities than were typically measured by intelligence tests (Guilford and Hoepfner, 1971). This model generated hypotheses for an array of abilities characterized by unique combinations of mental thought, informational content, and product. In its most recent form, there are 180 components. Unlike previous models of intelligence, the SOI model includes identification of components of divergent thinking. A complex of divergent production operations, defined as the generation of logical alternatives from given information where emphasis is upon variety, quantity and relevance of output from the same source was hypothesized as the basis of creativity ability (Guilford 1966, 1967.). A person’s abilities were very important for success in life, yet they were rarely the focus in the traditional educational setting. The model encouraged the idea that intelligence is not simply a number based on a test, and that every person has unique learning strengths and weaknesses.

Guilford was among the first to describe characteristics of creative thinking: flexibility, as mentioned previously, plus fluency, originality, and elaboration; all of these

can be used at home and implemented in classroom settings (Cray-Andrews and Baum 1996). Following the idea that the objective of creative problem solving is to produce novel approaches to problems (Cray-Andrews and Baum 1996), flexibility requires a child to change the direction of thought and offer solutions from different angles. This flexibility permits a child to see more than the obvious. For example, a child that sees a piece of bubble gum as a (comical, but plausible) alternative to glue has demonstrated flexibility. Working with different items in the home environment and making object substitutions enables children to be able to do the same in school: utilize materials at hand to solve a given problem in a novel way. However, the ability to do so involves not just the children, but also the adults in their environment. Their support provides opportunities for new learning.

Guilford's attention to creativity in the 1950s and later, his Structure of Intellect (SOI) Research (1967), led him to believe that humans had more abilities than were typically measured by intelligence tests (qtd. in Michael, 2003). The SOI model replaced the terms "IQ," "intelligence," and "creativity" with the terms "convergent production" and "divergent production." The model encouraged the idea that intelligence is not simply a number based on a test, and that every person has unique learning strengths and weaknesses (Michael, 2003). "Like any other aspect of intelligence, it represented to him a pattern of cognitive strengths that include, but are not limited to, the abilities to produce diverse responses to varied tasks," (Starko 1995). This work supports the research by Terman (1920), leading both to conclude that intellectual ability alone was not enough to predict significant accomplishment and knowledge about life.

Investment Theory

A second theory also focuses on factors outside of intelligence. Sternberg and Lubart (1991) designed an investment theory that recognized the importance of the social and cultural context in which people learn. They call their theory of creativity an Investment Theory, taking the view that, “to the extent that true creativity seems rare, it may be because many people are not willing to invest in it,” (Sternberg & Lubart, 1991, p.1). The investment theory suggests that individuals must “buy low and sell high” to achieve creativity (1991). That is, pursuing an idea that is highly unique, or “buying low,” increases the probability of generating a creative product, or “selling high.” Individuals that pursue ideas that are not novel or out of favor are less likely to achieve valuable, original results. This investment theory offers six types of interacting resources that contribute to creative performance: intellectual processes, knowledge, intellectual style, personality, motivation, and environmental context.

Sternberg (1985) designed a triarchic model of intelligence that includes components specific to creativity. The three different kinds of intelligence in his model are:

- Analytical thinking, which focuses on planning, monitoring, reflection, and transfer.
- Creative thinking, which focuses on developing, applying new ideas, and creating solutions.
- Practical thinking, which focuses on selecting and shaping real-world environments and experiences.

Simply having high intelligence in one or more of these three intelligence domains is not enough; success is dependent on how well they are balanced against each other (1985). Through metacognition, an individual decides what mode of thinking is

appropriate under certain conditions. Other components of intelligence seen as important in creativity are problem definition, strategic use of divergent thinking, selective combination, and selective comparison of information.

The investment theory also examines the role of knowledge in creative performance, envisioning it as upside-down U. Low amounts of knowledge are associated with limited creativity. High levels of intelligence may limit creativity because the person becomes so immersed in the current state of information that it is difficult to find a new or enlightening perspective. In addition to connecting creativity to knowledge and specific components of intelligence, Investment Theory is also characterized by a “style” that “prefers to create its own rules, attack unstructured (rather than rigid or prefabricated) problems, and be involved in ‘legislative’ tasks such as writing, designing projects, and creating business or educational systems,” (Starko, 2005, p. 50). Sternberg and Lubart also note connections to specific personality characteristics, including tolerance of ambiguity, intrinsic motivation, and moderate risk taking. Finally, they also emphasize the importance of task-focused motivation and environmental variables in supporting creative activities. Through this lens, the complex interactions of the six types of resources necessary for high-level creativity account for the relative rarity of such accomplishments.

Along these lines of investment, Balkin (1990) supported the idea that creativity could be taught. He distinguished between talent and creativity; talent is natural, yet creativity is an acquired behavior. Children and the adults working with them should recognize that discipline and practice are vital to creative work, and talent may be only play a small part. Therefore, creative potential can be enhanced through consistent

instruction and practice. In the classroom, core attitudes for creativity can be taught and nurtured. Children should be surrounded by models of professional and creative work to inspire their ideas and thoughts (Hickey & Webster, 2001; Stephens, 2003). Teachers can model the creative process for children by taking part in creative projects with their students. Likewise, parents can encourage creative behavior in the home through hobbies, lessons, and recreational experiences. As children learn through play, they are continually making meaning through their own experiences in a manner that is both unique and productive to them. Other people, family members, teachers, and siblings, serve in a role to encourage and nurture this meaning. These theories focus on creative performance rather than simply creative potential and take into account the actions of an individual. This leads us to the social-constructivist perspective.

Learning, Through a Social-constructivist Lens

While exploring the creative practices of children, learning will be viewed largely through the social-constructivist perspective. This lens emphasizes a construction of knowledge by individuals who are actively involved in their own learning. Behaviorists argue that learning is simply a result of stimulus-stimulus and stimulus-response associations that, when reinforced, grow stronger in nature. To the behaviorists, the state and psyche of the unconscious is largely irrelevant, as all learning takes place at the conscious level (Tracey and Morrow, 2006). To B. F. Skinner (1971), an individual's level of creativity will depend directly upon his prior conditioning in such ways that these

experiences will either increase or decrease the likelihood of a given behavior, depending upon the reinforcements given.

Social-constructivists, however, see creativity as more than the product of genetic and environmental influences, and they emphasize the role of social interaction in the development of cognition. This approach accounts for the unique needs and balances that shape the creative potential of an individual. Vygotsky (1978) stressed that community was a major factor in the child's ability to "make meaning" and argued that, "learning is a necessary and universal aspect of the process of developing culturally organized, specifically human psychological function" (1978, p. 90). In other words, social learning tends to precede development.

*Learning Through Imaginative Play: Improvising on Dispositions and Knowledge
Systems*

The participants' ability to utilize their creative literacy experiences to help them acquire and understand the world around them is a concept posed by many others. Vygotsky (1978) explained that play is "a leading factor in development" (p.101). He believed that imagination begins with child's play and transitions into "the conscious realization of its purpose" (p. 103) that can be regulated by inner speech. The imagination of a child's play is linked to their understanding of the daily events in their own lives. Related to Vygotsky's understanding is schema theory (Anderson 2004, Bartlett 1995), which explains that people organize everything they know into knowledge structures, or schemata. Every child has individualized schemata, thereby leading to differences in existing schema that greatly influence their learning. Likewise, contemporary learning

theory acknowledges human learning to be a complex, goal-oriented process (Starko 1995).

Examining early literacy is not complete without discussing the role of play. Children have a genuine desire to learn as they play, explore, and ask questions. At home, a child's play is spontaneous and freely chosen; it is quite imaginative. Indeed, it can be described as creative. While children can have fun naturally and are often creative in the process, it is apparent that there is a specific connection between a child's play at home and their developing creativity. Lev Vygotsky (2003) concluded that, "in play a child creates an imaginary situation" (p. 93). Thus, the purpose of this section is to discuss the influence of imaginative play on a young child's ability to learn, which is accomplished through Vygotsky's scaffolding and the zone of proximal development.

Vygotsky emphasized that play is "a leading factor in development" (p.101, 1978). In particular, Vygotsky saw the use of objects in symbolic play as key to the development of imagination. This is seen in Vygotsky's example of a young child who wants to ride a horse but cannot. Instead, the child uses a stick to pretend he is riding a horse, so that "play provides a transitional stage in this direction whenever an object becomes a pivot for severing the meaning of horse from a real horse" (p.97). A child begins to develop abstract meaning through play in his early years at home as he "operates with meanings detached from their usual objects and actions" (p. 98, 1978). This, Vygotsky argued, "From the point of development, creating an imaginary situation can be regarded as a means of developing abstract thought" (p. 103). Creativity is, in the simplest sense, bringing something new into existence. This is what occurs as children make object substitutions in play.

Using imagination to create abstract thought is further supported by Piirto's definition (2004), since creativity, "is in the personality, the process, and the product ... with optimal environmental influences of home, school, community and culture, gender, and chance" (p. 37). When engaged in imaginative play, a child is using an object in a different way than intended. Likewise, according to Vygotsky, "the child sees one thing but acts differently in relation to what he sees. Thus, a condition is reached in which the child begins to act independently of what he sees" (p. 97, 1978). One example is children's use of blankets and chairs to create "tents" as they pretend to camp while still in their homes. Other young children become more enthralled with the box their new toy came in, rather than the toy itself, and use the boxes as objects to stack or places to climb and hide in. Such independence marks the beginning of action stemming from ideas, rather than from objects. The child is making a sensible connection between two subjects, such as blankets and tents, which is an essential part of creativity.

Kress's notion of representation (1997) can also be applied to a child's play because it acknowledges how children's choices illustrate the flexibility in their imaginative play. Kress noted that, "the requirements of representation are that I, as the maker of a representation/ sign, choose the best, most plausible form for the expression of the meaning that I intend to represent. The example of the car....is an instance of that: circles to stand for wheels, and wheels to stand for car" (p.14-15, 1997). Therefore, as children play, they create representations for the items in their home environment, and these are unique to the child. Their chosen representations are a way of making meaning. According to Kress, the "interest of makers of the representation/ sign leads them to choose one aspect of the thing they want to represent as being criterial at that moment for

the representation of the object; they then choose the most plausible form which is available to them for its representation” (p. 14-15, 1997). Naturally, the child’s chosen representation represents an interest in a situation, topic, or design. To children, play is so constant and integrated that they have many opportunities to engage in imaginative and kinesthetic activities. Their interest serves as a motivating factor to continue play in a manner that is meaningful for the child. The child engaged in make-believe knows that the object he is interacting with is actually cardboard box, but he might pretend it is a car; in a sense, it is both a box and a car at once. This child has engaged in play that is both high in quality and novel, as noted by the definitions set previously. Make-believe play, therefore, provides evidence of a considerable amount of intellectual flexibility in the child. This flexibility that occurs during play is a key ingredient in the creative process, and one that can be developed in the home setting and carried over into the classroom learning environment. Symbolic play is crucial in the development of creative imagination. It develops into a consciously regulated mental function that influences, and is influenced by, inner speech and concept development. In this theory, linking imagination and thoughts begins in childhood, continues in adolescence, and reaches maturity in adulthood. Following this theory can help understand what it means to analyze creativity.

Because this dissertation examines the perceptions of creativity and the connections between them, this study recognizes the importance of participants’ individual experiences and ideas, as well as the variety of students’ literacy experiences and modes of learning.

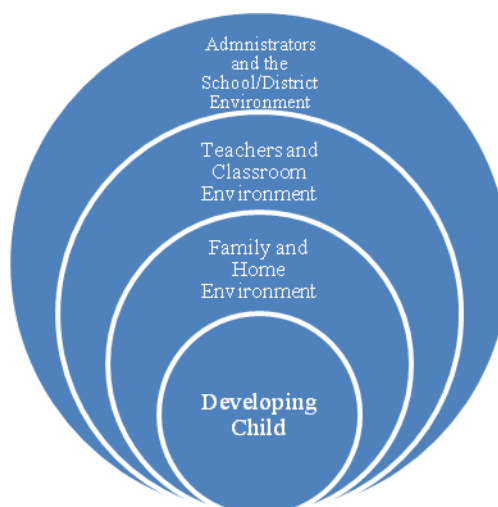


Figure 1. Spheres of Influence on a Developing Child's Creativity

Upcoming Chapters

With this conceptual frame, I have developed case studies of five families and their home creative practices. In the literature review of Chapter two, I explore several definitions of creativity, link creativity to literacy, establish why creativity is an essential skill, provide an overview of research in creativity, and explore the implications for promoting the creative development of children. Chapter three provides the methodology utilized in my study, introducing the participants, context, and setting, and explaining the methods used for data collection and analysis. First I will describe how the data was obtained, coded, and analyzed, and then Chapter four is a discussion of these findings, with sections related to teachers, administrators, and families. In this chapter, there is detailed portrayal of each participating family, teacher, and administrator, as well as a cross-case analysis of the data that connects the findings to research and various theories. In addition, I will discuss the children's artifacts, which were their photographs of what they considered to be creative. Finally, Chapter five examines the strategies suggested by

participants and analyzes the content of the students' captured photographs. My dissertation concludes with implications for the elementary classroom and recommendations for future research.

CHAPTER 2

Literature Review

In an essay for *Time* magazine, (November 22, 2010) Nancy Gibbs noted that, “Creativity can be an admirable end in itself- but it’s also a route to power” (2010). She shared the story of Connecticut wife and mother Marion Donovan, who grew tired of doing laundry in 1946: “She sat down at her sewing machine with a shower curtain, and the next thing you knew she had invented the reusable diaper cover, which she ultimately made out of nylon parachute cloth and sold at Saks Fifth Avenue. Then she designed an absorbent paper for a completely disposable diaper--which every large manufacturer told her was ‘superfluous and impractical,’ until the people at Pampers realized otherwise” (2010).

When many people first think about “creativity,” there is an automatic connection to the arts: drawing, painting, music, or dramatic play. Even when hearing about my research, so many people were quick to assume I was studying art. However, creativity actually has significant relations to social studies, science, and mathematics; “the age-old belief that the arts have a special claim to creativity is unfounded. When scholars gave creativity tasks to both engineering majors and music majors, their scores laid down on an identical spectrum, with the same high averages and standard deviations. Inside their brains, the same thing was happening- ideas were being generated and evaluated on the fly” (Bronson and Merryman 2010). From NASA to Apple to the Nobel Prize, our society is based on inventions, technology, and innovations that resulted from people visualizing a problem and a unique solution. Creativity can build on all disciplines, with

children learning that there is often more than one way to solve a problem, and that the problem-solving process is just as vital, if not more so, than the end result. Adopting such an approach to teaching still delivers content while creating a learning environment conducive to higher-order thinking skills; these are the same skills tested in classrooms year after year. At a young age, students can learn these higher-level thinking skills by evaluating ideas and making decisions independently.

In 2010, *Newsweek's* cover story was titled "The Creativity Crisis," and authors Bronson and Merryman reported that, for the first time in recent years, America's scores in creativity were declining. Some critics are quick to blame the decline of creativity on video games and other electronics, and others lamented the current emphasis on standardized testing in school. Still others ponder the lack of creativity development in schools; "there's no concerted effort to nurture the creativity of all children" (2010). Whatever the reason, the effect is clear: creativity needs attention, now.

Valuing the identity, knowledge, and being that are developed in both the home and school environments helps students find meaning in their learning as they develop the unique knowledge and skills that are applicable to their own lives. Creativity is significant in the classroom, and extending beyond into a fast-paced, ever-changing hectic world. In light of this, the purpose of this chapter is to examine what theory contributes to a greater understanding of creativity, and to discuss its connection to literacy and development. This will be done by comparing various definitions of creativity, establishing why creativity is an important skill, and providing an overview of research in creativity. Creativity is an integral part of the literacy curriculum, and more than ever, students are problem-solving in different ways due to technology, new forms

of communication, and increased multiculturalism. Together, these forces have created more necessity for creativity and innovation in the curriculum.

Learning will be viewed through the social-constructivist perspective as we examine the recent push for creativity and innovation. This dissertation will then investigate what creativity looks like in both the home and school environments by examining children's imaginative play; this will occur first through Vygotsky's scaffolding and then the zone of proximal development(1977) . In addition, Gunther Kress's notion of 'preliteracy' (1997) will be utilized while discussing the social and cultural aspects of learning. Next, children's early literacy skills and their implications for the formal school environment will be explored through the work of Shirley Brice Heath (1983) and Anne Haas Dyson (2009). Finally, skills and strategies for fostering creativity both in the classroom and at home will be discussed, as well as discussing how it can be measured and analyzed.

What is Creativity? Exploring and Establishing a Definition

In viewing learning as a creative practice, it is necessary to define creativity from this perspective. Providing a definition for creativity has been a constant challenge due to its abstract and subjective nature, and also because educators, psychologists, scientists, and researchers view creativity from different perspectives. In fact, Getzels (1975) stated that there is no universal agreement on the definition of creativity. It is such a "gray area" because what one person considers creative, another may not necessarily agree.

Defining creativity from a social perspective requires one to examine the specific personality traits that are characteristic of creative individuals. This includes patterns of aptitudes, interests, attitudes, and temporal qualities (Sternberg, Grigorenko, & Singer,

2004). Jane Piirto (2004) does just this, noting that, “creativity is in the personality, the process, and the product within a domain in interaction with genetic influences and with optimal environmental influences of home, school, community and culture, gender, and chance. Creativity is a basic human need to make new” (p. 37, 2004).

Vernon also emphasized the person by defining creativity as, “a person’s capacity to produce new or original ideas, insights, restructuring, inventions, or artistic objects, which are accepted by experts as being of scientific, aesthetic, social or technological value” (qtd. in Esquivel & Hodes, p. 136, 2003). Likewise, Howard Gardner, known for his theory of multiple intelligences (1983), considers the idea of a new product by defining a creative individual as, “...a person who regularly solves problems, fashions products, or defines new questions in a domain in a way that is initially considered novel but that ultimately becomes accepted in a particular cultural setting” (qtd. in Feldhusen & Westby, 2003, p. 101). Perkins (1988) distinguishes between a creative result and a creative person, noting that, “a creative result is a result both original and appropriate. A creative person- a person with creativity- is a person who fairly routinely produces creative results” (p. 311). MacKinnon’s (1962) definition of creativity emphasizes process as well as product:

True creativeness fulfills at least three conditions. It involves a response or an idea that is novel or at the very least statistically infrequent. But novelty or originality of thought and action, while a necessary aspect of creativity is not sufficient . . . it must to some extent be adaptive, to, or of, reality. It must serve to solve a problem, fit a situation, or accomplish some recognizable goal. And, thirdly, true creativeness involves a sustaining of the original insight, an evaluation and elaboration of it, a developing of it to the full. Creativity, from this point of view, is a process extended in time and characterized by originality, adaptiveness, and realization. (p. 485)

Sternberg (2001) summarizes the varying definitions by pointing out that while they differ, they “... have in common their emphasis on people’s ability to produce products that are not only high in quality but also novel” (page 360). Therefore, this chapter will focus on these definitions that emphasize not only the role of the individual, but also the importance of what is both high in quality and novel.

The notion of value is important to creativity as well. Vernon talks about “ideas or insights” being “accepted by experts as being of...value” while Gardner (1993) closes his definition by insisting that, ideally, the novel idea “ultimately becomes accepted.” Amabile (1987) and Perkins (1988) both use the word “appropriate,” as an idea proposed as being creative must be suitable for a particular purpose. MacKinnon (1962) points out that an idea “must to some extent be adaptive, to, or of, reality” and must achieve a goal that is “recognizable.” Thus, any idea must be realistic and recognized as valuable within society, and has to be assessed within a normal and standard framework.

The subjective nature of cannot be emphasized enough. What is creative to one person many not be creative to another. After having reviewed many definitions for creativity, there were several consistencies among definitions. Amabile (1987), Gardner (1993), MacKinnon (1962), and Sternberg (2001) all utilize the word “novel” while Vernon refers to “new or original ideas, insights, restructuring, inventions, or artistic objects” (1989, p. 94) Perkins (1988) also uses the term “original.” For an idea to be novel, it needs to be different from what has been seen or known before. Being creative means breaking from tradition and creating something both new and meaningful. For this dissertation, I will use the definition that creativity is novelty, or the ability to present concepts and ideas, while new or previously existing, in an original way. This emphasizes

not only the role of the individual, but also the importance of what is high in quality, novel, and valuable (Piiro 2004, Sternberg 2001, Perkins 1988, Gardner 1983, MacKinnon 1962).

Analyzing Creativity

Proctor and Burnet (2004) developed a “Creativity Checklist” that describes the different types of creative thinkers. The list was designed to recognize the different types of creativity that exists, rather than to confine creativity into a finite number of behaviors or categories. Proctor and Burnett’s nine types include:

1. *A Fluent Thinker* is full of ideas; finds different ways of doing things; answers questions fluently and readily; hypothesizes easily; generally possess high verbal fluency; can list, tell/retell, label and compile easily; answers (fluently) questions such as How many? Why? What are the possible reasons for? Just suppose...?
2. *A Flexible Thinker* can solve, change, adapt, modify, magnify, rearrange, reverse, and improve; is versatile and can cope with several ideas at once; is constructive and mentally builds and rebuilds; is sensitive to new ideas and flexible in approach to problems; can tolerate ambiguity
3. *An Original Thinker* can create, invent, make up, construct, substitute, combine, compose, improve and design; is attracted by novelty, complexity, mystery; asks *What if?* questions
4. *An Elaborative Thinker* can enlarge, extend, exchange, replace and modify; goes beyond assigned tasks; sees new possibilities in the familiar; embellishes stories/situations
5. *An intrinsically motivated student* often seeks out knowledge independently; does a job well for its own sake, not for rewards; appears to enjoy learning for learning’s sake
6. *A Curious Students who Becomes Immersed in the Task* tries to discover the unusual or find out more about a topic of interest; unable to rest until the work is complete; possesses a sense of wonder and intrigue; possesses a high energy level; is adventurous and engages in spontaneous action; can uncover, investigate, question, research, analyze, seek out and ponder
7. *A Risk Taker* will challenge, criticize, judge, question, dispute and decide; is not afraid to try new things; is not afraid to fail; can rank and give reason, justify and defend, contrast and compare, devise a plan, and make a choice between
8. *An Imaginative or Intuitive Thinker* will fantasize, create, compose, invent, suppose, dramatize, design, dream, wish; is perceptive and sees

relationships; can make mental leaps from one idea to another and from the known to the unknown

9. *A Student Who Engages in Complex Tasks and Enjoys a Challenge* can evaluate, generalize, abstract, reflect upon, move from concrete to abstract, move from general to specific, converge and has problem tolerance; is not easily stressed; does not give up easily; is often irritated by the routine and obvious
The first four types of thinkers, fluent, flexible, original, and elaborative, are Guilford's four traits, and the next five acknowledge other characteristics.

The term "checklist" does not mean to imply that a person must reflect each of the different types of thinkers. There is no minimum requirement to meet Proctor and Burnet's notion of creative thinkers. Rather, the list is designed to recognize not just the typical "artsy" creativity, but a full range of thinkers and ideas.

The *Design and Technology of the National Curriculum in England* (2004) came up with a list of characteristics of innovative and non-innovative work. While innovation is not an exact synonym for creativity, it is a part of its definition.

Work Rated as Highly Innovative	Non- Innovative Work
different exciting unusual bending the rules brave determined professional confident powerful unique	controlled focused orderly predictable honest reliable thorough thoughtful

At school, the emphasis is often placed on convergent questions, or finding the "right answer." Divergent and convergent thinking will be discussed more, but it is interesting to note that the words describing "non-innovative work" are often characteristics of a typical, well-managed classroom. Because of the "fuzziness" in examining what is creative, the three words quality, novelty, and value, will serve as the

framework for creativity, with the idea to emphasize what the participant feels is high in quality, novel, or valuable. The overall goal is to share perceptions of teachers, administrators, and parents, so therefore what is creative to them is what will be reported. The next section explores the implications for literacy as young children use their imaginations to play, create, and draw.

Early Literacy at Home: The Start of Creativity

Lucille Clifton, an American poet, once said, “It’s important to nurture your image of what’s possible. We can only create what we can imagine,” (as cited in Calkins, 2003, p.4). When children draw, they often tell stories as they do so, add occasional letters, and pretend to read. This experimentation with early literacy activities sets the tone for learning in school. Viewing learning through such the social-cultural lens allows individuals to be seen as agents who create meaning while they develop perceptions, values and goals relevant to their own schema. The purpose of this section is to discuss how early literacy serves as the catalyst for creativity and early meaning-making from a young age.

Examining early childhood scribbling and drawing provides a tangible link between what is done in the early years at home and what will be done during the more formal schooling years. Early writing activities tend to be more visible than early reading activities because they involve making something. If given crayons or pencils, children usually begin to scribble around the age of eighteen months; they find scribbling interesting because it leaves a visible mark (Whitehurst and Lonigan 1998). When children encounter print in their environment, they incorporate this visual information into their scribbling and pretend writing. As scribbling develops, it begins to resemble

various features of conventional written language, such as linearity, horizontally, and repetition (1998). As children learn that marks and letters represent or stand for something, they are developing an understanding of the central importance in learning to write and read.

As children grow, scribbling gradually turns into drawing during the preschool years. Neuman (2004) writes that with many young children, there is a close link between their drawing and writing. On just one page, they may draw pictures, write random letters, and scribble. As they do this, they are actually experimenting with several different writing forms. Yet, at other times, they begin to combine drawing and writing to communicate a message that can only be interpreted when they explain it. At this point, children do not recognize that writing stands on its own and can substitute for talking (Neuman 2004). When watching children playing, it can be seen that their play also includes experimentation with writing. Like the imaginative play discussed early, these early games assist children in acquiring literacy skills, as they help children to recognize the functions and purposes of writing. In addition, children begin to understand that writing is an important activity in regards to learning and communicating.

Scribbling and drawing at home during years before kindergarten serve more functions than play, as these activities become the catalyst for early writing in the elementary classroom. According to Dyson (1993), drawing is a necessary form of organizing writing for young students, at it is a way that young children gather and organize ideas. She defines learning to write as, “the process of gradually differentiating and consolidating the separate meanings of two forms of graphic symbolism, drawing and writing,” (1992). For young children, written words may be drawn objects. This is

seen in the preschool, kindergarten or even first grade classroom as children draw and label their pictures. Lines and curves are used in the drawing of items, and this knowledge is applied to the lines and curves used in writing (Dyson 1993). This is seen in young children as they experiment with writing through scribbling, where the child scribbles but intends it as writing. A child progresses by writing letter-like forms, where the child makes marks that resemble letters by using lines and curves. A child continues by writing previously learned units by using letter sequences learned from other sources (Morrow, 2005).

Emergent literacy knowledge provides a necessary foundation on which to build other learning. Research examining early literary knowledge and the conditions and contexts that foster it indicates that early childhood exposure to oral and written language assists children in learning to read. Experiences with print through reading and writing help young children develop an understanding of the function and purpose of print. Children learn about print from a variety of sources, including books and other media. This leads children to a realization that print, rather than pictures, is what communicates the main message. Children also begin to learn how text is structured. They notice that, in English as well as many Western languages, writing begins at the top of the page, moves from left to right, and carries over to the top of the next page when it is turned. The knowledge that printed words carry a message helps children close the gap between drawing and written language.

Scaffolding is an effective strategy to access the zone of proximal development because it allows a teacher to provide students with the opportunity to extend their current skills and knowledge (Vygotsky 1978). Ideally, children are able construct their

individual pieces of writing with teacher guidance, assistance and feedback. Teachers can encourage students to respond, examine and reflect upon their responses. Out of those elements they will create their understandings of the text and learn to express themselves. Early writers can draw pictures for their stories and label these drawings to carry their story. They gradually learn to write sentences and even paragraphs to accompany their pictures. The overall goal of writing should be for children to learn the rituals and structures of writing and to learn to carry on with some independence. The teacher charged with developing beginning reading skills will encounter children with varied literacy experiences, diverse languages, and different literacy approaches.

Scaffolding Opportunities for Abstract Thinking

Transferring knowledge from playing at home to learning in school relies not only on the child's experience, but on the adults with whom s/he interacts. In "Interaction Between Learning and Development," (1978) Vygotsky emphasized the need for adults to scaffold opportunities for more abstract thinking. He saw concrete thinking, "as necessary and unavoidable only as a stepping stone for developing abstract thinking- as a means, not an end in itself," (p.89). Learners need to receive support and guidance in order to encourage an individual purpose for learning. Thus, scaffolding, the process of guiding the child from what s/he does know to what should be known, is necessary. The purpose of this section is to investigate how scaffolding opportunities for abstract thinking in young children allows for purposeful, meaningful learning, specifically for creativity.

Play provides a transition between, "the purely situational constraints of early childhood and adult thought" (Vygotsky, p. 98, 1978). Thus, early childhood play serves

as a springboard for a connection between imagination and thought. This connection strengthens as older students develop the ability to manipulate abstract concepts. They begin to develop a more solid creativity than that of childhood, and this helps the child prepare for learning in the school environment (Vygotsky, 1978). In the school setting, young children are experimenting in a manner that may be different than at home, especially as they approach an age where abstract thought is slowly developing. Faced with a divergent problem, there are multiple solutions that allow open use of their imaginations. Adults can scaffold by assisting students in structuring their solution around their personal talents and expressions. Just as Vygotsky saw the use of objects in symbolic play as part of a developing imagination, students need opportunities to make connections between an object's intended use and other possible uses (Vygotsky, 1978). Play leads to imagination, and imagination to abstract thought. Resulting are Vernon's "new or original ideas" (2003) and Perkins "original and appropriate results" (1988): the essence of creativity.

According to Vygotskian theory, formal schooling and life experience contribute to the richness of one's imagination, the catalyst for creative activity. Vygotsky reasoned that learning takes place when a student encounters difficulty, as "teachers present problems to be solved as opposed to information to be memorized" (Wink and Putney, 2002, p. 8). As teachers scaffold opportunities for students to use these experiences, they begin to create knowledge. In reviewing Vygotsky's work, Wink and Putney distinguish between "just tell me how to do it" methods (p. 8), which "will not sustain teaching in the always-changing social cultural context" (p. 8). Theory, on the other hand, is a way "to understand, articulate, and adapt practice to meet the needs of students" (p. 8). The same

distinction can be made regarding creativity, where methods of teaching creativity are not as relevant as understanding theories in support of creativity.

The role of teachers is not limited to providing instruction within school, but also to help learners and their families find a comfortable connection between school and their home life, examine assumptions toward learning, and find an individualized purpose for doing so. The essence of learning is to provide a meaningful and relevant context, so that students are able to seek out their individual goals for attending school. The question of authenticity in the classroom is discussed often, as one overall goal of instruction is to bring meaningfulness and purposefulness to the classroom. Few people would argue with the idea that student motivation is an important influence on learning. There is a need for active support to improve reading in learners. Students, whether as children or adults, who are taught how to set attainable goals, how to reach these goals, and how to maintain a level of quality, become engaged in and accountable for their own education. Knowing this acknowledges the importance of building a bridge between what has already been learned and what can be learned.

Zone of Proximal Development

Vygotsky described the Zone of Proximal Development as “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (1978, p. 86). Vygotsky believed that understanding is social; “human learning presupposes a specific social nature and a process by which children grow into the intellectual life of those around them” (Vygotsky, 1978, p. 88). Teaching can also scaffold student learning by providing

support for activities that promote abstract thinking. In reviewing Vygotsky's work, Wink and Putney (2002) also distinguish between knowledge of and experiencing, and quoted a teacher who remarked that knowledge of swimming is quite different than experiencing swimming. Likewise, knowledge of creativity is different than experiencing creativity, just like methods versus theory, as noted above. Teachers have opportunities to building the bridge between knowledge of what creativity is, and scaffolding opportunities for children to experience creativity first-hand. For example, a teacher who discusses creativity and its importance, and even includes creativity as part of a grade is only teaching what creativity is. A teacher who actively involves students by exemplifying highly creative works, discussing and encouraging Guilford's notions of fluency, flexibility, originality, and elaboration, and allowing opportunities for creation is allowing a child to experience creativity. By offering a conceptual framework for learning, students are able to make connections between the information discussed in the classroom and their own lives.

Vygotsky's zone of proximal development (1978) serves as a bridge between what is known by the learners and what could be known. This is an excellent example of how teachers scaffold between what skills the child has previously acquired at home and utilizes them to begin instruction. This is the essence of the guided reading instruction that frequently appears in the primary classroom; it is the bridge between independent and instructional reading. Children begin with the literacy skills they have acquired in the home environment. These vary greatly from simply distinguishing between print and drawing, to knowing letters and sounds and attempting beginning decoding strategies. Learning occurs as the teacher first models appropriate reading strategies and then guides

the students as they incorporate these strategies. As children just begin to acquire reading skills, they learn strategies that incorporate phonics, utilizing picture for information, or relying on context clues, to help them decode new words. As they master these, they learn comprehension strategies, such as prediction, summarizing, inferring, or evaluating, to help them interpret meaning from text. Support comes through explicit teaching and occurs over time until students master the introduced strategies, and then know how and when to use them (Wink and Putney 2002). Following the social-constructivist approach, children bring different cultural contexts for learning, and it is these individual differences that promote learning. Because the research questions focus on the perceptions of the teachers, administrators, and families in a developing child's creativity, the child as an individual, the environment, and the family will be explored next.

The Role of the Individual

Early literacy and play are two examples of differences in student learning, as time has progressed, thoughts about creativity have moved away from strictly genetics and inheritance as the primary source of a creative mind. Although individuals may be born with factors for creative potential, such as intelligence, the purpose of this section is to explore how an individual student's strengths and skills, notably personality, contribute to an overall development of creativity. Maslow (1968) noted, "My feeling is that the concept of creativeness and the concept of the healthy, self-actualizing, fully-human person seem to be coming closer and closer together, and may perhaps turn out to be the same thing" (p. 55). Following the social-cultural perspective, the human capacity for growth is exceptional.

Allport (1937) defined personality as, “the dynamic organization of distinct psychological characteristics of an individual that determines his or her adjustment to the environment” (p. 48). Although these traits are generally of a temperamental, motivational, and social affective basis, they are closely related to the cognitive nature of creativity. In addition, personality factors and experiences may also influence the process of creativity (Esquivel & Hodes, 2003). Based on the definition used in this dissertation, it became necessary to study the link between personality and creativity. Just as it is impossible to establish one definition of creativity, it is impossible to identify one specific type of personality profile that is typical of the creative individual, and determine which traits distinguish the creative from the non-creative. In the past, creativity has been researched as relating to a given set of personality characteristics and how individuals display these traits (Gladwell 2008). Currently, creativity has become a study of individual differences, as well. Recent work (Csikszentmihalyi, 1996; Runco, 2010) has emphasized the importance of individuality and uniqueness in understanding the personality of the creative.

Terman’s work in the 1920s not only concerned the relation between intelligence and creativity, but also discussed personality characteristics. He found that intellectually gifted children displayed positive personality traits, including motivation, curiosity, and a positive self-image (Houtz, 2003). This research was one of the first to view personality as an integral part of creativity. Characteristics such as flexibility, sensitivity, and autonomy seem to be emphasized as traits that creative people possess, in addition to openness to experience, self-confidence, introversion, aloofness, and rebelliousness (Csikszentmihalyi, 1996). Such people also seem to have the ability to be playful in

addition to being hard-working, introverted as well as extroverted, and conservative yet rebellious, as the occasion requires (Csikszentmihalyi, 1996). They may also value their work for more than salary (Csikszentmihalyi, 1996), causing them to pursue it for more personal, intrinsic reasons. Although seemingly contradicting, these traits enable individuals to exhibit curiosity and interest in their professions.

Dacey reported eight essential personal qualities of the creative mind (1989).

They support Csikszentmihalyi's findings, as they concern:

1. *Tolerance of ambiguity*: The ability to remain open-minded in the face of ambiguity and to postpone the need for closure, a major trait vital to creativity and to the seven following traits.
2. *Stimulus freedom*: The ability to break free from assumptions about a situation and to disengage from a particular mind set, involves the ability to bend rules and to cross the boundaries of structure without anxiety or fear of being wrong.
3. *Functional freedom*: The ability to seek alternate patterns and to use different approaches for defining and solving problems. The opposite, *functional fixity*, is a rigid way of seeking solutions that interferes with problem solving.
4. *Flexibility*: The ability to see the entire aspects of a situation or to view problems holistically and from different perspectives.
5. *Risk Taking*: The ability to take moderate risks as opposed to limited or miscalculated huge risks, highly correlated to tolerance of ambiguity.
6. *Preference for disorder*: The ability to tolerate disorder and complexity and to find it more interesting and a challenge to be able to bring personal order out of disorder.
7. *Delay of gratification*: The ability to persist and to postpone satisfaction with the purpose of reaching a higher level objective.
8. *Androgyny*: The ability to integrate both feminine and masculine aspects of personality, without being bound by gender-role stereotypes. The higher level of gender-role identity has been linked to creativity.

Thus, creative individuals are distinguished more by their interests and attitudes than by their intellectual abilities. Sternberg and Lubart's Investment Theory (1991) was previously mentioned; it also connects specific personality characteristics to creativity,

including tolerance of ambiguity, intrinsic motivation, and moderate risk taking.

Likewise, Runco's 2010 "Parsimonious Theory of Creativity" from *A Judicious freedom of thought* contains a number of similar traits.

- Autonomy (interested in unconventional ideas)
- Courage (persistence, nonconformity)
- Wide Interests (broad knowledge base)
- Openness to experience
- Tolerance
- Authenticity (self-actualization, honesty)
- Risk Taking

Both Dacey's and Runco's lists include tolerance and risk-taking, and Runco's idea of nonconformity echo Dacey's stimulus and functional freedom. Runco's "openness to experience" is also reflective of Dacey's "flexibility." Based on an understanding of these traits, researchers can now address the role that educators play in recognizing creative characteristics in students and creating a learning environment that is conducive to creative learning for all students.

Creativity Space and Place

The importance of the individual environment of a child cannot be understated; "thus when we seek to understand learners, we must seek to understand the cultural contexts within which they have developed, learned to interpret who they are in relation to others, and learned how to process, interpret, or decode, their world" (Purcell-Gates, 1995, p. 5). Knowing that there is a relationship between creativity and personality, and that early literacy practices influence learning, leads one to next examine environment. Viewing learning, and specifically creativity, through a social lens assumes that students are more likely to develop and retain knowledge, skills and understanding if they see them as relevant to the problems and challenges in their own lives. Therefore, creative

practice is made relevant by settings and identity. Acknowledging the existence of different ‘literacies,’ illustrates how personality traits combine with different social-cultural contexts: home and school. The purpose of this section is to explore the different environments in which children participate and discuss how these influence the development of creativity.

Viewing learning through such a social lens supports the idea that creativity is a skill that can be fostered. Craft (2001) acknowledged that research concerning creativity in the 1980s and 1990s, “became rooted in a social psychological framework which recognizes the important role of social structures in fostering individual creativity” (p. 9). She reported (2001) that three major studies exploring the organizational climates that stimulate creativity all converged on major points, suggesting that it is helpful for participants to:

- feel challenged by their goals, operations, and tasks
- feel able to take initiatives and to find relevant information
- feel able to interact with others
- feel that new ideas are met with support and encouragement
- feel able to put forward new ideas and views
- experience much debate within a prestige-free and open environment
- feel uncertainty is tolerated and thus risk-taking is encouraged

This report repeatedly uses the word *feel*; creativity can be fostered within environments that focus on the individuals who create meaning while they develop perceptions, values and goals relevant to their own schema. Amabile (1988) identified the factors that support creativity by studying a group of 120 innovators working in research and development with similar results. While individual factors were important, it was the social environment that made a difference to creativity. Environments that encouraged creativity exhibited freedom, strong project management, and sufficient resources. In

addition, nearly half of the subjects also identified the need for encouragement, organization, recognition, and sufficient time. In a separate study by Amabile, also in 1988, she created a model that suggested creativity may be affected by even minor aspects of the social environment. For example, creativity could be hindered when rewards are offered in advance, time constraints are in place, there is over-supervision or competition, restricted choices, or an evaluation is expected. All of these results indicate that creativity is likely to develop in an environment that encourages freedom and novelty while offering peer interaction and support. These also support the personality traits that coincide with creativity, including sensitivity, autonomy, and self-confidence.

Examining and reflecting upon the environment is essential to understanding factors that influence creativity. There is actually quite a strong correlation between creativity and accomplishment. Data analyzed from a 1958 study of 400 third graders shows that the connection between childhood creativity and creative accomplishment was more than three times greater than that of childhood creativity and IQ (Bronson and Merryman 2010). Examining this correlation leads to the social and environmental characteristics of highly creative people. A specific combination of life circumstances may help to foster a creative individual.

Malcolm Gladwell's work on "outliers" (2008) also supports this theory. Everyone seems to love the idea of a "rags to riches" story, of an individual who rose to success independently through sheer hard work, after starting out with little or nothing. However, "...the closer psychologists look at the careers of the gifted, the smaller the role innate talents seems to play and the bigger the role preparation seems to play" (2008). Gladwell began with the birthdays of professional hockey players, reporting that

the majority of players had been born just after January 1. A January 1 “cut-off” date gave these players nearly an extra year to gain strength and skill, and therefore outperform their peers. While people maybe born with an aptitude for music, success is determined not by an innate quality, but by the hours poured into practicing; “....research suggests that once a musician has enough ability to get into a top music school, the thing that distinguishes one performer from another is how hard he or she works. That’s it. And what’s more, the people at the very top don’t work just harder or even much harder than everyone else. They work much, *much* harder” (2008).

In the 1920s, Louis Terman began to question the link between creativity and intelligence by observing children throughout their careers and reporting on their development (qtd. in Kersting, 2003). This study began by comparing a group of children with high IQs with groups of children typical of the general population to discover similarities and differences. Research continued from the initial collection date of 1922 through 1986, with follow-ups at 5-year intervals. Although all of the subjects were considered highly intelligent, Terman noted that not all students developed their ability to be creative (qtd. in Esquivel & Hodes, 2003). Terman concluded that creativity is not based on intelligence alone; other factors, either through social or environmental circumstances also affected creativity. Gladwell referred back to Terman’s original research from the 1920s regarding intelligence, creativity, and personality characteristics. When trying to determine the relation between intelligence and creativity, Terman revisited his work and later split the group of high achieving students he had studied into three groups: the As, who maintained successful careers, earned numerous degrees, and earned high incomes, the Bs, who worked at satisfactory jobs and earned some degrees,

and the Cs, who appeared to have done the least with their elite ability. In reviewing the Cs, Gladwell thought they “lacked something that could have been given to them if we’d only known they needed it: a community around them that prepared them properly for the world. The Cs were squandered talents. But they didn’t need to be” (2008). “In a devastating critique, the sociologist Pitirim Sorokin once showed that if Terman had put together a randomly selected group of children from the same kinds of family backgrounds as the Termites- and dispenses with IQs all together- he would have ended up with a group doing almost as many impressive things as his painstakingly selected group of geniuses,” (2008). Terman finally concluded “that intellect and achievement are far from perfectly correlated” (Terman, p. 352, 1947).

However, a teacher’s role in fostering creativity is not limited to its enhancement. Stoycheva (1996) also found that teachers tend to put a low value on creativity traits within the school environment. Rather, their perceptions of creativity focused on its intellectual components and problem-solving processes. Shirley Bryce Heath (1983) carried out ethnographic research in three communities in the Piedmont Carolinas and found that children whose home cultures and use of literacy were similar to the culture of literacy and communication in schools were more successful in school than children. Likewise, students whose home cultures and use of literacies were different than that of the schools did not perform as well. While students were sometimes perceived as lacking skills, this is not necessarily true. On the contrary, these students are equipped with a variety of literacy skills that are unique to their home and community discourse. While not an ideal thought, an important concept to acknowledge is the discontinuity that can occur between home culture and school culture.

Purcell-Gates observed and wrote through the lens of sociocultural theory, following the idea that, “all learners are seen as members of a defined culture, and their identity with this culture determines what they will encode about the world and the ways in which they will interpret information” (p. 4). Culture provides schema, and each child brings a unique cultural context for learning. These individual differences promote learning, yet Purcell-Gates reported that “teachers, curriculum designers, and the children, are not perceiving the school experience in identical ways” (p. 5). Both Heath and Purcell-Gates emphasize that the role of the educator is to determine how to tap into the students’ unique literacy experiences and scaffold new forms of literacy skills. The idea is not to find and carry out the one “right” way of teaching literacy in the home, but rather to value and incorporate what is carried out in different homes in a variety of ways. The culture of schools and each classroom should support individuals as unique learners who can succeed, and in doing so there must be opportunities to celebrate achievement for all. The culture of the classroom and school must make explicit, behavioral, and academic expectations that all can experience personal success. This is the essence of an environment that fosters creativity: one that offers support and interaction while encouraging freedom and novelty.

Parental Involvement

In the late 1980s and early 1990s, Lareau interviewed and observed eighty-eight white and black children from middle class, working class, and poor families. Her observations helped her to discover differences between parenting styles. She also coined the term “concerted cultivation,” where middle class families foster and assess a child’s talents, opinions, and skills. utilize a strategy of “accomplishment of natural growth.”

“Concerted cultivation” is the type of childrearing observed in middle-class parents. Parents provide a structured life for their child through extracurricular activities and parental involvement in education. These parents generally have a higher level of education, with the main advantage to this type of childrearing being that children are taught lessons through organized activities that help prepare them for future careers and the types of real life interactions they will encounter.

“The accomplishment of natural growth” is the type of childrearing that working class and poor parents practice, yet this is often not by choice. They often have less time to impose the values upon their children that will give them an advantage in school and in life. This type of childrearing yields less organized activities and more free time for their children to play with other children in the neighborhood, leaving Lareau to conclude that these children were less whiny, more creative with organizing free play, better behaved, and had a well-developed sense of interdependence.

From all her observations and analysis, Lareau concluded that the different types of childrearing have more to do with class than race. She also emphasized that one style is not morally better over the other; there are benefits and shortcomings of raising children through either concerted cultivation or natural growth. However, the middle-class children had advantages from the informal and formal lessons taught at home and after school. Children learn from parents that they have the right to speak up; “They acted as though they had a right to pursue their own individual preferences and to actively manage interactions in institutional settings. They appeared comfortable in those settings; they were open to sharing information and asking attention” (2003). The style of “concerted cultivation” perpetuates inequality because these children have of advantages

through participation in extracurricular activities, engagement in critical thinking and problem solving. These advantages remain and grow throughout a child's life, and it is these practices that perpetuate inequalities from one generation to the next.

While valuing home and school is essential, learning is not limited to just these two settings. Educators can create a unique haven for extracurricular learning that incorporates both home and school literacy values while scaffolding new forms of literacy and creativity skills. Heath identified the term "third arena" (p. 10, 2001) and its positive learning opportunities for students. In addition to her work in the Piedmont Carolinas, Heath has studied effective learning environments offered in the non-school hours to young people in different settings around the world, seeking to take into account the cognitive and situational learning that takes place. This part of her work has focused on sports teams, community organizations, extracurricular activities, and voluntary community service. However, research concerning literacy tends to focus on home or school, often not acknowledge what children do during after-school hours. She noted that, "The third arena of learning, that which takes place beyond classroom and home, is generally left unattended, minimally supported, and almost completely unexamined" (p. 10, 2001). Studying children in their "extra niches of learning" (p. 10) allows them to be seen in a natural environment while capturing their meaningful planning and leadership styles. The idea of examining this "third arena" is especially interesting in light of the recent emphasis on standardized assessment and test preparation in the school curriculum. While there are many concerns over academic achievement in schools, there is also a move to investigate the multiple sites and ways of learning beyond schools. Such

an initiation acknowledges the fact that learning is not limited to school, and places a value on the extracurricular activities in which many children are actively engaged.

Research has shown that the development of creativity plays an essential role in producing positive outcomes for youth. Programs that teach children creative problem-solving skills help them to become successful adults who determine the accuracy of information and then put it to constructive use (Todd & Shinzato, 1999). Creative thinking encourages all people, not just children, to “avoid boredom, resolve personal conflict, cope with increasing consumer choice, accept complexity and ambiguity, make independent judgments, use leisure time constructively, and adjust to the rapid development of new knowledge” (Strom, 2000, p. 59). In addition, student involvement in creative activities has been linked to a reduction in drop-out rates among students while simultaneously improving student motivation (Sautter, 1994). These real-world implications are important because, in the world around us, problems are complex and open-ended. Knowledge alone is not sufficient to reach innovative solutions. Creative thinking skills are required for success in a developing society, and it is a central factor in our ability to continue to adapt to the changing environment.

Fostering Creativity through Literacy

Examining early literacy practices challenges the idea that learning can only take place at school. As just seen, the home is a rich environment for children’s learning, and examining children’s extracurricular activities provide a glimpse into the real-life skills that are nurtured there. This is the essence of family literacy. The National Center for Family Literacy (NCFL) maintains that, “literacy is the foundation on which all learning is based,” and that “the benefits span generations: both parents *and* their children build

essential skills to learn and compete in today's economy" (NCFL site, "What is Family Literacy?" paragraph 2, 2009). According to Rowsell (2006), "family literacy emphasizes using the pleasure and comfort children's experience with texts they use at home and out in the community to motivate them and offer opportunities to develop as readers and writers" (p. 10). It is because the parents and children are investing in literacy that they do well. The same is true for creativity; when children invest in creative performance, they can be successful in its outcome.

Assuming that children have the potential to be creative brings up the question, can creativity be taught? As children play and learn, parents who encourage independence and communication without judgment can also help to nurture creativity. Families of creative children "show strong family ties and warm relationships between their members" (Esquivel & Hodes, 2003, p.142). Families are important for creative development, as parents who give their children freedom and exploration of their environment help a child to achieve a sense of autonomy. Research (Starko, 2005; Feldhusen and Goh, 1995; Davis and Rimm, 1985) has reported that skills can be used as a base for developing creativity. Thus, the purpose of this section is to first discuss connections between creativity and literacy, and then highlight specific skills and strategies that illustrate how creativity can be fostered, both at home and in school.

Creativity and Literacy

Pahl (2007) undertook a study to explore a way of approaching creativity that focuses on examining how children use different experiences from home and schools to create text. It is proposed that more complex and different domains result in a multi-layered text. The term *laminated*, coined by Holland and Leander (2004), described the

ways in which identities build up on one another and are layered within texts. The lamination metaphor is useful, thinking about how materials of different substance become fixed to one another. While the layers retain some of their original distinctiveness, there is now a different configuration. This conjures a process where subjects are positioned over time and according to the multiple identities and artefacts that they create and are subject to along the way. This is similar to the idea of multimodality (Kress, 1997), which is the combination of different kinds of modes (visual, written, oral, spatial, etc.) in a text's content and design. Before children go to school, there is a natural way in which they engage in creativity as they explore and make sense of the world around them. Within this research, the concept of a literacy practice is situated within multimodal communication.

Through the lens of the New Literacy Studies (NLS), Pahl explored a deeper understanding of creativity and literacy. In terms of the NLS, Pahl noted, "This perspective can be a theoretical tool in order to enable educators to identify creative texts" (p.86, 2007). The New Literacy Studies are based on the view that reading and writing only make sense when studied in the context of the social and cultural practices of which they are a part; "the New Literacy Studies has suggested that by seeing literacy as a social practice, its *socially situated* quality comes to the fore" (p. 86). From this view, each child is valued for bringing a unique cultural context for learning, with an emphasis on family and life experiences. "Creativity can then be understood as being the enactment of these transformations" (p. 91, 2007). Children's creations can be seen, "in the context of the multiple events and practices sedimented within them, and then extend that understanding" (p. 91, 2007). This allows for, and encourages, educators to

appreciate that literacy exists outside of school. Acknowledging the literacy implications in the creative arts should also be seen as supportive of the acquisition of creativity, and leads to a discussion of what specifically can be done to foster creativity.

Creativity How To

Guilford (1950) was among the first to describe characteristics of creative thinking: fluency, flexibility, originality, and elaboration. These four terms have been implemented in classroom settings (Cray-Andrews and Baum 1996), musical creativity (Gorder, 1980), and problem-solving. The first step in the process is for the child to become fluent. According to Cray-Andrews and Baum (1996), “fluency is the ability to go beyond the initial idea, to break away from the ‘one right answer’ assumption, to go beyond the initial idea to many ideas for solutions.” The main objective of creative problem-solving is to produce novel approaches to problems (Cray-Andrews and Baum, 1996), and novelty was a key word utilized in the multiple definitions of creativity discussed earlier. Any student can provide an answer, but it takes time and careful thought to promote multiple responses. The second step occurs after fluency has been mastered, requiring the student to change the typical direction of thought and to offer solutions from different angles. This flexibility permits a child to see more than the obvious. This also relates back to Vygotsky’s ideas concerning make-believe play as a means of developing abstract thought. Guilford’s third step is to develop originality. The child has many answers but is now moving to different answers that are unique and different. The final step in this process is to elaborate on an answer, “to move from the drawing board to the test site” (1996). The student can add details and check to see if the proposed solution works.

Guildford's original four characteristics of creative thinking (fluency, flexibility, originality, and elaboration) were expanded upon by Davis and Rimm (1985). In addition to these four skills, they added sensitivity to problems, problem defining, visualization, ability to regress, metaphorical thinking, logical thinking, evaluation, analysis, synthesis, transformation, extension of boundaries, intuition, predicting outcomes, concentration, and resistance to closure. They noted that these skills are behavioral and natural, and could be used as goals for an educational program (1983). This research was echoed one decade later, when Feldhusen (1993) listed similar skills and strategies for creative problem solving. Sensing that a problem exists, formulating questions to clarify, determining causes, clarifying the goal, specifying the problem, seeing implications of actions, selecting the best solution and carrying it out are all steps that involve the constant thinking and evaluation of the individual problem-solver. Similarly, Treffinger (1990) described a six-step model for creative problem-solving. The six steps include:

- *Mess Finding*: identifying and acknowledge the situation before proceeding.
- *Data Finding*: unearthing and collecting information, knowledge, facts, feelings, opinions, and thoughts to sort out and clarify more specifically.
- *Problem Finding*: formulating a problem statement that expresses the situation
- *Idea Finding*: brainstorming as many ideas or alternatives as possible for the problem statement.
- *Solution Finding*: evaluating all ideas systematically.
- *Acceptance Finding*: creating a plan of action to implement the solution.

Rather than following a scripted recipe to “teach” creativity, students are able to observe and question, and then take appropriate actions based on what has occurred. Therefore, it is not the specific lessons in the curriculum that make the difference to the student. There is no perfect “how to” instruction that will promote creativity in all children. The efficiency of creativity is rooted in the fact that it is tied to subjectivity,

because issues of identity bring forth different ways of knowing and understanding. However, Torrance (1987) examined 142 studies, drawing the conclusion that sufficient evidence exists to show that creativity skills can be taught. Successful programs emphasize a combination of personality factors, as discussed previously, cognitive skills, motivating conditions, and active student involvement. This also echoes what was reported in earlier sections on personality and space and place; creativity can be fostered within environments that focus on the individuals who create meaning while they develop perceptions, values and goals relevant to their own schema.

Gladwell (2008) developed the idea of an intelligence threshold by exploring convergent and divergent thinking. He began by reviewing the undergraduate colleges and universities of the last twenty-five Americans to win the Nobel Prize in Medicine, and of the last twenty-five American Nobel laureates in Chemistry. While the list certainly contains the traditional Ivy League schools, it also contains DePauw University, Holy Cross, and Gettysburg College. As Gladwell points out “it’s a list of *good* schools,” (page 119). Additionally, he highlighted the work of Liam Hudson, who had collected data from a top British high school by asking students to write down uses for a brick and a blanket. This was an example of a “divergence test,” which “requires you to use your imagination and take your mind in as many different directions as possible,” (2008). Gladwell listed the responses of several people, who were considered to be highly intelligent, and highlighted the difference between a student named Poole and another named Florence. Florence listed two uses for a brick and four for a blanket; “he identified the most common and most functional uses for bricks and blankets and simply stopped” (page 129). Poole’s list, however, had 5 uses for the brick and 8 for the blanket. “He’s

funny. He's a little subversive and libidinous. He has a flair for the dramatic" (page 128). Florence's IQ is actually higher than Poole's, "but that means little, since both students are above the threshold. What is more interesting is that Poole's mind can leap from violent imagery to sex to people jumping out of buildings without missing a beat, and Florence's can't. Now which of these two students do you think is better suited to do the kind of brilliant, imaginative work that wins Nobel Prizes?" (2008). Divergent thinking yields production.

At school, the emphasis is often placed on convergent questions, or finding the "right answer." When nurturing creativity, though, educators could ask, "Are there any other answers to that question?" Following the notion that creativity can be fostered, it is important for students to feel that their ideas are accepted and validated. Therefore, it is essential that teachers and parents provide a receptive curriculum in which to foster creative learning characteristics. In addition, educators can design goals geared towards creative development and implement teaching techniques, instructional methods, and class management styles that are conducive to creative learning (Esquivel & Hodes, 2003). Creative teaching techniques should also "include the use of brainstorming, open-ended questions, problem-solving, and imaginative activities that enrich visual, language, and kinesthetic imagery" (Esquivel & Hodes, p.241, 2003). Creative teaching should refrain from focusing on criticism and correction, but rather emphasize divergent thinking and independent learning. Learning does not imply being a spectator. They must talk about what they are learning, write about it, relate it to past experiences, and apply it to their daily lives. The result is not only creativity, but also increased levels of academic achievement.

Kress (1997) points out that, “As children are drawn into culture, ‘what is to hand,’ becomes more and more that which the culture values and therefore makes readily available,” (p. 13). As children create, some of their works “are valued, at least for awhile. Many are not noticed, and not valued, or are relegated to the value of ‘play’, for instance. Those which are valued become subject to the regulatory intervention of culture and society,” (page 13). Likewise, this relates back to Sternberg and Lubart’s Investment Theory of Creativity (1995), which states that creative people are like good investors: they buy low and sell high. Investors expect an annual return after investing. They consider ideas and invest in some; they reject if the new proposal lacks value. Whereas investors do so in the world of finance, creative people do so in the world of ideas. Creative people sometimes generate ideas that are like undervalued stocks, and both are generally rejected by the public. Sternberg and Lubart (1995) note that when creative ideas are proposed, they are often viewed as useless or even foolish, and are therefore rejected. The problem is, of course, dismissal of what is not considered “important” or “valuable” when the focus should be more on the process, rather than the end product. Sternberg (2001) notes that many “highly creative individuals defy the crown, that is, they produce products that are good but that are not exactly, and often not even approximately, what other people expect or desire” (p. 361). This creates what Sternberg calls a “person-system interaction” (2001, p. 361) and means that creativity is “the property of an individual as that individual interacts with one or more systems” (2001, p. 361). Therefore, what one might consider creative another person may not, and what may have been creative at one point may be less creative today because the idea is no longer as novel as it was before. This creates implications for the classroom, as teachers work

with different students year after year. Kress (1997) notes, “The adults’ own overwhelming focus on language and literacy makes it difficult for us to see children’s meaning- making principles” (p. 13). Indeed, a classroom is generally teacher-directed, with students following the established routines and principles guiding their instruction. Instead of limiting students to one way, teachers should be asking, “Is there another way to do this?” One way is to encourage the use of multiple materials and different mediums. One of the key components of the Odyssey of the Mind program mentioned previously is that it is entirely student-directed; in fact, students are penalized for receiving outside assistance. In teaching, educators should be careful not to unintentionally stifle imagination and exploration, or to allow their personal feelings to hinder creative exploration.

Conclusion: Creativity, Literacy, and Problem-Solving

This section explored literacy and creativity as both a social and linguistic process. When examining which theories contribute to creativity, it is necessary to review definitions for creativity. In so doing, it was noted that a number of definitions emphasize the importance of value and novelty. A rationale for exploring creativity was also given, pointing out that creativity is an essential factor in producing positive outcomes for children, and creative thinking skills are required for success in a constantly changing society. Origins of creativity were also reviewed, noting early traditions from different cultures and tracing research throughout the last century. Vygotsky served as a focal theorist, including his work on abstract thinking and the zone of proximal development as a means for scaffolding a child’s emerging abilities (1978). After defining creativity through a social-constructivist perspective, this chapter investigated both the significance

of and the connection between the home and school environments by examining children's imaginative play, first through scaffolding and then through the zone of proximal development. Gunther Kress's notion of 'preliteracy' (1997) incorporated the social and cultural aspects of learning. Next, children's early literacy skills were explored through the work of Shirley Brice Heath (1983) and Anne Haas Dyson (1993, 2009). Emergent literacy knowledge provides a necessary and important foundation on which to build. Acknowledging the literacy implications in children's drawing should also be seen as supportive of, rather than in opposition to, the acquisition of literacy skill. A secondary purpose was to reconcile the emerging evidence on emergent literacy with the demands and limitations of beginning reading for the purpose of suggesting feasible, effective and efficient instruction that ensures that all students will obtain the necessary literacy background to support successful reading acquisition. This also leads to the importance of Heath's "third haven", while acknowledging the discontinuity that can occur between home and school (1983). Considering all of this leaves one to conclude that there is no single, set way to ensure that every child develops their creative potential. Exploring such development involves looking at the student and all the impacting affective and cognitive components, including the home environment and the environments that serve as a sphere of influence for the child. Finally, creativity was viewed through the lens of literacy, and as a strategy for improving literacy standards. At this point, specific skills and strategies for fostering creativity were highlighted.

CHAPTER 3

Methodology

The aim of this research is to explore the conception that creativity can be honed through specific home and school practices, and this includes the specific methods and strategies that teachers, administrators, and parents can utilize to encourage it. The intent of this chapter will be to present the research design used for this study. This chapter will begin with a description of the school district in which this study was conducted, as well as a description of the subjects who participated in the study. This will be followed by the research questions used to gather and analyze data and an explanation of the data collection procedures and data analysis.

Situating the Study

The specific objective of this study was to determine family, teacher, and administrator perceptions of children's creativity and how these ideas shape rearing and teaching practice. This study involves the investigation into the ways participants approach, interpret, and understand the multimodal texts and sociocultural influences in their lives. Both schema (Bartlett 1995, Anderson, 2004) and learning (Sternberg & Lubart, 1991) theories help me to analyze the ways that the participants perceive and contextualize information in relation to creativity. In this study, the examination of texts, practices, and identities are examined together to shed light on the ways students, parents, teachers, and administrators understand and value creativity in the elementary years.

As this dissertation addresses impressions of creativity, it also calls attention to ways that teachers and administrators design lessons and curricula. Examining notions

from different populations within education is important because it is difficult for teachers, parents, and administrators to make good decisions about classroom and home practices that might encourage or discourage creativity without information concerning the experiences and circumstances that allow individuals to become more creative.

There is theory and research addressing basic questions about creativity, yet there are few studies about the implications for classroom life. There are not many investigations concerning motivation and creativity, and how this may affect grading, evaluation, or reward. In addition, there is surprisingly little research and theory examining the longitudinal development of creativity (Starko, 1995).

When examining the research used in the conceptual frame for this study, Starko (1995) writes about aspects of daily classroom life. However, absent from her work is a home aspect that expands on the development of creativity, and manifestations in children. There are studies that examine creativity in the classroom and others that investigate creativity in the home, but this one is unique in that it looks at the relationship between classroom and home in terms of creativity.

Therefore, this study specifically targets a varied population and proposes a topic that has not been explicitly addressed by existing research as it examines all of the different populations that directly impact the learning of a student: the student himself, parents, teachers, and administrators.

This ten-month-long qualitative study of four administrators, eight teachers, ten parents, and nine students provides insight into the ways students have experienced creativity, where it comes from, and what experiences, circumstances, and activities allow for it. The data and findings can help other educators go beyond simply providing

interesting and enjoyable classroom activities utilizing creative writing and creative teaching practices.

Research Questions

The following research questions guide this study and form the basis for which data will be collected and analyzed:

The research is designed to answer the following questions:

1. What perceptions do teachers have about creativity?
 - a. How do these conceptions shape teaching practice?
 - b. What do teachers think they can do to improve students' creativity in relation to literacy teaching and learning?
2. What perceptions do administrators have about creativity?
 - a. How do these conceptions shape administrative practice?
 - b. What do administrators think they can do to improve students' creativity in relation to literacy teaching and learning?
3. What perceptions do parents have about creativity?
 - a. How do these conceptions shape rearing practice?
 - b. What creative literacy practices take place at home, and how do parents view their significance?

In accordance with the case study design, interview and focus group transcripts, student artifacts, and field notes were used to develop a detailed account of a developing student. The following sections detail the setting where these collection measures will take place, as well as information in regards to the study participants.

Methodology and Design

Classrooms are sites for more than academics; they become environments for specific cultural and language practices where students come together to give and take meaning and understanding. Like an ecosystem, teachers, students, language, practices, beliefs, and skills should interact and influence each other. The notion of teaching has grown increasingly complex as the population increases, backgrounds vary, and policies regarding “best practices” constantly change. “The role of research, then, is to define more closely what these knowledge bases, abilities, and forms of language may be, how exactly they function in interaction, and how to afford access and proficiency” (Hawkins 2004). Before decisions can be made concerning curriculum, it is essential to investigate how cultural representations and understandings are formed in the classroom environment by teachers and administrators and the home environment by the families, and how these ultimately impact the students.

This research is framed by three bodies of work: a sociocultural approach to the study of literacy; research on situated identities and literacy practices; and examination of the importance of students’ creative artifacts in their efforts to become literate. Sociocultural theory allows me to look at ways students relate to their creative artifacts on a personal and social level. Examining the students’ photographs involves the understanding of each family’s values, beliefs, and literacy practices. Language is not only a way of communicating information but also a method of supporting social identities. Language is more than just words; it entails behaviors, attitudes, and different

tools and skills (Hawkins 2004). The ability to interact in different settings relies on the ability to rely on multiple identities. Knowing what is appropriate for each setting is crucial, and this complicates literacy teaching.

Discourse can also influence relations of power. Fairclough (2003) notes “that language connects with the social through being the primary domain of ideology, and through being both a site of, and a stake in, struggles for power.” The concept of discourse can be used to examine the ways parents, students, and teachers build their understanding of themselves and the world around them. Classroom discourse is a complex social activity, and activities must encourage learners to explore their interests, values and expectations. Knowledge is a form of power, and power is a social construction. Messages are conveyed to students within a school setting about their value in a school community. School practices produce different identities for pupils. This knowledge of different identities is not surprising, as schema theory contends that students organize what they know into knowledge structures, or schemas (Tracey and Morrow 2006). Through observation and interviews, I use schema theory to gain an understanding of the students’ prior experience on current and future perceptions and understanding.

Vygotsky believed that understanding is social; “human learning presupposes a specific social nature and a process by which children grow into the intellectual life of those around them” (Vygotsky, 1978, p. 88). He emphasized that imaginativeness of a child’s play is linked to their understanding of daily events. Keeping this in mind, designing curriculum becomes less about teaching reading and writing and more about scaffolding opportunities to learn forms of language that give access to status. For

Vygotsky (1978), discourses are embedded in communities of practice. The administrators and teachers in this study spoke about the need to secure a safe environment that encourages risk-taking as a springboard for creativity. To do so, they need to value the different discourses brought to school because they are part of the students' identity. Without acceptance, there cannot be growth.

Setting and Participants

Permission to conduct this study was obtained from the principal of the elementary school where the majority of the research took place; this permission was granted in May, 2010. This study included a total of thirty-one participants: four administrators, eight teachers, ten parents, and nine students. The highest regard has been given to ensuring privacy and confidentiality; no identifying information was used in either the research reporting or findings.

Setting

The research design included teachers, administrators, and families from a suburban school district. An upper-middle class community in New Jersey, is the setting for this study. It part of a regional school district serving students in grades kindergarten through eighth grade. There are approximately 5,466 students among seven schools. The district is comprised of one early learning center for pre-school and kindergarten, five elementary schools that house grades 1-5, one sixth grade center, and one middle school for grades seven and eight. (The high school is part of a separate, regional high school district).

The “insider knowledge” of the school and its inner workings from that of a teacher’s perspective, as well as the rapport I have the teachers, are strong advantages of this site. In addition, the school has diversity in terms of socioeconomic status, ability, and general levels of school engagement amongst students. The school that housed the study had 534 first through fifth grade students in the 2010-2011 school year. The primary language spoken in the school is English (89%), followed by Russian and Spanish (2%), and very small percentages of Korean, Mandarin, and others. 4% are students of Limited English Proficiency (2010- 2011 NJ School Report Card). The majority of students are Caucasian, followed by very small percentages of Asian, Hispanic, and black students (2010- 2011 NJ School Report Card). Due to the restructuring of schools in the district for the 2009-2010 school year, the school currently houses students in grades 1-5 instead of grades 1-3, which it had previously contained.

According to NJ ASK scores received in August, 2010, one elementary school in the district made Adequate Yearly Progress (AYP), two others did not make AYP for Students with Disabilities for Language Arts/Literacy but made Safe Harbor; they were on hold status, Year 1, for the 2010-2011 school year. Two other schools did not make AYP for Students with Disabilities for Language Arts/Literacy and did not make Safe Harbor; they were in Year 1 for the 2010-2011 school year. The sixth grade school and the middle school did not make AYP for Students with Disabilities for Language Arts/Literacy and did not make Safe Harbor. The middle school was in Year 1 and the sixth grade school was in Year 2. The principle behind Safe Harbor is to recognize subgroups and/or schools that demonstrate a significant increase in achievement even if the achievement does not reach the level of the Annual Measurable Objective (AMO).

The rule for Safe Harbor is that the percentage of students scoring in the basic category must decrease 10% from the previous year. All students must make AYP in the same subject of the Safe Harbor subgroup. In order to make AYP through Safe Harbor, the school must also meet the 95% participation rate, API, and graduation rate requirements. This information is applicable because the data was collected during the 2010-2011 school year, and many of the administrators' and teachers' responses reflected concerns about the administration of the May, 2011 NJ ASK.

Participant Selection

Thirty-one participants: four administrators, eight teachers, ten parents, and nine students were used, with the goal to include all of the people that play a role in a child's education: the child himself, parents, teachers, and administrators. My participants were chosen because I had access to them, and I believed they could provide me with a good "opportunity to learn," (Stake, 2000, p. 446). More importantly, I had already developed a strong sense of rapport with each of them, many due to the Odyssey of the Mind program, and others from time spent with their children in the classroom. "A researcher's background and position will affect what they choose to investigate, the angle of investigation, the methods judged most adequate for this purpose, the findings considered most appropriate, and the framing and communication of conclusions," (Malterud, 2001, p. 483-484). My extensive background with the Odyssey of the Mind program, from years of participating, judging, coaching, and serving on the advisory board, is what made me seriously examine creativity and how it can be utilized in the classroom and at home in the first place.

Family Participants In addition to working with teachers, five families were interviewed as a way to gather data concerning parents' perceptions and knowledge of their child's creativity. Families were used in order to explore the home-school connection and as a way to measure their perceptions of creative practices at home. Examining the creativity within the home environment helped the researcher to meet with each family in a comfortable home space, see family artifacts, and learn more about each child's life outside of school.

The method for selecting participants for this study was purposive sampling. Three of the selected families (codes F1, F2, and F5) had been involved with Odyssey of the Mind, a creative problem-solving program. This was done to ensure that families had an interest in creativity. Every family had at least one child who had been a former student of the researcher, because using former students meant that there was already an established rapport between the researcher and child. However, none of the children were students in my class during the time of the research. Using this method of sampling also increased the likelihood that each family would complete participation and would also give the researcher access to the home space.

Families were contacted through an in-person conversation to see if they were interested in participating in the study; all five families contacted displayed interest and agreed to participate. Parental consent forms, accompanied by a letter of explanation (Appendix B), were given to each family on the day of the scheduled interview. The five families selected had children of varying age levels (see Table 2) and each family had at least one child in elementary school. This way, responses from parents could be compared with those of the teachers.

The original intention had been to choose only families who had participated in this program, in order to ensure of an interest in creativity. However, one former team member from the 2009-2010 team moved out of state in September, 2010, shortly after I had begun collecting data. Two other former students were no longer of elementary age, and the intent had been to report on perceptions of creativity in elementary students. Because the program was no longer offered in the school district past June, 2010, there were not as many current students from which to choose. Therefore, I made the decision to invite two other families to participate, based on my knowledge of these children, their school practices, and their extracurricular activities.

In addition, it is important to note that five of the seven participating children were part of the district's Academically Talented (A.T. program). This occurred because I had taught the third grade class for four years, and several of them ended up in my class and/or on the O.M. team. The rapport built lent itself to including these families in the study. The A.T. program is offered for children who possess high intellectual ability, proven academic performance, higher level thinking skills, a commitment to all tasks, and self-motivation to consistently produce quality work. Students identified as having exceptional ability in both reading and mathematics and exceptional academic aptitude and intelligence, qualify for placement in this full-time program. The A.T. classes pool students from across the district and offer a differentiated curriculum emphasizing acceleration in specific subject areas and enrichment experiences in others. Instruction in all major areas has been designed to provide in-depth study, research skills and problem solving techniques.

I met with the first family (F1) in December, 2010, at their home in this NJ suburban town and conducted the interview during this session. The parents have three children: 11-year-old Kelly, 10-year-old Josh, and 6-year-old Ally. The children were given their cameras, and I explained their assignment was to take pictures of what they considered to be creative. I intentionally did not give a deadline in order to give the students' freedom. These children's pictures were taken between late December, 2010, and July, 2011. Due to the family's schedule and my own in July, I met with them in August, 2011, to discuss the photos.

I met with the second family (F2) in January, 2011, at their home in this NJ suburban town. The interview was conducted between the parents, 11-year-old Sofia, and I, and Sofia was given a camera to take pictures of items. After I tried to develop the pictures, I discovered that only one had developed properly. Since Sofia was leaving for summer camp, and it was near the end of the school year, I was hesitant to give her another camera. Instead, I brought my digital camera to school. She stayed in the school's after-care program, so after school she stayed with me and took pictures of her schoolwork and artwork that was displayed in her classroom and around the school. We also reviewed photos I had of her work as part of her two years on my Odyssey of the Mind team. The third family (F3) was interviewed in May, 2011, at a local restaurant. Both girls, 12-year-old Elaina and 10-year-old Sasha, opted to use their own digital cameras to take pictures. However, due to a problem with the family's computer, the pictures were initially lost, and then recovered months later. We met to review them in September, 2011, after the family computer was repaired. The fourth family (F4) was interviewed in their home in June, 2011. The father had been on a conference call for the

beginning part of the interview, and the younger daughter, 7-year-old Laura, was in her room. I began the interview with just the mother and her son, 9-year-old Jason, but both the father and daughter joined us midway through the interview and it evolved into a discussion between the entire family. Cameras were distributed to both Jason and Laura, and were returned to me within a month. I met with both children and their mother to review the photos together in August, 2011.

Table 1- Family Participants	
<i>Family Code</i>	<i>Children in the Family (ages as of June, 2011)</i>
F1	2 girls, 1 boy: 11 year-old 5 th grade girl (Kelly) 10-year-old fourth grade boy (Josh) 6-year-old kindergarten girl (Ally) (all 3 children participated)
F2	1 11-year-old 5 th grade girl (Sofia)
F3	2 girls: 12 year-old 6 th grader (Elaina) 10 year-old 4 th grader (Sasha) (both children participated)
F4	1 boy and 1 girl: 9-year-old third grade boy (Jason) 7-year-old first grade girl (Laura) (both children participated)

Teacher Participants Practicing elementary teachers were used in this study in an effort to assess teacher perception of creativity in the classroom. Twelve teachers in the school were originally invited to participate in an interview and focus group session through the use of a letter (Appendix A). I invited twelve, knowing that it was high unlikely that all twelve would be able to participate due to scheduling conflicts. The method for selecting participants for this study was purposive sampling, allowing the researcher to select teachers who were likely to provide a range of information due to varying levels of experience, education, training, and the different grade levels that each

was currently teaching. When the participants were contacted for the first time, they were told that it was a study about different perceptions about creativity. Four teachers declined to participate, citing lack of time. This left eight participants, meeting the original intended sample size of eight to ten teachers. These eight still included teachers of different grade levels and programs, with varying amounts of experience. This sample included 3 special education teachers, 3 of regular education, 1 of gifted education, and one music educator (see Table 1). Classroom teaching experience ranged from 4 years to 29 years. None of the teacher participants were teachers of the student participants.

Table 2- Teacher Participants		
<i>Code</i>	<i>Grade Level/ Assignment</i>	<i>Years of Experience</i>
T1	Kindergarten	20
T2	First Grade	10
T3	Second Grade, Inclusion	21
T4	Second Grade, Academically Talented	26
T5	Third Grade	9
T6	Elementary Music	12
T7	Physical Education	27
T8	Fourth Grade	4

I began interviewing the teachers in February, 2010, and held the focus group session in May of that same year. Seven of the eight teachers were interviewed before the focus group session, in order to encourage the individuals to voice their thoughts without being influenced by the group. One teacher needed to reschedule the interview twice, and with the final scheduled date ending up after the focus group session. This was the only interview done after the focus group.

Administrator Participants This study also included school administrators because an administrator fosters a climate among teachers and other staff members to accept goals and identify the practices to be used in the achievement of these goals.

Administrators design curriculum, guide instruction, and make decisions, all of which can influence the presence of creativity in the classroom. Added last to the research design, they were the final component of my goal to view the entire picture of a child's education. Four currently practicing administrators were invited to participate in an individual interview through the use of a letter (Appendix C). As in the cases of the other participants, the method for selecting participants for this study was purposive sampling, allowing the researcher to select administrators whose backgrounds reflected different areas of expertise and experience (see Table 3). During the 2010-2011 school year, when the research took place, two administrators were principals, one was an assistant principal, and one was an assistant superintendent of curriculum; all were from the same school district. I individually interviewed the elementary principal, assistant principal, and superintendent in November, 2010. At this point I was satisfied with the data I had collected and began coordinating the first family interview. After having met with all of the teachers and most of the families by May, I decided I wanted one more administrator to provide an early childhood perspective, based on the data I was gathering. Throughout the course of the year, I had constantly been comparing my growing field notes to theory and research, and I realized I wanted an administrator who worked with very young students, and whose experience could reflect the Vygotskian theory of early literacy and play I had included. I wanted to see if the themes that were emerging and the conclusions I was drawing were reflected in another administrator's responses, especially one who worked with such a young population of students. Thus, the final administrator interview was conducted in late May, 2011.

Table 3- Administrator Participants		
<i>Code</i>	<i>Position During the 2010-2011 School Year</i>	<i>Experience (starting with most recent)</i>
A1	Elementary School Assistant Principal	4 years as assistant principal, 7 years teaching fourth grade
A2	Assistant Superintendent of Curriculum	Director of Curriculum: 8 years Supervisor of Language Arts & Social Studies: 9 years Department of Education: 2 years High School English Teacher: 12 years
A3	Elementary School Principal	2 years as principal, 5 years as assistant principal at a middle school, 10 years teaching 7 th grade social studies
A4	Early Childhood Center Principal	4 years as principal, 6 years as assistant principal (3 at a grades 4-6 school and 3 at an elementary school), 5 years teaching sixth grade

Context

Three families included in the study were involved in Odyssey of the Mind, an international educational program that provides creative problem-solving opportunities for students from kindergarten through college. The program had been offered as an after school extracurricular activity in the district through the 2009-2010 school year; it was no longer offered due to budget constraints in the 2010- 2011 or 2011-2012 school years. Students who participated in the program were selected in the fall by a panel of teachers and administrators after a tryout process, and they worked together during the school year to apply their creativity to solve problems that range from building mechanical devices to presenting their own interpretations of literary classics (Houtz 2004). The end result was a skit designed to present their solution to the chosen problem. Students then brought their solutions to compete at the local, state, and international levels (www.odysseyofthemind.com).

Connecting this program to this particular study was useful because it is a program that emphasizes creativity and problem-solving, but also celebrates uniqueness and ingenuity. Students work in teams of seven to learn cooperation, evaluate ideas, and make decisions on their own. The entire solution must be constructed for under a cost limit (\$125- \$145, depending the problem), which teaches budgeting and resourcefulness. During the course of the year, they see that there is often more than one way to solve a problem, and that process is as important as the end result. The program challenges the notions of the typical teacher-run classroom and is entirely student-based, as adults are to take a role of guidance only. All of the decisions regarding writing, scenery, mechanics, and costumes are made by the team members. The program also yields a number of team-created artifacts, similar to the artifacts gathered and photographed by each student in the study. In fact, one student (F5A) photographed a number of the items she had created during her two years in the program. Teaching the students to think and question gives them a chance to create their own social practices specific to their own team. Thus, their learning occurs as a result of the social practices they create from discussing, theorizing, evaluating, and critical thinking. Their identity and what they each offer plays a role in their language and literacy.

Role of the Researcher

When I first began my field work at the elementary school, I knew that serving as a teacher in the school might affect how the teachers responded to me. I did not want them to feel as if I were “reporting back” any of their responses to anyone, and tried to repeatedly reassure them that all responses were confidential and anonymous. Thankfully, this was not an issue that I encountered when working with teachers.

During one of my family interviews, the mother pointed out that her daughter felt “defeated” in her current class setting, and she shared a few examples of issues that had come up during the school year. At this point the child was visibly concerned, and I realized she did not want to say anything negative about her teacher, since she knew her teacher was my colleague. Both her mother and I reassured her that all of her thoughts and comments were to help me understand children’s thoughts, that all responses were confidential, and I would never repeat any information she shared. I also thought that her mother did an excellent job of explaining certain school situations that did indeed answer my interview questions, but did so in a discrete, thoughtful manner that honestly shared information without putting the teacher in a negative light.

I know that in another family, I did not have as much rapport with the father, and I could sense he felt a bit nervous about my presence. This was remedied by initiating simple conversation about the family’s activities and a previous sports game before informally beginning the interview, and I found this seemed to help a lot. Reiterating to each family that driving force behind this research was my own desire to learn more helped to reassure that there was no “ulterior motive” for any of the data.

While I was thankful to not have had an issue recruiting participants, I knew that I was walking a fine line between researcher and teacher, since the teachers I was working with were my colleagues. I did not want them to feel intimidated, nor did I want them to feel as if they had to impress me with their current classroom practices or beliefs. This did not seem to be an issue, but I also made sure to address it before beginning each interview. There was a point in the focus group discussion where there were criticisms of our current administration, and I knew I needed to remain neutral, allow the conversation

to take its own course, and only step in if I needed to redirect or refocus. However, since the conversation did answer one of the intended questions, and redirected itself rather quickly, I chose to let it be. In addition, I did have several teachers ask if they were answering “right” and if there were “better” answers they were supposed to be offering. Overall, I believe I gave a lot of reassurance to all of the participants that the only “right” answers were their true beliefs.

Data Collection Methods

Someone once told me, “Blessed are the flexible, for they shall not be bent out of shape,” and now I truly understood the importance of flexibility in this research. I made a few changes and adapted as necessary throughout the process of planning and data collection; those changes will be outlined here. My collection methods and timeline have been adapted to fit the circumstances that arose when conducting this research; “It is important to reiterate, however, that design should be seen as an essential part of the on-going research process requiring, as does every other part of research and activity, flexibility and reflexivity,” (Scheyvens and Storey, 2003). The changes I made included inviting families other than former Odyssey of the Mind participants to join, including a fourth administrator near the end of data collection, and working with one student to retake photos after her originals did not develop.

The idea of using disposable cameras had seemed a practical way to give each child an opportunity to capture unique images of what they considered to be creative. I had used them when helping with previous research and had no concerns or issues with the pictures caught on film. However, I came to realize that they are a bit antiquated. It was harder than I thought to find disposable cameras (though not impossible), and it takes

much longer for stores to develop film rather than digital prints. Most concerning was the fact that the picture quality they capture was not very clear. Each child who participated was given the option of having their own disposable camera, or of using a family digital camera, if they had one. Only one child opted to use her own digital camera, and the others chose to have their own disposable cameras. I believe that they each enjoyed the opportunity to take pictures on their “own” camera, instead of having to borrow a family camera. This ownership and freedom to pictures whenever they chose to was important to me, but it did mean that some of the images were not clear and others did not develop at all. When working with the third family (F3), I had dropped off all the children’s three cameras in separate envelopes to be developed, but when I picked them up, all of the pictures were mixed up together in one envelope. This made it nearly impossible to identify the photographer for some of them, especially since this family had taken the pictures over the course of six months. Instead, we sat around the kitchen table while each of the children “claimed” as many photos as they could, and argued lightly over the remaining ones. I still got the information that I needed and sometimes I learned about the picture from more than one child, which was fine.

The data collection took longer than I initially thought, although I was always able to maintain ongoing interaction with participants. I did not want to put a time limit on the students’ photographs, because I really wanted them to explore creativity and capture images as opportunities arose. I am still happy that I gave them freedom, but it also meant that some families had the cameras for months, and it took another month to develop the pictures and set a time to meet with the children again.

As noted earlier, I have utilized a qualitative case study approach using individual

interviews with different sample populations, as well as student photographs, as a means to gain a full picture of students' developing creativity. According to Yin (2003), a case study design should be used when the focus of the study is to answer "how" and "why" questions. Both Yin (2003) and Stake (1995) suggest placing boundaries on a case regarding time, place, and activity, in order to avoid answering a question that is too broad or a topic has too many objectives for one study. Overall, the study emphasizes teacher and student reflection, providing me access to the "individual lived experience" (Marshall & Rossman, 1999) through the lens of each student. Further, family dialogue provided data clarifying the students' knowledge and behavior regarding their creative literacy practices. My data collection methods can be divided into four main categories: interviews, a focus group, field notes, and collection of student artifacts. A comprehensive discussion of these methods is below.

Teacher Interviews. In order to assess teacher perception of creativity in the classroom, eight elementary teachers were interviewed individually for their input. Interviews were audio-recorded (see Appendix D for permission). Each teacher met with me individually to complete the attached interview (Appendix E). The questions could be classified as a general interview guide approach, as it was structured around the given prompts, but still contained quite a bit of flexibility in its composition (Gall, Gall, & Borg 2003). This less formal approach allowed me to rely on the rapport already established with each of the participants so that I could ask follow-up or probing questions based on their responses to the pre-constructed questions. Adapting allowed me to provide a more personal approach. According to McNamara (2009), the goal of the general interview guide approach is to ensure that the same general areas of information are collected from

each interviewee; this provides more focus than the conversational approach, but still allows a degree of freedom and adaptability in getting information from the interviewee” (“Types of Interview” section of website). This also gave me the flexibility to alter the order of the questions, if the conversation was gearing in the direction of a question that I knew was set for later in the interview.

All interviews took place in school in the individual teacher’s classrooms. This allowed teachers to refer to classroom posters and other decorations, lesson plans, and student work to reinforce concerns and ideas, as specific questions had been designed with these in mind. Patton (2002) reiterated that good questions in qualitative interviews should be open-ended, neutral, sensitive, and clear to the interviewee. Using each teacher’s classroom also put the teachers in a place of comfort because I was conducting the interview in his or her space. Interviews were used as a way to hear and understand teachers’ thoughts concerning creativity, and are useful as they have been described as “one of the most common and powerful ways in which we try to understand our fellow human beings” (Fontana and Frey, 2001, p. 641). The interviews ranged from 25- 80 minutes, based on each individual teacher’s response length. Some interviews followed a “question-answer” format while others turned into lengthy conversations, based on the questions.

The researcher, in selecting a sample, believed it to be essential that the teachers involved in the study be honest and forthright in the evaluation of not only their own teaching practices and expectations, but also when commenting on administrators’ practices and beliefs that impacted the teachers’ own practices. The issue of how best to achieve an optimal environment for the teachers to openly and honestly respond, without

concern of breeches of confidentiality or repercussions from any family member, administrator, or fellow teacher, had to be addressed, especially before the focus group session. Therefore, it was decided that no administrator would have any knowledge of the teachers involved, and this was stressed to each participant before each interview and the subsequent focus group session. Teachers were also ensure of their own confidentiality, and encouraged not to share any specific comments from the focus group session with any other teachers, family members, or administrators.

Parent Interviews. The use of an interview also provided an in-depth look at the parents' roles and responsibilities at home, in addition to their knowledge and perceptions concerning creativity development. Parents are uniquely able to reinforce their child's learning through interactions and by understanding that a child's home is an excellent place to learn. Interviews were centered on the given prompts (see Appendix F). Families were asked if they preferred to meet in their home, or in a public space such as the library; all families invited the researcher to their home. This allowed the families to answer questions in a comfortable area, and also provided the additional benefit of allowing me to see the house layout and family space, which included important photographs and mementos. Another asset of home interviews was that several of children chose to illustrate their points by running to their rooms to grab toys, souvenirs, and other items to share with me. These interviews were different than both the teacher and administrator interviews. Teachers and administrators could speak of "scaffolding experiences" and "developmental readiness," and parents spoke volumes of the same without needing to say the words. The parent interviews really completed the picture of a child.

Maxwell (2004) discussed the need to ask questions, “to which you are genuinely interested in the answer, rather than contrived questions designed to elicit particular sorts of data” (p. 92). While the basic questions were the same for each family, conversations were specifically geared toward individual families, such as soccer (F3), family vacations (F4), and overseas trips to visit extended family (F5). I also employed a general interview guide approach, and found that I relied heavily on the conversational approach and often needed to open with general conversations before officially starting the interview. Three of the families I knew quite well; two of them (F2 and F5) I had spent time in out of state during a competition in May, 2010. One family (F1) I had two of children in my class in consecutive years, and both parents took an active role in their children’s education (even going so far as to paint *Wizard of Oz* scenery in their house for our class play.) With the other two families, I had already had a relationship with one of the children and the mothers, but did not have as much rapport with the fathers. So, they discussed computers (F3) and pharmacy (F4) while I listened, and that helped.

All interviews were audio-recorded so that I had a chance to listen to each interview as many times as needed to decipher the major themes. All comments, feedback, and discussion points were transcribed and reported verbatim, respecting the genuineness of all comments and avoiding bias by not compromising the analysis of the data. Each individual family was treated as a case study, with the goal to describe each family in-depth and address the research questions. Provided for each family will be a rich description of the context and discussion of themes, issues, and implications that would serve as an example of the role that creativity can play, either directly or indirectly, in the home. I also used ethnographic methods to attain a detailed picture of

family life, in effort to examine shared beliefs, values, practices, language, norms, rituals, and artifacts that students use to understand creativity in their world. Taking an ethnographic approach (Greene and Bloome, 1997) means going into a context and documenting the culture, much like an ethnographer goes into settings and completes an in-depth analysis of the culture of context.

Focus Groups. In a session following seven of the eight teacher interviews, the teacher participants reconvened to take part in one focus group session, where conversation was based on a prearranged question set (see Appendix G). A focus group was chosen as a method of collecting data because they are helpful for exploring ideas, topics, and perspectives of the participants. “When combined with participant observation, focus group interviews can be especially useful for gaining access, focusing site selection and sampling, and even for checking tentative conclusions” (Marshall and Rossman, 2010, p. 149). Seven of the eight teacher interviews had been completed between 3 weeks and two days before the focus group session. The eighth and final teacher interview was conducted one week after the focus group session, due to the teacher’s schedule.

This session was conducted at the end of a school day, in my classroom, on a warm, sunny day in May, 2010; the session lasted approximately 70 minutes. The intent had been for questions to be guided by me, however, a major benefit of the discussion style format was that the discussion took off on its own accord. The topic of each question was discussed, at length, yet I only officially asked the first question, and didn’t need to ask another. The conversation directed itself to the teachers’ major areas of concern and interest, which (thankfully) had also been the topics of my questions.

Therefore, I did not need to directly ask each question, and an additional benefit was this it allowed for more a comfortable discussion instead of a typical “question-answer” format. The focus group discussion was audio recorded in addition to being documented by the researcher’s note-taking of issues raised in the session.

Field Notes. In qualitative research, an important emphasis is on the researcher’s ability to accurately record the details of the observed behavior. Field notes are “the most important determinant of later bringing off a qualitative analysis and provide the observer’s *raison d’être* [reason for being]. If...not doing them, [the observer] might as well not be in the setting” (Lofland, 1971, p. 102). Field notes were written up after I visited to each family’s home in an effort to accurately capture I had observed, heard, experienced, and thought about during each family meeting and one focus group. After each interview, several typed pages of notes were written so that I would be able to remember my initial impressions, thoughts, concerns, and observations during the following months of data analysis and writing. They were especially helpful because there was a nine month time period between the first interview (with administrator A1) and the last interview (with family F3). Likewise, as noted earlier, there was a long time span between the interview with the first family (F1) and the day we were finally able to meet to discuss the children’s photographs. It was very helpful for me to review my notes prior to meet with them regarding the photographs, and again after meeting with them. I frequently found myself reviewing my notes to remind myself what had taken place, or to begin to make connections and comparisons between the different participants. These notes led to beginning patterns and emerging themes, and were added to and adjusted following each new interview.

Collection of Student Artifacts. Working with families, especially within their own homes, provided an excellent opportunity to include student and family artifacts. Literacy artifacts, objects in the home from which the children are already learning, are a way to seen connections between the school's literacy teaching and real-life applications. These came in the forms of photographs, Christmas decorations, family heirlooms, crafts, school projects, and toys. Examining such artifacts follows the belief that objects serve a purpose and use by acting as a method of reflecting identity. Artifacts are defined as "objects with a history and as a material presence" (Pahl and Rowsell, 2005, p.27). Students were asked to photographs different items that they consider to be creative. An additional benefit was that, during the interview, students were quick to run to bedrooms or other areas of the house to produce the toy or project they were discussing, and these were also documented by the researcher's own camera.

Including artifacts as part of this study will be useful in order to determine what literacy practices take place at home, how families view their significance, and how individuals interpret creativity. Inter-textual links between and among events are often present in such artifacts, and traces of identity are often present as well (Pahl and Rowsell, 2005). The research examined the range of artifacts presented, the ways in which they were either identified or constructed by the children, and how the choices of focus reflects the creativity that children have within themselves. Analysis sought to understand how these choices define creativity in the eyes of these children, and what is present and important in within the lives of the families studied. This analysis will build on the understanding that the definition of creativity is present in these artifacts.

Data Analysis

In an effort to understand the perceptions informing parents, teachers, and administrators' understanding of creativity, I needed to identify ways that each of these populations perceived it, and also how students viewed the creative literacy practices that took place in their lives. To do this, I conducted several rounds of coding in search of evidence of students' beliefs, prior knowledge, and learning contexts. Informing this search was an overall social-cultural lens, specifically driven by schema theory (Anderson 2004, Bartlett 1995), Guilford's Structure of Intellect (SOI) Research (1967), and Sternberg and Lubart's Investment Theory (1991).

Data analysis was done from two perspectives: (a) From the transcripts of the tape recordings, including interviews and students' explanations of their photographs, comments were coded into categories of creativity and literacy references; (b) patterns were derived from the field notes and transcripts. This study used conversation and artifact analysis in order to explore the relationship of the document to past, present, and future teaching, rearing, and creating practices of the teachers, parents, and students. I wanted to analyze the data across both the different populations and the different cases in order to help me clearly understand each of the participants' responses.

Hennick, Hutter, and Bailey present a framework for conducting qualitative research that acknowledges the cyclical nature of the qualitative research process (2010). During all phases of data collection, analysis was ongoing. Data collection was an organized procedure that was conducted prior to formally coding the data. It was organized in such a way that I could begin thinking about initial categories and themes that were emerging, conduct preliminary analyses and form interview questions that

helped to elucidate and/or expound extant data. This next section will explain the overall data organization in an effort to provide insight into how initial codes were created.

Data Organization

Patton (2002) posited that “content analysis is used to refer to any qualitative data reduction and sense-making effort that takes a volume of qualitative material and attempts to identify core consistencies and meanings” (p. 453). Data analysis was an ongoing process in this research. Throughout the entire process I kept reflective notes about each participant and possible connections between what I was observing and learning. Data was transcribed from interviews, notes, and reflections into word documents. Given the ways that my research methods related to each other, I needed to design a system to help me organize the data from each interview, my field notes, and students’ photographs. I labeled a folder for each family, teacher, and administrator, I used it was a place for the transcribed interview, notes, and reflections relating to that participants. Schensul, Schensul, and LeCompte (1999) note that good field notes:

- use exact quotes when possible
- use pseudonyms to protect confidentiality
- describe activities in the order in which they occur
- provide descriptions without inferring meaning
- include relevant background information to situate the event
- separate one’s own thoughts and assumptions from what one actually observes
- record the date, time, place, and name of researcher on each set of notes. (p. 65)

Each time I met with a participant, I recorded notes to help me reflect upon what I was observing and to form initial categories for coding. After spending time interviewing the families and detailing the photo assignment to the participating children, I wrote up field notes for each visit. This became the basis for the emerging themes and categories. After each family’s children had completed taking photos and they were developed, I met

with each family again to go through the photos together and hear the children's interpretation. Field notes were written again, and these ideas were added to the emerging findings section.

I pondered ways in which the interviews, and in the cases of the students, subsequent sessions discussing photographs, gave me insight into students' identities and perceptions of creativity. With regards to data coding, I will utilize DeMunck and Sobo's (1998) research on thematic analysis and code development, which is discussed in the following section.

Coding

DeMunck and Sobo (1998) suggest that coding is used to select and emphasize information that is important enough to record, enabling the researcher to weed out extraneous information and focus his/her observations on the type of information needed for the study. They describe codes as:

rules for organizing symbols into larger and more meaningful strings of symbols. It is important, no imperative, to construct a coding system not because the coding system represents the 'true' structure of the process you are studying, but because it offers a framework for organizing and thinking about the data (p.48).

Each line of transcribed data was read carefully, and then divided into meaningful analytical segments, or codes. This process was continued until all of the data was segmented.

During coding, I kept a master list of all the codes that were developed and used in the research study. These codes were reapplied to new segments of data each time an appropriate segment was encountered.

Both schema (Bartlett 1995, Anderson 2004) and creativity investment (Sternberg & Lubart 1991) theories help were used to as a resource as I reread each interview several times for themes. Beliefs, prior knowledge, identity, prior knowledge, and perception of creativity were initial themes, and I looked actively for anything related to any of the aforementioned theories. I also made note of the students' unclear responses so that they could be clarified when meeting with them to discuss their photographs.

Content analysis was used to analyze the participants' responses to interview questions. The import, meaningfulness, and insights generated from qualitative inquiry have to do with the information richness of selected participants (Patton 2006). Using an inductive framework, each transcript was reread multiple times, with patterns and themes concerning creative practices emerging through this inductive investigation. Coding data is about creating patterns and looking across multiple interviews to find ways of understanding the links between objects and narratives. Therefore, coding was established using the research questions and interview protocol to organize data. "Through coding, the multifarious data of qualitative research begin to merge into a cogent whole," (Franklin, 2002, p.68). The work of Vygotsky and Kress was used to analyze as a lens for creativity. Lev Vygotsky (2003) noted that, "in play a child creates an imaginary situation" (p. 93); imaginative play influences a young child's ability to learn. This is accomplished through scaffolding and the zone of proximal development. Kress's notion of representation will also be applied to a child's play because it acknowledges how children's choices illustrate the flexibility in their imaginative play. Kress concluded that, "the requirements of *representation* are that I, as the maker of a representation/ sign, choose the best, most plausible form for the expression of the

meaning that I intend to represent. The example of the car....is an instance of that: *circles* to stand for wheels, and *wheels* to stand for car,” (p.14-15, 1997). Therefore, as children play, they create representations for the artifacts in their home environment, and these are unique to the child. Using Vygotsky and Kress during the coding process, categories and sub-categories were be formed. These codes were analyzed for similarities and differences between the three populations: families, teachers and administrators.

I also began to look for examples of schema and investment theory. My data had been collected through interviews, a focus group, and students’ photographs, which meant my data was quite varied. Interviews were a main tool used for the parents, teachers, and administrators, and this featured a lot of personal stories and testimonies. Parent interviews, of course, focused mainly on the students’ home behavior, interests, and activities, while teacher interviews provided information about the classroom and students’ general behavior. Administrators were looking at the “big picture” as they seek to make decisions concerning curriculum that affect students much differently than the decisions made by their parents or teachers. The interview transcripts were typed, and I continued field notes when meeting with students regarding their photographs as a way to maintain consistent records. This next section explains how data from my interviews, focus group, field notes, and student photographs, and how the combination of my analyses provided me with a insight into the students’ creative literacy practices, and the ideas affecting them from their parents, teachers, and administrators.

Schema. According to schema theory, people organize everything they know into knowledge structures, or schemata. As a result, everyone’s schemas are individualized, thereby leading to differences in existing schema that greatly influence learning. Coding

schema meant that as I created codes, my goal was to capture the perceptions and beliefs of the participants. I began with Piaget's use of schema (1926) and how it evolved with Anderson (2004). The categories "comfort," "ownership," "guided exposure," and "experience," emerged because they clearly identified elements of schema.

Investment Theory. Sternberg and Lubart's Investment Theory (1991) states that creativity is an acquired behavior that you must be willing to invest in. Coding this meant that I was looking for examples of those who were willing and able to "buy low and sell high" (Sternberg, 2006, p. 87). Buying low means pursuing ideas that are new, unknown, or rejected, but that have growth potential. It reminded me of the student who reported that she could not seem to please her teacher, despite her many ideas and strong effort. Thinking about the parent, teachers, and administrators who play such a large role in influencing the child (in both positive and negative ways) made me want to include codes that reflect this influence. As a result, "risk-taking," "encouragement," "guided exposure," and "scaffolding" became codes that emerged from investment theory.

Interviews. During my meetings with each of the different students and their families, the first interview session consisted of a question and answer period that, in each case, was more like a conversation. The subsequent session took place between one and six months later (depending on the amount of time it took for each of the children to take their photographs) and involved a review of photographs. The teacher interviews consisted of questions and answers, followed by the focus group questions. The administrators had individual interview questions only. All data from this collection method was captured during the sessions and was part of the interview transcripts. Then, the responses from each population were analyzed through an initial round of coding.

“Encouragement” and “scaffolding” were repeated responses from the participants, and these were two of the first emerging codes. Others came out during careful reading of the field notes, which will be discussed below.

Focus Group. I reviewed the data from the focus group session in a similar manner to my coding of the interview transcripts. Information from the focus group was mainly conversational, accounting for what the teachers’ believed, observed, and practiced. Because there was only one session, there was a finite amount of data that was easier to examine, as opposed to the volume generated from the interviews. Based on this session, I could see initial themes beginning to emerge. After reading and organizing my field notes, these themes became the basis for coding.

Photographs. The students’ conversations and their photographs served as the main tools to help me gain a clearer picture of each child’s activities, interest, and prior knowledge while also providing me insight into the various factors that contribute to their creative literary activities. Having each student capture images gave me access to their private lives, outside of school. Using these images helped me to understand what a child considered to be creative. For example, Jason took a picture of his sister’s “bicycle kick” in the air, perfectly capturing her move mid-air. This and similar images led me to add the “effort,” “space,” “time” and “materials” codes.

Field Notes. My field notes were used to help me summarize what I had observed while I was at each of the interview sites: the family’s home, teacher’s classroom, or administrator’s office. This was the first place where I was able to record information and potential themes that I could look for in upcoming interviews. Each family, teacher, or administrator had their own folder with pages of notes inside. These notes were then used

as I reviewed my notes looking for examples of students' schema and learning. Some of the codes used included "the role of the teacher," "the classroom environment," and "home life." My observation notes also helped me to begin to understand how the teachers saw themselves relating to the administrators' "big picture." Under the classroom environment, I added codes such as "safety," "comfort," "risk-taking," "ownership," and "influence from peers." Colored highlighters helped me to catch important responses and ideas, and then mark the words on the appropriate pages. For example, when one student was struggling because she couldn't ever seem to figure out what her teacher wanted, I marked this section in a colored highlighter and labeled it "comfort." Continually reviewing my field notes again to find more and more areas to highlight helped me to ultimately write and discuss my findings. Some themes and codes seemed to emerge from more than one source. For example, the code of "comfort" fit with both scheme and investment theory, and it also became an important part of the classroom environment. My field notes were the place where themes were confirmed and ultimately the codes were formed.

Figure 2 displays the coding terms based on the insights offered by the teachers and administrators. Figure 3 displays the coding for family findings. To help analyze the data across the cases, I created a chart (Figure 4) that lists the participants' responses to interview questions. The responses from the focus group were then coded in the same manner in which I coded the other interview data.

Coding for Teaching and Administrator Findings

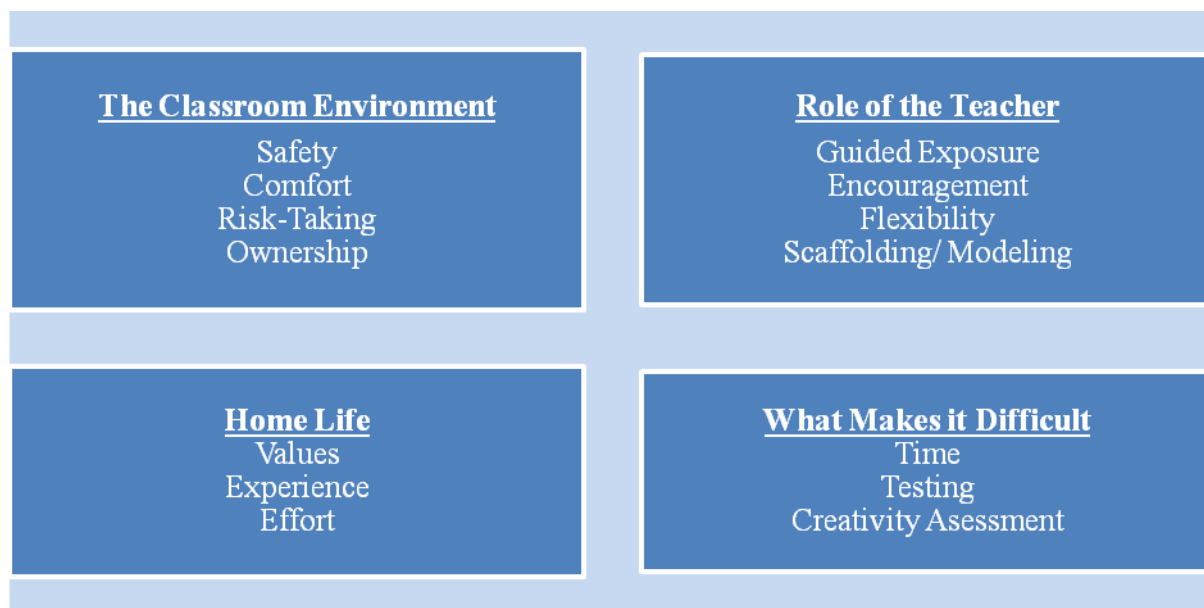


Figure 2: Coding of qualitative data; underlined items in box are categories; items listed beneath sections are sub-sections.

Coding for Family Findings

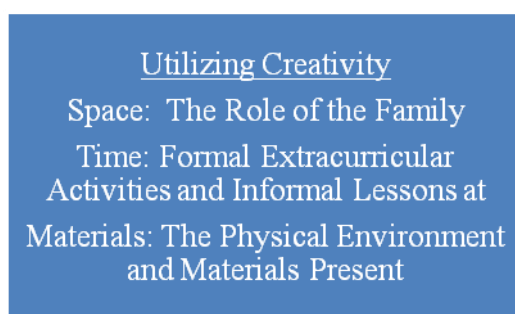


Figure 3: Coding of qualitative data; underlined items in box are categories; items listed beneath sections are sub-sections.

Broad Category	Sub-Category	Data
<i>Classroom Environment</i>	Safety/ Comfort	“fostering an environment where they feel safe” Teasing and negative feedback from peers can makes students feel insecure it’s the comfort- safe environment,” (Source: Teacher 5). “And if I express myself in this place I’m not going to be wrong”
	Risk-taking	Playing musical instruments and creating songs; some students unable to do so
	Ownership	Is there a new and better way? Children are creative in different ways

		Students taking responsibility for their own actions/learning/growth
<i>Role of the Teacher</i>	Guided Exposure	“you’re not really teaching it; you’re exposing it to them and those words are the tools” (Source: Teacher 3) allowing opportunities for ownership helps a child find meaning in their work not just for “gifted” children
	Encouragement	specific praise “We tell students to be creative and then we only assign a very small portion of what we’re grading and what we’re assessing on that creativity. We’re not really sending the message that we value it.” (Source: Admin 3) Button project
	Flexibility	Materials other than worksheets “learning how to piggy-back classroom activities around creativity” (Source: Teacher 5)
	Scaffolding/ Modeling	Teachers as role models Movement Exploration (ME) Words in the classroom: fluency, flexibility, elaboration, and uniqueness
<i>Home Environment</i>	Value	School is very different now than it was when parents went to school
	Experience	experience is more important than material goods
	Effort	Effort is better when students feel comfortable and confident with themselves
<i>Difficulties</i>	Time	“you can really foster creativity if you start them young enough” (Source: Teacher 4) the program itself became “one more thing” (Source: Teacher 2)
	Testing	Data-driven instruction Are we overdoing data? Change in testing and standards
	Creativity Assessment	Can you test creativity? Do you even need to do so?
<i>Utilizing Creativity</i>	Space	Family 1’s basement, but also the “mental space”/attitude that it’s ok to do things
	Time	Extracurricular activities: performance, art, sports, religion Time in room/house/yard
	Materials	Providing ample materials for creation Sofia’s room Christmas cookies (F1)

Figure 4: Participants’ Responses to Interview Questions

Validation of the Data

Corroborating and validating the results is an essential component of qualitative data analysis. Validity refers to the extent to which a given methodology measures what it is intended to measure, whereas reliability refers to whether the methodology generates consistent results that can be duplicated in a similar setting. Examining the data for reliability and validity was done throughout the data collection, analysis, and writing process in order to ensure trustworthy results. A number of strategies were used to improve validity and reduce bias. I relied on researcher reflexivity, triangulation, and peer debriefing (Creswell & Miller, 2000) in an effort to establish validity. In order to ensure researcher reflexivity, it was necessary to continually reflect upon my own “assumptions, beliefs, and biases” (Creswell & Miller, 2000, p. 127) and seek to keep these in check throughout the study. I also strived to obtain the participants’ trust, and it is helpful that there was already an established relationship with the teachers and families. Verbatim interview and focus group data was used.

When necessary, participants were asked to elaborate on responses or clarify and explain their ideas. This included instances of teachers’ current teaching practices, family events, and students’ extracurricular activities. If I didn’t understand what a student was referring to during the interview, I asked further questions to clarify. With one younger child, I had difficulty hearing a few responses even though she sat nearby, so I relied on furthering questioning and some clarification from her mother, and then asked her to confirm the information I had.

In addition, it was necessary to triangulate varied data sources. Triangulation “reduces the risk that your conclusions will reflect only the systematic biases or limitations of a specific sort or method, and allows you to gain a broader and more secure

understanding of the issues you are investigating,” (Maxwell, 2004, p. 94-95).

Triangulation of interviews, the focus group, and field notes provided a more complete account than any could alone. Specifically, this was methodological triangulation, because it involved using more than one method to gather data. In this case, I utilized interviews, a focus group, and the children’s artifacts. Through the interview, casual conversation with students and their parents, and student photographs, I was able to confirm student reports of their home behavior, extracurricular activities, and perception of various creative literacy activities. Likewise, the information from teacher interviews was confirmed through examination of their lessons plans, classroom set up, and student work displayed around the room and in the hall. In addition, because this research involved the use of more than one theory in the interpretation of the data, this is theory triangulation. The theory is built on Vygotsky's zone of proximal development alongside Gunther Kress, schema theory, and Sternberg and Lubart’s Investment Theory.

Finally, peer debriefing helped me to challenging my thinking and providing me with guidance, advice, and structure. My support came in the form of an administrator who gave concrete “how to” tips, another who was also available for conversation that I found constantly challenged and guided my own thoughts and the emerging themes, and by checking in with my committee via e-mail.

Reciprocity

While I am a teacher at a school in the district where the research took place, I still looked for ways to reciprocate to the classroom teachers who were involved in the study. In some cases, this involved photocopying sets of papers, helping with bulletin boards, or arranging classroom displays and furniture. I found that the “interview” often

continued during casual conversation, providing me further insight into each teacher's individual style and belief system. The same was true for the families. With one family, I answered homework questions and with other families, I solicited advice regarding a school conflict and an extracurricular activity. All of the families appeared pleased to be involved with this research, but I still wanted to help in any way I could as a small gesture of gratitude.

Limitations

All of the teachers were from the same school, and all of the administrators were from the same district. Therefore, generalizability of this study is limited to suburban middle class students in grades one through five. The study is also limited in its use of only one school district for the selection of its entire sample.

The fact that the participating teachers were my colleagues may have influenced their responses. All of them were told on more than one occasion that all answers, as well as their identities, would be kept confidential. I also relied on my existing rapport with all of them in order to create a secure environment. However, I am also aware of research where participants try to please the researcher. Likewise, I am an employee of the district, and a teacher at the school. My own principal enjoys reading and discussing research, and it was her interest and questions that led me to include an administrator section. Nonetheless, this could be another instance of pleasing the researcher.

Another limitation is the difficulty in gauging the perceptions of the teachers, as they could have had different interpretations of the term creativity. Therefore, the study is limited by the definition of creativity used. Though recognized as a comprehensive definition, there are other aspects of creativity that are not presented in this study.

The sample size could be viewed as a limitation because of the limited number of subjects used. This study included a total of thirty-one participants: four administrators, eight teachers, ten parents, and nine students. With qualitative research, the focus is on the breadth and depth of the research gathered, and there were no statistical tests that would require a larger sample size. Naturally, sample sizes are smaller in qualitative research because it is the quality, instead of the quantity, of that is valuable.

Finally, self-reported data is limited by the fact that it is more difficult to be independently verified. All of the interviews and the one focus group session were transcribed verbatim in order to address this.

CHAPTER 4

Findings

Introduction

The purpose of this study was to determine what families, teachers, and administrators know about creativity, and how these conceptions shape rearing and teaching practices. Further, this study sought to determine the relationship between these perceptions because teachers, administrators, and parents all have an impact on the developing creative child. This chapter presents findings of the different participants' views, beliefs, and perceptions about creativity in the home and school spaces. In addition, from my investigation of students' creative artifacts, I present data revealing how the students perceived their own creativity in and out of school. The study sought to answer the following questions:

1. What perceptions do teachers have about creativity?
 - a. How do these conceptions shape teaching practice?
 - b. What do teachers think they can do to improve students' creativity in relation to literacy teaching and learning?
2. What perceptions do administrators have about creativity?
 - a. How do these conceptions shape administrative practice?
 - b. What do administrators think they can do to improve students' creativity in relation to literacy teaching and learning?
3. What perceptions do parents have about creativity?
 - a. How do these conceptions shape rearing practice?
 - b. What creative literacy practices take place at home, and how do parents view their significance?

Additional demographic variables included are the subject of expertise and number of years in teaching and/or administration. The results of this study are examined in this chapter. The first part of this chapter will present comparative qualitative data for families, teachers, and administrators as measured by interview and focus group questions and children's artifacts. Each research question will be explored along with relevant qualitative data.

This research was inspired by the belief that children come to school with the innate abilities to think, create, make sense, and interact as part of a social group. Students grow through the grades as readers, writers, thinkers, and principled people who express themselves with passion and intent. Assuming this is true, revisiting the research questions leads us to examine the perceptions that teachers, administrators, and families have about creativity, and how these conceptions shape practice.

In this chapter there are two larger sections of findings, one for the teacher and administrators and one for the families. Each section is subdivided into smaller sections to help me describe data pertaining to the participants' perceptions and beliefs. In addition, each of the two major findings section is preceded by introductions to each of the three groups of participants: teacher and administrator introductions precede the first sections, and family introductions precede the second. In light of my research questions and theoretical framework, I provide a comprehensive review of the data, examining the social and cultural aspects of learning (Kress's notion of 'preliteracy') and the opportunities for scaffolding students' creative practices (Vygotsky). Next, children's early literacy skills and their implications for the formal school environment will be explored (Shirley Brice Heath, Anne Haas Dyson). Finally, skills and strategies for

fostering creativity both in the classroom and at home will be discussed, as well as discussing how it can be measured and analyzed. I describe the expectations and beliefs of the teachers and administrators, and of the students and their parents, including how the students perceive their own creativity. I also examine the students' activities outside of school, describing the student's learning spaces and literacies. Finally, I spend time examining the students' photographs and what they may reveal regarding different sources and types of creativity. In addition, my discussion of the focus group interview data helps to explore themes that began to emerge between the three different participant groups.

The subdivisions help me describe data pertaining to the participants' perceptions, literacies, and behavior as relating to creativity inside and outside school. In an effort to answer my research questions aligned with my theoretical framework, I provide a review of the data, examining the students' sociocultural theories of identity formation, behavior and beliefs situating an identity, for school, learning, and creativity. I describe the behavior and activities of each student at home and how s/he perceived activities, interests, and artifacts.

I also spend time relaying data from the teachers' interview and focus group sessions inside school, establishing what the teachers believe, how each views her role in the classroom, and her perceived impact on her students. In addition, my discussion of the focus group interview data helps to clarify any questions I found in the teachers' individual interviews. My works with the administrators serves to further clarify the picture of a developing child's creativity. My examination of the data across the three groups of participants also allows me to highlight converging responses, analyze the

teachers' and administrators' beliefs regarding creative literacy practices, and discuss how the students' creative literacy practices informed the students' understanding of their chosen creative artifacts and of themselves.

Meet the Teachers

Teacher 1- Kindergarten

“Creativity only comes with a seasoned teacher, especially in a data-driven era.”

Walking into this teacher's kindergarten classroom, eyes are immediately drawn to the bright tissue paper flowers lining the walls, the messy paint easels, crayons and scissors at every table, and overflowing bookshelves. This teacher brings a myriad of experience to this kindergartener's haven: three years at a university's early childhood learning center in a preschool and a kindergarten reading program, kindergarten enrichment in a private school, and six years in a public kindergarten, teaching an inclusion class. Her role as a teacher, combined with her role as a parent, helps her to really see a child's abilities, rather than his limits.

Teacher 2- First Grade

“Authentic teaching leads more to creativity.”

Teacher Two has been teaching first grade for ten years. As her years of experience have grown, this participant is more confident in her abilities and judgments as a classroom teacher. An advocate for students, she feels it's completely possible to infuse creativity into lessons, but it needs to be “thoroughly planned out higher level thinking” where students are “mindful of the real world.”

Teacher 3- Second Grade Inclusion

“You can't be a textbook teacher.”

Teacher Three is a classroom teacher with twenty-seven years of experience, eight in a private school and nineteen in this school. She currently teaches in an inclusion second grade classroom with a part-time special education teacher and a classroom assistant. Instead of limiting students to one way, teachers should be asking, “Is there another way to do this?” The second grade teacher also emphasized the importance of the home environment as encouragement for imaginative play.

Teacher 4- Second Grade Academically Talented:

Creativity: “It’s not telling them, it’s showing them.”

Teacher Four has twenty-nine years of experience, in Pre-K, 1st, 2nd, 3rd, and 5th grades, with children ranging in ability “from the severely learning disabled up to the academically talented,” (Source: Teacher 4). A veteran to creativity, every new school year she introduces the words that she feels lead to creativity: fluency, flexibility, elaboration, and uniqueness. She is careful and consistent about using these words throughout the entire year, to promote continuity and understanding of what creativity actually is.

Teacher 5- Third Grade

“It’s a real challenge for the student who has one thing at school and one thing at home.”

Nearing a decade of teaching children with a wide range of abilities leads this teacher to believe that there is definitely a relationship between creativity and intelligence; “you sort of have one with the other.” Having taught inclusion classes, she notes that there are simply people who think differently.

Teacher 6- Elementary Music

“The worst thing you can do in a creative program is expect a right or wrong answer.”

I had asked to interview the music teacher based on her role as a music teacher in school, but the fact that she was a parent proved very important, as well. She currently teaches students in grades one through three and has thirteen years of experience; three in this school district and ten in a neighboring county’s district. As a parent, she notes that it’s interesting to see what children and parents do with the interest that children demonstrate in music.

Teacher 7- Elementary Physical Education

“Within themselves, everyone has strong attributes and curiosities, which when combined with determination and perseverance, can lead a person to invent, discover, or create something unique.”

“If you had fun, you won!” is the sign that greets students in the gymnasium. This teacher is quick to correct students and teachers who mistake her class for “gym” rather than “physical education.” With an emphasis on movement and play, she keeps the students moving through their entire class period. She finds that, “children, by their nature, are inquisitive and creative beings.” Teacher Seven teaches health and physical education to first through third graders, and has nearly three decades of experience.

Teacher 8- Fourth Grade

“What’s important to the family is important to the child. We need to give more support to each family.”

Teacher 8 grew up in the town where she currently teaches. During her four years of teaching, she wants every child to be where they should be, moving towards the goal without any pressure. She feels that creativity is very important but often overlooked in

our current testing environment, and that schools could do a better job of linking creativity to actual achievement. It seems that some parents and teachers tend to see more “in black and white” and don’t always see the value in classroom activities that promote creativity. Many of these “other” activities that are often excluded from the school day are the ones that encourage creativity and are less scripted. However, some teachers want more structure and shy away from other activities, instead thinking that more traditional approaches produce more tangible results, such as advanced reading levels and math facts. “There are new demands now,” as the current education environment is changing, and certain activities are less of a priority.

Meet the Administrators

Administrator 1- Elementary School Assistant Principal

“As an administrator you need to be a creative problem-solver to help support your staff. And your staff, the teachers, also have to be creative problem-solvers to help address your kids’ various needs. And if we want our kids to demonstrate those creative qualities in their academics, we have to be able to model that and model the successful implementation of that.”

Administrator 1 had been an assistant principal in the school for four years. Prior to this role, she taught a regular fourth grade, fourth grade inclusion, and one of the fourth grade classes in the district’s Academically Talented class across seven years. As an educator, she feels that it’s important for creativity to be “modeled, praised, and encouraged,” but doesn’t “know if creativity can be taught, per say.” Environment plays a crucial role, one that encourages alternate, open-ended assignments, and risk-taking; “they know they get a chance to play with things their teacher tried to pull out of them in

school. They know this is their chance to shine.” Yet, she feels a very real pressure from standardized testing; “I dislike and don't believe in standardized testing... I question the usefulness of data we get from these tests both in isolation and when trying to make longitudinal data comparisons, watching a kid progress through the grades; it's not telling information.”

Administrator 2- Assistant Superintendent of Curriculum

“I think that anytime we have the opportunity for individual expression, anytime we have an opportunity for interpretation, anytime we have an opportunity to synthesize information or to make judgments, to construct, to interpret, that's creativity and all of those things are part of Bloom's Taxonomy. They are part of any study skills; learning is creativity.”

Eight years as the director of Curriculum, nine years of the supervisor of language arts and Social Studies, two years in the Department of Education, and twelve years as a high school English Teacher gives Administrator 3 a wealth of experience. She feels, “creativity is just part of how we live our lives.” Her opinions are based on decades of experience working with struggling readers and writers. While testing was a major theme of interviews and the focus group session, this administrator has a strong, experienced, and research-based perspective on creativity, curriculum, and standardized testing. “No one wants to look at it from the point of view of, ‘if we do what think is appropriate, effective teaching, what does happen to our test scores?’ People are too afraid to ask what I think is the most important question.”

Administrator 3- Elementary School Principal

“I think it’s important for us to ask students to be creative and then to show them to value of that creativity.”

Administrator 3 had served two years as principal and five years as an assistant principal at a middle school. Prior to administration, she spent ten years teaching seventh grade social studies. She is enthusiastic but cautious: “As an administrator, I love to see the creativity in the classroom but I also know we’re looking for standards as well. I want to make sure that creativity comes through but that you’re hitting the goals of whatever it is you’re supposed to be doing as well.” *One of her comprehensive goals is to build self-confidence and self-assurance in the children. Through all of our character programs and the daily curricular work in each class, she wants her staff to strive to teach all students to believe in themselves and to learn that all goals are attainable through hard work, effort, dedication, and positive thinking. Backed by parents, in addition to their teachers, children learn that goals are within their reach.*

Administrator 4- Early Learning Center Principal

“What’s important to the family is what’s important to the child.”

Administrator 4- Melinda is the current principal of the district’s Early Learning Center, which services preschool and kindergarten students. As of June, 2012, the school had been open for 6 school years; Melinda was principal for all 6 of them. Previously, she had served as an assistant principal in one of the district’s primary (K-3) schools for 4 years, and as an assistant principal in one of the district’s intermediate (4-6) schools for 3 years. Prior to that, she had taught sixth grade for 5 years.

To her, creativity includes expression, individual imagination, and outlet. In the early learning center, this takes the form of “lots of creative play,” with students

experimenting with various materials to express themselves. Different mediums include painting with brushes, finger paints, writing and drawing, art centers, projects, dress-up, sand, and manipulatives; all of this lends itself to cross-curricular connections and creativity. Melinda feels that she sees the use of these mediums more so in the pre-school curricula, whereas she feels the kindergarten curricula is more “academic.”

Organization- This chapter is divided into smaller sections to help me describe data pertaining to the participants’ perceptions and beliefs; these sections that are associated with the research question and subsidiary questions. Following this is a transition between teacher and administrator findings to separate one for the families; this transition section seeks to answer the question, “What does creativity look like?” because this is applicable in both the home and school environments. Selective coding was then used to determine which categories could be aligned in response to the research questions. Direct quotations from the study’s participants are utilized to illuminate each of the sections.

Administrator and Teacher Findings

The first two research questions concerned the perceptions that teachers and administrators have, and how these conceptions shape their respective practices. The teacher and administrator interviews and one teacher focus group session invited and encouraged teachers to bring their own thinking, ideas, and experiences to the learning environment. Personal choice and opportunities to share their thinking motivated teachers to participate and learn from each other. These guiding principles support the empowerment of students and the growth and development of teachers as the facilitators

of student thinking and learning. Common sentiments, such as the pressures of testing, the need for a comfortable environment, and family support were consistent topics. The academic leveling of students was a shared concern among both teachers and administrators. “Some students are not in their correct level and they lack emotional maturity. It’s all connected. If they are struggling in science they are struggling with reading the material” (Source: Teacher 3). In response, a colleague shared similar sentiments; “They might be placed in the wrong level and so the work, the reading and the math are too hard for them” (Source: Teacher 8).

During both the interview and focus group sessions, all of the participants’ responses were forthcoming and candid. Teachers openly shared their concerns regarding testing mandates, the classroom environment, and the importance of home support. All comments, feedback, and discussion points were transcribed in an effort to preserve and respect teacher input without compromising the analysis of the data.

As evidence in the quotes gleaned through the focus group discussion, teachers interjected while others were speaking, added comments to one another’s remarks and shared similar opinions, regardless of the subject area. Humor punctuated the focus group session; participants joked with one another as well as with the researcher. Common sentiments, such as the pressures of testing and parental influence on students, were consistent topics throughout the various individual interviews and the focus group discussion.

Similarities between the teachers, administrators, and parents were more marked than dissimilarities. Consistent between and among participants were the shared demographics as a result of working on one district. One major objective of this

dissertation was to examine the perceptions that teachers and administrators have about creativity, listening to examples of best practices and examining the school environment as a whole, as well as the specific classroom environment, helped me to think about how these conceptions shape rearing practices.

The Classroom Environment: Offering Safety, Comfort, Risk-taking, and Ownership

“We want an environment of ‘it’s okay to make mistakes.’ In fact, it’s expected to make mistakes,” (Source: Admin 1).

Creativity in the elementary classroom is naturally affected by the environment of each individual classroom. Teachers work hard to create a unique atmosphere and community within their own classroom space, with students benefiting from what happens in this space. “Children are naturally curious, and curiosity breeds creativity” (Source: Teacher 7).

During the focus group session, talk concerning the importance of creativity in the classroom began immediately, as teachers discussed the tendency for students- and their parents- to focus on finding “the right answer.” “What happens in many situations is that they get thrown into a box. There’s a right answer, and there’s a wrong answer,” (Source: Teacher 4). Indeed, while school has traditionally been the place to instruct students on how to find the correct answer, there is now an emphasis on process, as well as product. This is Guilford’s idea of divergent versus convergent thinking (1967). This is seen as the writing process is taught in younger grades, and with the push for problem-solving in all levels of mathematics. “The pendulum has shifted from ‘they’re empty vessels to be filled’ to ‘what is the answer but how did you get it?’” (Source: Teacher 6). “With us now trying to have them express themselves, how did you come up with your solution, is there

more than one solution, brainstorming, all that kind of stuff, I think it opens them up to when they're out in the real world, that they don't have to be in a box. They realize being creative is acceptable because it was accepted in school. They think for themselves; there are gray areas" (Source: Teacher 4). This quote reinforces the idea that creativity can have value, if it is taught to be valuable. Another teacher concurs; "In my classroom it's very intriguing because I like the children to look at the way they solve. Just for example, we were doing some type of math problem and this one child went about following a method that even I didn't understand how the child got the answer. It was correct so I wasn't about to critique a different matter of approaching it" (Source: Teacher 5). These beliefs determine the importance, and acceptance, of creativity in each of their classrooms. Yet, if creativity is to be accepted, how do teachers go about allowing or creating it in the classroom?

Safety & Comfort. "It's fostering an environment where they're safe" (Source: Teacher 6). The idea of safety was echoed by another teacher; "think about the environment of the classroom- your kids have the freedom to be themselves and express themselves and this is the discussion I have with my student teachers. The boundaries need to be in place because the kids will bounce around- literally- if you don't set them. It's almost a paradox- in order to be able to allow the free flow and exchange of ideas, to set up that environment you have parameters in place or else it becomes a free-for-all" (Source: Teacher 6). Likewise, "it's the comfort- safe environment," (Source: Teacher 5). "And if I express myself in this place I'm not going to be wrong- I know the parameters are in place and it's safe for me to take this leap, and I'll be supported" (Source: Teacher

6). It seems like common sense to steer children away from risky behavior, but part of growing developing means taking positive risks.

Children need opportunities to take safe risks in safe places where they will be supported. Try out new skills to see what best works allows children to develop their own strategies. Teasing and negative feedback from peers can makes students feel insecure, which can lead to a change in behavior. This can make them less likely to take safe risks, like trying out new strategies for writing or being willing to read aloud in front of peers. One way teachers mentioned helping students is by creating a space that not only tolerates, but also encourages, taking risks. It needs to be a non-judgmental environment where a student can try, and either succeeds or fails, and s/he can be supported either way. Support and flexibility in the classroom will lead to comfort in exploring creativity.

Risk-taking. Just as it is impossible to establish one definition of creativity, it is impossible to identify one specific type of personality profile that is typical of the creative individual. The idea of risk-taking was brought up by several participants. However, the teachers had interesting experiences with students who were more willing to take risks than others. The music teacher spoke of her annual lesson teaching composition of simple musical pieces to third grade students. As a culminating project, students put all of their musical knowledge concerning notes, rests, beats, and measures together to create a simple, original piece. “During the composition unit- and this is my favorite- my inclusion classes generally have more creative ideas than my AT [Academically Talented] classes” (Source: Teacher 6). This observation defies the perception that in order to be creative, one must be highly intelligent. She related that some students were quick to experiment with the different sounds coming from the

xylophones, while others limited themselves to what sounds and pieces they already knew. There was, “a group of five pianists and they were not able to break out of the mold [of published musical pieces]. Sometimes they’re so worried about doing the right thing that they couldn’t do it. Another group- I was watching them and they were just having so much fun expressing themselves” (Source: Teacher 6). In this case, the five pianists used the xylophones as another medium for playing a simple piece they already knew from playing the piano. The students who didn’t know a musical piece were free to experiment. “Because they’re not perfectionists” (Source: Teacher 4) another teacher chimed in. The music teacher reported that the five piano students continued to play music they knew from their piano lessons, because it was what they knew, and it served as their level of comfort. However, without the ability to take risks, they were limited.

Ownership. The idea of ownership also arose. As a physical education teacher, this participant pointed out that while she teaches skills, it’s interesting to see how children apply those skills in other ways. “Once you can throw a ball, do you throw it higher or lower, left or right-handed, and so on? Is there a new and better way of throwing the ball?” (Source: Teacher 7). Creativity also serves to individualize the child, and teaches them to think for themselves. Rosenblatt’s transactional theory (1984) stated that all students have individualized experiences due to his/her unique schema. Out of those elements they will create their own understanding. Teachers should encourage students to respond, examine and reflect upon their responses. The focus should be on helping learners to use their background to make meaning. When discussing movement, the physical education teacher cited examples of students using creativity in movement: “how fast can you get from one point to another, how many different ways can you turn

in a circle from one place to another? In other words, they had to do things in genius new ways. How many ways can you bounce a ball: how many different parts of your body can you bounce a ball? With a lot of them, you give them the initiative to think and the ownership. It becomes, ‘Oh, look at what I just did’” (Source: Teacher 7).

Ownership also applied because “I think the children also need to know that not everyone’s creative in the same way, and there are different types of creativity- Howard Gardner- multiple intelligences” (Source: Teacher 7); “sometimes we keep children in the dark and we don’t give them an understanding of what creativity is, and I think maybe we need to give lessons on that.” However, one teacher pointed out that, “It’s not telling them, it’s showing them” (Source: Teacher 4). By highlighting something positive- “That really is showing creativity in- whatever it is, look at those details,” a student is learning by example.

Each of these elements is enhanced in a unique way based on the individual teacher. The next section will explore the role of the teacher. Through many years of training and different field experiences, a teacher hones his/her craft.

The Role of the Teacher: Offering Guided Exposure, Encouragement, Flexibility, and Opportunities for Scaffolding & Modeling

“I feel confident with what I do, not making students fit the mold” (Source: Teacher 1).

Teacher and student rapport can be strengthened by a teacher who nurtures and develops the creative aspect for any child:

I think the Morning Minute, the A.T. (Academically Talented) experience, is certainly a way to bring out and nurture and strengthen kids’ creativity. In a fourth grade lesson they do the skeletal system, the fourth grader as a science detective. They need to know the purposes and parts of the skeletal system. I know of a teacher who goes through the standard lessons they have to cover and then it enriches it by having the kids make a connection to social studies; an excavation and geography and where certain remains or excrement can be found. They actually dig through and

find actual pieces of rat and mouse skeletons. They then take their human skeleton knowledge and try to apply it to assembling another creature's skeleton. That's creative. (Source: Admin 1)

Guided Exposure. Much of the focus group conversation, as well as individual interviews, led to much discussion concerning the possibility of teaching creativity: can you or can't you? The general consensus was no. "You can't teach creativity, though" (Source: Teacher 3). "You can" (Source: Teacher 4); "you can give them the tools; some will take it further than others" (Source: Teacher 4). "Some kids have no idea what it means to be creative because he has been told this is what's right or wrong, so you can expose it to them and they each take it off on their own level, so you're not really teaching it; you're exposing it to them and those words are the tools" (Source: Teacher 3). This idea of exposure follows Vygotsky's social process of instruction, with teachers interacting among students in a context meaningful for each individual. Through repetitions of a task individualized for the student, s/he will take on more of the responsibility, with the teacher helping as needed and creating new opportunities as employed by the student. It's about, "confidence in themselves. Praise kids but be specific, not just 'nice job,' but 'I love the way you did that.' Well the same thing with creativity- if you notice it, praise it, but express exactly what it is you're complimenting" (Source: Teacher 4). Again, allowing opportunities for ownership helps a child find meaning in their work:

I think it is important for creativity to be modeled, praised, and encouraged, but I don't know if creativity per say can be taught. But, I think problem solving can be taught. I think multiple responses or multiple reactions to the same scenario can be taught and explored. But, I think there is a level of intuitiveness that comes with creativity. Some people are very logical, and straightforward and analytical. Other peoples' brains are

more wired towards the more creative aspects. So nurtured yes, but I don't know if I would use the word taught. (Source: Admin 1)

Similarly, one administrator explored the idea of guiding students into different ways of looking at something; "We're looking at ways the students might not be doing as well as they could and we're giving them very specific things they can do to do better" (Source: Admin 2). However, she went on to explain that some students are naturally going to outshine others students in certain areas, whether it be related to creativity, art, science, or an integration of any areas. What I especially liked was that she acknowledged that no one knows the limit of a child's abilities. "But there comes a point where we have to recognize it's not within your capacity to do this any better than you're doing. So we all have to accept this and be comfortable with it and let's devote our time to a place where it is within your capacity to do that. But for little kids like this, you don't know what their capacities are. Your third graders, you don't ever have to say that about any of them, 'this is the best you can do'" (Source: Admin 2). Because we as educators and parents don't know what the "best" a student can possibly do is, her message of encouraging and nurturing all students is consistent. Never tell students there's a limit on what's possible. Later during the interview, she brought up a popular misconceived notion that only gifted children are creative; "This notion that creativity is only for gifted children, that creativity is only for the most capable of children, is misguided. Creativity is just part of how we live our lives." It is my observation that when we put children in the situation where they are actually guided in an opportunity to explore, they're going to be creating something in their own heads that is personal and unique. Each one of us interprets what we read in a very personal way; Rosenblatt's transactional theory (1984) stated that all students have individualized experiences due to his/her unique schema. Out

of those elements they will create their understandings of the text. Teachers should encourage students to respond, examine and reflect upon their responses. The focus should be on helping learners to use their background to make meaning, knowing that vocabulary is a critical component of academic language. Research often emphasizes teaching through the use of thematic units, to offer an environment rich in contextual support. Therefore, a lesson should be about helping learners to use their own perspectives to create meaning, as opposed to following a meaning prescribed by the dominant culture. Creativity is the same; the creative act is one where the child has engaged in an interaction with that text, with that author or with the artifact that the author has left behind. The child's interaction with that author's artifact is something new in that child's mind.

Encouragement. This sentiment offered by the group followed the idea that once the students have the opportunity, it's up to the teacher to provide encouragement. "I never, ever show my students a finished product of mine" (Source: Teacher 1). Providing a model is "like telling them what they must do, instead of what they can do" (Source: Teacher 1). In the kindergarten classroom, Teacher 1 noted that it's a challenge to see "black and white thinkers" versus divergent thinkers. Some students are "brilliant, but can't draw a flower" (Source: Teacher 1). Encouraging risk-taking, free play, and imagination are essential for development. Some students come to school with experience using crayons, markers, paint, or any medium possible. Other students are afraid. She related the story of one little girl, who always came to school beautifully decorated in colorful dresses, yet she was so afraid of getting dirty. In this case, the flexibility of the

teacher, as well as the student, helped the child to learn. Hearing this vignette led to the participants' discussion of teachers taking risks, instead of just the students.

Likewise, an elementary school principal shared the idea of encouraging it and reiterated the importance of placing value on creativity; "I don't know that it is something that you can teach someone more than you can encourage it. I think that's the key for us as educators. I think for us it's important to ask students to be creative and then to show them the value of that creativity. We tell students to be creative and then we only assign a very small portion of what we're grading and what we're assessing on that creativity. We're not really sending the message that we value it. We tell students, think outside the box, be creative, use all of the resources and materials you have...but this is the answer. Make sure you get that" (Source: Admin 3). This notion of finding the "right answer" is especially interesting in light of the previous teacher discussion and administrators' comments. In addition, one administrator noted was a teacher may consider to be creative may not be what a teacher does, and that is still okay. "And even just the notion of accepting error as a child's individual interpretation and looking at that interpretation and determining what brought the child to that place. And how much of it is error and how much in effect is accurate and another interesting way to look at the question or problem or project?" (Source: Admin 2). I liked how this administrator acknowledged that while a child's view may be different, but this does not make it wrong.

Teacher Two shared her annual project that serves as an introduction to creativity in her classroom:

The very first project, I give them a button- make something, and I have had kids take a button, stick it down, and make a flower. And then I have the kid who takes the button and makes three-dimensional things out of it. I take them all and hang them up and you classify them. And the one kid-

where it's not a flower- Look at this- you have ten kids who made the flower. Is that creative? No; it's not unique and they recognize what I'm talking about in all these areas and at that point they start to realize when they do a project that was really unique because no one thought to do it that way. It may not seem unique to us but it's a starting point. (Source: Teacher 4)

This relates back to her word *unique*; the children are setting their own standard for creativity, based on the teacher's open-ended assignment and refusal to tell them exactly "what is creativity." Rather, the students are exposed to their peers' creations, encouraged by their teacher to try something new, and then have the opportunity to decide for themselves. Again, ownership is taken, and peer influence is valued. This teacher was also referring to modeling creativity. Allowing the students to examine the one child's work that is highly "creative" (which in this case, means three-dimensional), students have a better understanding of expectation. "If we want our kids to be able to demonstrate those creative qualities in their own academics, then we have to be able to model that and model the successful implementation of that" (Source: Admin 1)

Vygotsky's zone of proximal development (1978) serves as a bridge between what is known by the learners and what could be known, and this is achieved by the teacher or another student modeling the desired effect. This is the essence of guided reading or writing instruction; it is the bridge between independent and instructional reading. Learning occurs as the teacher first models appropriate strategies (in this case, the three-dimensional, non-flower design of a button) and then guides the students as they incorporate these strategies (helping them to recognize what is unique). Support comes through encouragement and occurs over time until students master the introduced strategies, and then know how and when to use them:

I think there is a fun aspect for kids to get to explore with the teacher. There is not that right or wrong. Instead, it's okay to try new things, learn from mistakes, it's sometimes the fun of being creative. I would hope that in terms of a home translation, children have specifics when their parents say, 'What did you do in school today?' They have exciting stories to tell that are connected to their lessons, and they are not paranoid about making mistakes on a traditional homework assignment. And, they are excited to be assigned a more open-ended homework assignment. They know they get a chance to try and play with the things their teacher tried to pull out of them in school. They know this is their chance to shine. (Source: Admin 1)

A teacher can help a child by encouraging them to try something new and different, and this works effectively when the teacher is willing to be flexible in her own thinking and practices.

Flexibility- Teacher 2 observed that some teachers naturally “stick to the mold with worksheets and concrete information. Do you think that's easier?” Perhaps, but she feels it steers both students and teachers away from creativity. She is not a fan of “cookie cutter teachers. It's easy to pull the same lesson out of the closet year after year, but is that addressing student need?” Discussion among the participants insisted no, a teacher must be flexible. After attending a recent literacy convention, she returned with a concern for fragmented learning in the classroom. “We need a vision as a district,” instead of just “cramming in all the different parts” (Source: Teacher 2). “With a vision come people who work hard and have value for that.” She shared a conversation with the school librarian, who recently had to test all students on basic components of the library and its curriculum. She was baffled to see that the majority of second-grade students could not, when asked to tell what the name of a book was called, identify it as the *title*. The librarian, along with this teacher, was concerned about the sheer volume of information students were expected to know, and how it was “all coming in bits and pieces. No

wonder they can't follow!" (Source: Teacher 2). She gives the example of traditional book reports: "they're mindless! You just take the information and transfer it into paper." She has, along with the other second grade teacher, made an effort to "revamp them- have the students try a new approach to sharing information." Her thoughts on authentic teaching lead to more purposeful instruction.

In the classroom, it's the teacher's responsibility to provide open activities, while "learning how to piggy-back classroom activities around creativity" (Source: Teacher 5). However, teacher security and confidence in his/her own ability is important. Like the kindergarten teacher, this third grade teacher feels that a teacher's comfort with creativity comes with time and experience. "It takes a mature kind of ability to do that," "you need to be rather secure in abilities to be able to do that" (Source: Teacher 5). Sometimes a more spontaneous way of infusing creativity into a lesson arises, yet detecting such an opportunity comes from experience. Recently, she taught a social studies lesson to one group of students and it went, "just okay." The same lesson was to be taught to a different group of students the next day, so that night, "I went home thinking, 'What can I do to spark it?'" As they walked in the next day, I assigned each student a role: farmer, miner, or family. They had to determine which roads they would take to reach a destination." The lesson fit the same objective; students learned the same material as the previous class. It was "concrete, but in a fun way," (Source: Teacher 5). Recognizing this opportunity, and being flexible enough to make the change, made the difference.

Scaffolding & Modeling. In the school setting, teachers are role models as well. As a physical education teacher, creativity is used in ways that encourage students to explore their physical world through problem solving. "One of the many ways of

exploring personal space is through Movement Exploration (ME). Educational researchers have proven that there is a relationship between motor development and achievement in all aspects of education. ME's lesson objective is to develop a child's motor skills through thought provoking questions that will encourage an original and creative response from the child." Citing a sample lesson on walking, she would encourage students to first walk freely among classmates in a taped off area measuring 20 x 40 feet. Then, ask them, "Can you decrease the size of the area and still walk among your classmates?" Avoid all contact while walking among classmates. Take as few steps as possible to move from one area to another." Watching the students complete this last instruction allows one to see the different ways this step can be interpreted. Likewise, "walk in a circle from one point to another," or "draw a pattern and then walk that pattern." While students may collectively be accomplishing the set goal, each will go about individualizing what that particular step means to them. There is also the broader scope of development that involves the child's ability to learn about his or her social awareness, appreciation of the arts, sciences, and physical world.

Both veterans to creativity, every new school year Teachers 4 and 5 introduce and explore the words that they feel lead to creativity: fluency, flexibility, elaboration, and uniqueness. These are modeled after Guilford's (1950) characteristics of creative thinking: fluency, flexibility, originality, and elaboration; they substituted uniqueness for originality. Both are careful and consistent about using these words to model what creativity is throughout the entire year, to promote continuity and understanding of what creativity actually is. These four words were very popular when shared with the other participants. "Those terms you used- those should be terms that are used throughout the

curriculum use same terms so they apply it” (Source: Teacher 7). Indeed, in these teachers’ classrooms, they become the standards by what creativity is measured. Is this product unique from other students? Are there details? Does it make sense? These words pass with the students to the third grade, where they are again introduced and reinforced in the classroom. From the teachers’ careful modeling and scaffolding, students learn to critique others’ work, based upon what they have learned. Upon hearing this, the physical education teacher pointed out during the focus group session, “we should all be using those words.” She did, in fact, ask for a copy for her own future use. Modeling and peer influence serve to solidify these concepts.

The idea of reinforcing language is not new. When teaching reading strategies to students, teachers use consistency, so that a child who hears words or phrases in the classroom will have the same words or phrases echoed with their reading teacher. Ideally, a parent would be familiar with the phrases as well, so the child is consistently hearing the same words. Imagine the benefits of hearing the words *flexibility*, *fluency*, *elaboration*, and *uniqueness* not just in literacy, but when solving math problems, experimenting in science, mapping in social studies, and in music, art, physical education as well. Vygotsky’s views on scaffolding opportunities for abstract thinking can also be extended to creativity. It is necessary that students also learn everyday concepts, which are those that students are socialized to understand. Consistency might involve teaching about looking at a situation in different ways or from a different perspective:

If you give them the tools to recognize what it is that you’re looking for from the very start where we define creativity as flexibility, fluency, elaboration and uniqueness. In the very beginning of the year we teach them the four words. Fluency is how many ideas. Flexibility is do you see it evolve in a different track? Elaboration is in their writing, in their

drawing, in their thinking; can you give me details? And uniqueness- is the idea different? (Source: Teacher 4).

Teachers serve as role models not just in the classroom. When asked if the teacher influenced the child at home, Teacher 2 commented that, “I want to think it does! When they’re happy they bring home that happiness. They feel comfortable and confident. Then it’s up to the parents to see what is done with that happiness” (Source: Teacher 2). These sentiments were echoed by the music teacher, as well. If a child comes home and teachers the music games to the siblings, they are carrying over their school experience to their home environment.

The Home Connection: Value, Experience, and Effort

“You can’t argue with the fact that if you’ve got the resources and support, you have a better shot at it” (Source: Admin 2).

Students spend six to seven hours in school, with at least as many waking hours at home. Naturally, the home environment plays a large role in the development of a child’s creativity. Parents are an integral part of development because they:

have to allow it to happen. They have to be patient and understanding; they have to have a sense of humor. They need to understand that creativity isn’t just silly fun; it really is that higher level thinking application of all the other tools that our kids have. They have all these choices to pull from and now the creative mind can take Tool A and apply it to Problem B even though it was traditionally not the connection (Source: Admin 1).

This administrator has identified that family values, effort, and experience influence the developing child.

Value. Finding a supportive parent and finding one who supports creativity can be two entirely separate searches. This is not to say that most or even many parents don’t

support creativity, but educators need to realize that parents may not be educated in the same manner. One administrator felt that:

It more likely comes more naturally to teachers because we have the educational and child development background. Parents, through no fault of their own, are used to their own schooling, which was not as creatively emphasized. They worry about their kids doing well. And how do the kids do well? They get the grades. How is doing this little creative project supposed to help them learn times tables? Parents need to be taught the connections, much like the kids need to be taught. (Source: Admin 1)

From sports to homes to clothing style, parents have different values, and this diversity incredibly important. But, we also know that sometimes:

parents value creative acts, and if they see their child having the capacity for creativity, they will nurture creativity. There are lots of examples of families that don't value the sort of creativity that the child feels and sometimes they can squash it. But, very often they can't squash it even if they want to, even if they don't value it. If the child has that sort of creativity, the child's going to express it even if it makes the parents very unhappy. I mean I'm thinking about people who are expressing creativity through all the tattoos on their body. Lots of their parents don't like that but they don't seem to be able to stop it. Certainly, like anything else, anything at all that the parent is going to nurture and support, the child is going to have a better shot at. But, if the child is born into a family that isn't nurturing and supporting, that doesn't necessarily mean that the child is not going to have a shot at it. And we see all examples daily of families that are nurturing, that are supportive, that are providing the lesson, that are encouraging and the child is still not developing in that area. You can't argue with the fact that if you've got the resources and support, you have a better shot at it. (Source: Admin 2)

Experience. The good news is that educating parents may not be all that difficult, and naturally, it does not require education only about the creative arts. One principal, who is also a parent, stresses that experience is more important than material goods. "I think the parents, the ways they can foster creativity, they don't have to have a craft room in their house or a place where students can break out markers and glue sticks. I think you

can foster creativity just by asking questions of your children outside of the confines of the school day. You know, take them on trips, talk to them about things, people they're hearing about in school or they're seeing in a show on television... To me, that's creativity, you know just infusing little snippets of humor in with historical references and scientific references, those are fairly creative, those are really creative things. And there's no glue sticks involved," (Source: Admin 3).

Interestingly, the music teacher has noticed that younger siblings of current or former students often come to school with knowledge of the games their older siblings played with this teacher. Wink and Putney pointed out that, "When children actively generate knowledge through meaningful classroom discourse and activities, they hurry home to tell their families," (2002, p. 61). Thus, if a child comes home and teaches the music games to the siblings, they are carrying over their school experience to their home environment. Teachers and students are not separate entities; rather, there is a "social environment that link[s] the two together," (Vygotsky, 1997, p. xxiv). This highlights the significance of the home-school connection.

An integral part of the music curriculum is the games. Through games, children are able to listen to, distinguish, and repeat pieces of music. They are also taught to work, play, and sing together, which builds cooperation and teamwork, as well as a musical foundation. One example of a game played with students is called "Apple Tree." Students sit in a circle and sing:

*Apple tree, apple tree
Will your apple fall on me?
If it does, I won't shout
If your apple knocks me out!*

The game is taught to reinforce musical beats, as well as song. The apple is passed on the beat, and the constant repetition helps children to find and continue the beat. On the word “out,” that person is out of the game but can keep singing in the circle.

The songs are simple rhymes that allow students to feel comfortable with music, but also provide a link between what they already know from previous experience and what they have the potential to learn. As mentioned previously, students of the music teacher often rush home to share their games with family members. They are first learning on the social level, between people, before learning on an individual level, inside oneself. So, when students come home excited about a musical piece played in school, how do parents react? Some parents may think it’s “nice.” Others may help them locate the music (online, perhaps) and play it at home. This reinforces what is taught in school, and puts value in it, creating the same value in the home environment.

Effort. One of the biggest projects in the Academically Talented program (which Teachers 4 and 5 teach) is the Morning Minute, a research project for students on a self-selected topic. Over the course of six to eight weeks, students select a few topics, choose one with teacher and parent input, research by reading and taking notes, and conclude with a six to eight minute presentation on their topic. “It’s interesting to see what students choose, and see how involved parents are in the topic,” (Source: Teacher 4). A student from last year chose women’s suffrage, and she “was miserable. It was clearly her parent’s choice, and the work, the research, had no meaning to her,” (Source: Teacher 4). A student this year chose a topic, and it became a chance for family learning. “She [mom] took him to Philadelphia, and it helped him to be more involved. It gave him more background,” (Source: Teacher 4). The idea of providing background for students is not

new; building a base of knowledge is essential for vocabulary and reading instruction. The project in itself provides the freedom to research what the student opts to research. It's "not that they can't do it; they can. It's 'how will they follow through?'" (Source: Teacher 4).

In kindergarten, Teacher 1 emphasizes the importance of students feeling comfortable and confident with themselves. Some kindergarteners are eager for homework, especially if they see their older siblings working. Others are more hesitant if they feel unsure or unconfident in their ability. When creating directions for homework, it's necessary to remind both students and parents that work should be completed in the students' own writing. "Be specific with directions, and tell the parents not to do it for them." Students cannot develop a level of comfort if work is being done for them. This inadvertently sends a message that the child is incapable. She, along with the other participants, addresses the importance of appropriate support in the home environment. In addition, writing work is never graded, and is never right or wrong. "It takes a short amount of time to bash it [a child's work], but plenty of time to build it up," (Source: Teacher 1). She worries that, "homework is done at the Wendy's drive-through!" Yet, the kids who are succeeding in "leaps and bounds" are the ones who are encouraged to play with Play-Doh, paint, and chalk. She feels strongly that, "we need to educate parents more."

Teacher 5 had a different take on the role of parents and the home environment. Having worked with very bright children, she is used to parental involvement and support. However, some parents can be "unintentionally unsupportive" because "they are always looking for more." She noted that many don't look at math in a creative way,

because of the tendency to seek out one right answer. This notion of “the right answer,” was a common theme that occurred throughout several interviews and the focus group session. Parents sometimes equate rigidity with structure, but creativity is much more ambiguous; “it’s impossible to compare the two.” Mindset and attitude are important qualities in a family environment. “If it is accepted and nurtured at home, there is not problem in the classroom. If that is not the case at home, then it won’t be in school.”

The physical education teacher agrees with the other participants that parents are crucial. “Parents are the original role models for their children and can thus be extremely influential in determining, through example, how the student will view their world. Developing dialogue, promoting reading as a means to enjoyment and as a resource for answers to their questions will provide the child with a head start in the academic world” (Source: Teacher 7). As a primary educator, she notes that, “these learning experiences are essential to the child’s total learning experience during the first five years of life. Parents who offer their child rich learning environments through example and inclusion will help to improve the child’s critical thinking development.” As influential beings, children absorb the vibes of their household and carry their lessons from home with them to the school scene, the playground, relationships, and their eventual occupations. Different parenting styles will have an effect on the child in school, “but happily the student also as their own will and conscience and will exert it more often than not.”

What Makes it Difficult: Time, Testing, and Creativity Assessment

“When we focus on creativity, we may ask, ‘what impact does it have on our test scores?’ No one wants to look at it from the point of view of, ‘if we do what we think is effective,

appropriate teaching, what does happen to our test scores?’ People are too afraid to ask what I think is the most important question” (Source: Admin 2).

Time. While the teachers and administrators adamantly agreed that creativity is an essential part of any classroom, “I think it’s difficult, though, to find the time to get away from the skills” (Source: Teacher 5). As mentioned previously, some discussion centered on students- and parents- need for “the right answer.” Naturally, the teacher and administrator participants discussed the current standardized testing mandates and all of the test preparation that is part of the school day. This sentiment- of rushing to fit in all aspects of the curriculum, and prepare students sufficiently for testing- was brought up early on in the focus group discussion, without any prompting, and was echoed numerous times through the course of the session. “And that’s why it’s so sad, because this is where you can really foster creativity if you start them young enough” (Source: Teacher 4). The participants spoke candidly of a district-wide suicide prevention program that was developed as a response to a state mandate for professional development on suicide prevention. While the idea of suicide prevention is important and necessary, the program itself became “one more thing” (Source: Teacher 2) that was mandated and added to an already full curriculum. “I think the important thing is, too often, a good idea, when trying to implement district-wide, becomes ‘now suddenly we’re going to learn about suicide!’” (reference to the aforementioned program). “The way that I look at creativity is it’s got to be something infused because what ends up happening is” (Source: Teacher 6), interrupted by another participant, “you *must teach creativity!*” (Source: Teacher 4). Laughter came from the participants, who are used to new programs being introduced. “Exactly! Today, we’re doing creativity. Tomorrow, we’re not teaching creativity; we’re

going back!” (Source: Teacher 4). “That’s one of the biggest problems with education- and that goes back to No Child Left Behind. What’s next- how do you test creativity? We- music, Spanish, gym, art, library- have to do a pretest, instruction, and authentic assessment. And we’re sitting going how- what- why? The worst thing we can do in a creative program is have a right or wrong answer! We have a big meeting where we have to come up with these assessments and I think it is absolutely the antithesis of creativity,” (Source: Teacher 6).

Testing. Hearing the teachers’ focus group discussion citing lack of time, often due to testing pressure, was especially interesting because by this point, I had already interviewed the administrators and specifically asked them about standardized testing. I also noticed that two administrators appeared very comfortable about discussing testing, whereas I felt one was less comfortable. Her answers often talked about the need for students to find the “right answer,” which I found to be in direct contradiction to the teachers’ discussion. In reviewing the transcript of her interview, I found her to be very passionate and extremely encouraging; however, I sense a very real fear of time constraints and test scores. Indeed:

I think it’s hard as educators to give kids the leeway to take risks and also be creative. It’s very hard for us because we want to see them get it right and we want to see them...and we don’t have time to kind of value every single part of that process because I feel we’re strapped for time. The child may arrive at this answer, but how long do we give them to get there? So if I only have 2 or 3 days to teach this concept...I’d love for you to fumble through all different kinds of explanations but really you have to get there by Wednesday. You can be as creative as you’d like but you’ve got to be done by Wednesday. So I think that time doesn’t allow us to be as creative as we could be either. I think that’s a big factor for us. (Source: Admin 3).

I sense that she wants to see and encourage creativity in the classroom but is unsure of how to see that her teachers fit it in. She is not wrong that time is a real factor, yet I think her focus on testing is a result of her first experiences with it.

When referring to a former superintendent, this principal:

felt that she was very data driven. And that's not a terrible thing to be because she wanted to see, show me the results, show me the evidence that we're doing, what we said we were going to do. So, I do understand that drive. I think our administration now has sort of backed away from that...while we care about our test results we also realize that we are a district where our test results are good, yes our writing may not be so great but our writing isn't great because our kids aren't taking risks in their writing. That's what we're seeing; they're not taking that risk. So how do we get them to take that risk? I think for a long time we were taught as teachers, teach them the prompts, teach them how to write this, teach them how to write the 5 paragraphs, teach them...and I think that came from above. I think now we're backing away. I think that we as administrators need to do a better job of leading you [teachers] in a direction. But I think you all know where to go. I really do. I think if we trust staff to say you know what they need to do and if you're not so worried about the score, I think you'll be less stressed and that push for creativity will show through you too. It trickles down. If I say it's okay to be creative, you'll say it's okay to be creative, and the kids will say it's okay to be creative. And then I think we're where you want to be. But if we're teaching lock step and I say you must, you'll say you must and the kids will say oh my god. I'm scared of this test. And I think that for a little while that was what was happening. (Source: Admin 3)

What was most interesting about this conversation was that she clearly identified the need for students to take risks in their writing, because this will improve their writing scores. We know from the focus group discussion that teachers had also identified the need for students to have a safe, comfortable environment that encouraged them to take risks. Literature reviewed in the second chapter supports this as well. However, the principal identified risk-taking as a way to improve scores but did not seem to comprehend that doing so was also a way to infuse creativity that would not require the

extra time she feared we didn't have. Her thinking was like a circle that was *almost* complete.

Similarly, she went on to discuss how an administrator's focus and leadership affects teachers:

I'm confident that teachers can infuse creativity in their classrooms when I think the leaders don't have a 'standardized tests only' focus...*I can be guilty of this myself, I know.* You know you have test scores that are at a certain level and you know you want to bring those scores up because you have to because the state says you're in "Year 1" this year. But I also think that children learn better when they are allowed to think and they are allowed to take risks. So I'm confident that if leadership, myself and from above, if we say, "It's not only about the scores, it's about how to get there and it's about the process and it's about teaching them to think for themselves." I think the teachers can run with that. I really do. I think it's far worse for creativity if I say it's only about the test, teach to the prompts, teach to the test and we're good. I think I, as a leader, and my administration above me have to value a process as well as an end result. (Source: Admin 3).

In reading this part of the conversation, I see that she is desperately trying to balance what she knows are good teaching practices: creativity, process over product, risk-taking, and independent thinking. However, she is still accountable to what numbers appear on the NJ ASK results, and it is my observation this fear was driving her answers based on the fact that she talked about the need for creativity, but kept returning to data, test scores, and "the right answer."

It must be noted that these interviews took place in the fall of 2010, approximately six weeks after the NJ ASK scores for the 2009-2010 school year were received. According to these scores, one school made Adequate Yearly Progress, two did not make AYP for Students with Disabilities LAL and made Safe Harbor; they were on hold status Year 1. Two other schools (the school of the teacher participants and another) did not make AYP for Students with Disabilities LAL or Safe Harbor; they are in Year 1.

The last two schools did not make AYP for Students with Disabilities LAL or Safe Harbor. Of these two, one school was in Year 1 and the other was in Year 2.

Fear was also evident to the assistant superintendent, although she was primarily speaking of the teachers. “I don’t have a lot of confidence in my teachers’ current capacity for that, and you can see in our conversation that went on today [reference to a reading workshop with third grade teachers on the morning of the interview] that they’re afraid. When I talk to board members about this I explain to them that I see a faculty that has really been beaten up by parents and are very afraid of parents. And I also see a faculty that has no confidence in their own ability to define, describe, and defend what they are doing in their classrooms. And that makes me very, very sad. I think that people who are afraid to defend what they’re doing don’t think hard enough about it and don’t have a very clear idea of it themselves. I don’t think that’s even possible to execute exemplary unless you really know what it is. I wish my faculty had more confidence in their own ability to make good decisions and more willingness to think hard about why they are doing what they’re doing and be able to explain exactly what it is, deliver it with a sense of confidence and then defend it against anybody who disagrees with it,” (Source: Admin 2). In reading and rereading her comments, I think of not only a teaching faculty but also an administrative staff with a lack of confidence in the own decisions.

This same administrator seemed to have an idea of the “bigger picture:”

That’s where we need to very clearly define what we are doing here. I think very often we don’t know. That’s why on the first day of school [2010-2011 school year] I talked about how the days for covering the curriculum are over. Really it’s time to uncover the curriculum...And when we uncover the curriculum it means we have to think very hard about what we’re doing and why we’re doing it. And how much time is it worth devoting to this part of this written curriculum and how much time

should I be devoting to that part. We have to make these decisions for ourselves. And I think it's hard for teachers to make those decisions independently because you really feel as if you're standing out in the line of fire all by yourself. And what's where I think PLCs are so helpful to teachers. You can feel that as a group, as a grade level, we have decided, that gives you some strength and those are the kinds of things that I think can help you feel more confident about what you're doing, why you're doing it and its essential rightness for children. (Source: Admin 2)

This administrator was honest about not always knowing what to do, and I appreciated this. As the researcher, what I especially liked was her focus on *why* teachers do things. Constantly reassessing and reevaluating our procedures, lessons, and individual students is necessary. While a teacher cannot start from scratch every year, one also can't use every single lesson as it is with a new class. A responsible educator will need to examine strengths and weaknesses and teach based on these needs. Doing so helps a teacher to find the time one needs, the time that the principal (Admin 3) feared was lacking.

Are there ways around the fear that seemed to dominate some interviews? Yes, but "it's a very, very slow cultural change. People need to know much we want our kids to know that they are in an environment where it is safe to take risks. Teachers need to truly believe that their administrators will support their decision to do more creative processes because that creativity will lead to better test-taking skills and greater background knowledge and the ability to think on their feet and apply their test-taking strategies. As an administrator, you can say it as sincerely as you want and as many times and it's still a slow cultural change" (Source: Admin 1). Nearly two years after these interviews, I as the researcher still sense the same feelings of fear and somewhat contradictory statements as administrators wrestle with the desire to create safe havens for teachers, who in turn want to create safe havens for students, while still meeting the

required annual standards. To do that, “I think they [teachers] need a lot of support from me and all the other administrators. I think we need to spend a lot of time building that support” (Source: Admin 2).

What some administrators and some teachers acknowledged, and what others failed to see, is that education *is* creative problem-solving. As per the original research question, this is a perception that affects practice. School curriculum aims to provide students with a thorough, well-rounded education. A strong curriculum and creativity do not have to be mutually exclusive. “But I think if we know that students know how to read, write, do math, they are interested in science and we can keep conveying to kids that they competent, they will become confident enough to actually sit down and do a job during a test. It’s not a test of what you know; it’s a test of *how* you can apply what you know. You have to be comfortable to do that kind of application” (Source: Admin 2). Educators who adopt a creative approach to teaching are more likely to deliver content and create a learning environment that develops higher order thinking skills (Perkins 1988, Feldhusen & Goh 1995). Teaching and learning is a reciprocal process, as is instruction and assessment; one serves to guide the other in a cyclical fashion.

Yet, Admin 1 feels that “standardized testing deters teachers from feeling like they have the freedom to nurture creativity. Parents might not know if their child is succeeding unless they come home with the grade on their report cards. Teachers are worried about the score on the standardized tests and rightfully so, as there is a lot of accountability. So, with curriculum getting heavier and expectations rising, if something has to give, I think many teachers feel they won’t be tested on “creativity” so to speak. Tests get in the way” (Source: Admin 1).

Creativity Assessment. The idea of the possible over-testing of students needs was echoed by a second grade teacher as she brought up the point, “How are we going to show what they know? Are we being too objective? I think posing a general question what do I want them to get out of it” (Source 4). Of course, not everyone accepts it. “It’s harder for teachers to let kids go off on tangents” (Source: Teacher 4). Asking “how do you measure it?” (Source: Teacher 2) brought the discussion to a poignant question: “Can I just ask something-Why does it have to be measured? (Source: Teacher 4). “The objective is to get kids to think creatively or do things creatively, but to measure it? I don’t see why” (Source: Teacher 4). “Because there are some kids who will never be creative. You have some kids that will never be a creative child” Teacher 4). “But that’s what I’m saying- why measure it?” (Source: Teacher 3).

Some teachers try to encourage creativity by assigning it a point value on a rubric. While students then know that creativity is going to be assessed, it doesn’t necessarily give them any idea about how this might occur. “I don’t know if creativity can be pulled out in isolation on a rubric or a point tally sheet. I think if creativity is really authentic, it comes through in all of the other aspects: creative content, creative presentation of material, creative use of the materials. I don’t know if by itself it can be a strand alone” (Source: Admin 1). Naturally, this relates back to the issue of trying to define creativity. Because it can be defined so drastically differently, and through so many different lenses, it does not make sense for creativity to exist by itself on a rubric for a designated amount of points, without providing further explanation of how creativity is being sought or defined.

If not a rubric, then what? How can creativity be examined, and does it need to be? “I think we can borrow from the arts. You know criticism is a very important part of arts education and from pretty early ages and I think our teachers in our district do an awfully good job of it. They ask kids to critique each other’s work and teach them how to talk to each other in honest but respectful ways. Did this piece deliver on these requirements? This piece did and this piece didn’t and can we see the difference between these two pieces. Accepting that this child did a better job. Yes, on this project this child was a better performer. And not feeling bad about that fact and recognizing that that’s the reality and then looking carefully at the piece that wasn’t well done. Is there something I can teach the child and that will enable him to do it better and also recognize that I might be able to teach the child better but I might never be able to make it as the child who has natural affinities and talents in that area. When anybody thinks that everybody has to have an A, it’s sort of like why are we assessing anyway?” (Source: Admin 2). I admired the way this particular administrator was not afraid to describe a scenario where one child performs better than another and this is okay:

I think there are guidelines you can give students. I do think there are some students that don’t necessarily think creatively nor do they have to think creatively because they know that in the end what we’re looking for is that answer. I think that we don’t do a good enough job, and I say as a whole in education of placing value on creativity...When you say creative, I think the best we do is give them guidelines. Use different materials than everybody else. Use an idea that nobody else has used before. I think you can tell them those things and they’ll try to meet those criteria...but I don’t know they see the value of it because they’ve done everything else that we’ve asked them to do. (Source: Admin 3)

This echoes the idea of placing value on creativity and also on modeling it. Vygotsky’s thoughts on concreteness as a means to an end, and not an end in itself, are especially interesting in light of the fact that many districts are moving towards a

curriculum that emphasizes more concrete, often scripted, instruction. This type of instruction tends to occur as a result of a strong emphasis on standardized testing.

Ironically, these tests require critical and strategic thinking skills, which do require more abstract thought. Scaffolding opportunities for such skills could actually raise test scores, a fact which was reflected in a study by Green and Gendelman (2004). Regarding all children, either ESL, gifted, or with disability, Vygotsky was correct in asserting that “the school should make every effort to push them in that direction [abstract thinking] and to develop in them what is intrinsically lacking in their own development” (1978, p.89).

What Does Creativity Look Like? Transitioning from the School to the Home

Environment

“I’m always baffled when people use a term like creativity as though that’s one distinct thing,” (Source: Admin 2).

The one area where all teachers, administrators, and parents agreed upon was that creativity is a highly valuable skill. Yet, how does one go about distinguishing it?

Everyone has different examples of what creativity looks like, whether they are referring to the classroom, home environment, or another space. “I think that anytime we have the opportunity for individual expression, anytime we have an opportunity for interpretation, anytime we have an opportunity to synthesize information or to make judgments, to construct, to interpret, that’s creativity and all of those things are part of Bloom’s Taxonomy. They are part of any study skills; learning is creativity” (Source: Admin 3).

Piaget told us the child invents to learn. “And what is invention if not creating. So this notion that creativity is something different from learning is very baffling. I think all learning is a creative event of the act of memorizing something. We all have to create a

structure in our brains that allows us to recall information. It is another creative act” (Source: Admin 3). Every year in kindergarten, Teacher 1 reads aloud the story of *Charlotte’s Web*, (E.B. White). The story has very few black and white drawings, so reading aloud allows the children to create their own images in their mind. In class, she encourages them to draw their favorite parts, as a form of listening comprehension. The teacher points out that this is a form of a higher level retelling. As she showed me the children’s work, I sensed the teacher’s excitement and pride in the children. One girl drew how Wilbur the pig talks to the spider Charlotte, and Charlotte was indeed drawn up in the corner on the door frame. She also included all of the farm animals, and it’s true that when Wilbur met Charlotte, all of the animals were there. Another child drew Templeton trying to get the eggs, and included a picture of the trough. Interestingly, the teacher read the word *trough* but never actually explained what it was. Yet, the child was able to decipher the meaning, and her picture included a food bin for the farm animals. A struggling student drew when Charlotte caught the fly and spun it. While the drawing was simple, it clearly reflected Charlotte’s grasp of the fly (and the child’s grasp of the concept). Another child drew the part when Fern is daydreaming in school and announces “Wilbur,” as the answer to a question. Her drawing included a speech bubble saying “Wilbur!” Little bits of the different pictures, such as drawing the spider up in the corner, as she always was, or including the stool that Fern sits on, were such small details that the teacher felt truly showed how the children really listened and learned as the story was read aloud.

Creativity is not limited to literacy. Just this year, Teacher 4 gave a math test on basic multiplication concepts. One question asked if it was possible to use the equation 3

+4 +1 to create a multiplication problem. The concept was simply identifying basic multiplication practices. If the given equation was $3 + 3$, the student would have created 3×2 . In the equation provided ($3 + 4 + 1$), there were no similar addends; three different numbers were used. Was there a way to group them and create a multiplication problem? One student answered yes, a problem could be created. He explained that he had actually regrouped the given numbers into $4 + 4$. This, of course, equals 8, as does $3 + 4 + 1$. In grouping them as $4 + 4$, he created the multiplication problem 4×2 . Was he wrong? According to the math text, yes. However, the teacher awarded him full points for a much deeper and solid understanding than the book called for. She asked him to explain his thinking, and he demonstrated how he changed $3 + 4 + 1$ into $4 + 4$. “He didn’t even know that what he did had a name, and was called the distributive property. He simply saw the numbers, and saw them grouped to become something else,” (Source: Teacher 4). The student was even able to solve a similar problem in the same manner, demonstrating a full grasp of an advanced concept. Hearing this example was especially enlightening, due to the fact that discussion concerning creativity generally centers around literacy and the arts. The teacher was quick to acknowledge the implications of this unique problem-solving; “now *that* is creativity!”

One surprise arose from the interview with the music teacher, as an example of creativity in motion. Part of our conversation centered on the notion of gender as a cultural model. Gender roles, although often culturally dictated, influence how we understand and interact with others. Discourse can also influence relations of power. Fairclough (2003) notes “that language connects with the social through being the primary domain of ideology, and through being both a site of, and a stake in, struggles for

power.” Language serves to reinforce and challenge these perceptions of gender, which often come from the environment. She noted that as a music teacher, she finds that boys are often discouraged from joining the chorus, because “boys don’t sing,” and “dancing is for girls,” (Source: Teacher 6). (Some music games involve dance as well as song.) She has been told this directly by some fathers. She mentioned that one little boy in our school came to Halloween dressed as Cinderella, and pointed out that the parents must have bought him the outfit, thereby giving approval. This again reinforces that a parental attitude makes a significant difference. She phrased it as the parents “letting part of their ego go.” Piirto (2004) recommends avoiding an emphasis of sex-role stereotypes. Part of being creative is having the ability to express yourself, and it takes flexibility and security on the parents’ part to offer the safe, secure environment necessary for the boy to dress as Cinderella. As per the original research question, this is a perception that affects practice.

The first two research questions concerned teachers’ and administrators’ different perceptions of creativity, and how these conceptions shape their educational practices. The interviews and subsequent focus group session invited and encouraged teachers to bring their own thinking, ideas, and experiences to the learning environment; these findings were coded into four major categories: the classroom environment, the role of the teacher, the home connection, and difficulties. This next section explores the family’s influence on the child, in order to round out the emerging picture of a child’s creativity development.

Meet the Families

Family 1: 11 year-old 5th grade girl (Kelly), 10-year-old fourth grade boy (Josh), 6-year-old kindergarten girl (Ally)

“Creativity starts with us and hopefully continues.”

My first visit to this family's home was 3 days before Christmas and the day before the schools closed for winter break. The family was eager to show me their beautifully decorated home, including their three Christmas trees. The tree in the front hallway, the first I saw as I stepped in the house, was full of ornaments and decorations acquired during the family's many trips to Disney World; Mr. and Mrs. Potato Head, Buzz Lightyear, and Mickey adorned the tree. Off to the left, the living room tree contained special family mementos: each of the children's baptismal shoes, the children's handmade ornaments, small framed photographs, and family heirlooms. The final tree was situated in the dining room and was decorated with ribbons and Lenox ornaments. Sitting around the kitchen table, Amanda and John shared that they had moved to this NJ suburban town from Staten Island, NY, approximately 12 years ago, knowing they wanted to begin a family in this home. As a testimony to this desire, the yard contains trees that were planted on the day each child came home from the hospital after being born. There are three children: Kelly, an 11-year-old fifth grader, Johny, a 9-year-old fourth grader, and Ally, a 5-year-old kindergartener. The older two children are part of the school's "Academically Talented" program, which offers students an advanced math and reading curriculum. Ally began kindergarten in September at the same local private school her older siblings attended. This school is part of the Catholic Church the family attends and is situated on a main road just a few minutes away from the family's home.

Family 2: 11-year-old 5th grade girl (Sofia)

"Study, so you don't have to farm!"

Michaela is a nine and a half year old fourth grader. She enjoys learning and school and is part of the school's "Academically Talented" program, which offers

students an advanced math and reading curriculum. She particularly enjoys math and art, and would one day like to be a basketball player who does artwork. She is an only child who moved with her parents to the United States from Bulgaria in the summer of 2000, when she was three months old. Her parents are computer engineers and came here for “job opportunities.” Her father’s company offered a job here, and they at first came here temporarily, but then the job offered “green cards” and they opted to stay. At home, the parents speak Bulgarian, and Michaela understands but responds in English.

Because both of her parents work full-time, Michaela takes part in the local YMCA’s after-care program, which is offered at the elementary school she attends. On a typical school day, her dad picks her up from school at approximately 6:00 PM, and her mother arrives home from work between 6:30 and 7:00. Her mother cooks, and dinner is served between 7:30 and 8:00. Michaela often helps her mother with the salad, but sometimes gets distracted by cutting up the cucumbers into little shapes, and this is the only task she gets done! In the evening, Michaela works on school projects, if she has any. All other homework is completed during her time in the after-care program. While her parents checked her homework over for her when she was younger, she now only asks for help if she needs it. In the evenings, she likes to “relax” in her bedroom, because it has everything she “needs except for food.” To her, this means a lot of art supplies. On the weekend, her family spends time together. On a few occasions, her family has gone ice skating together. She shared one particular time when she “fell a lot,” although her parents “were pretty good.” Once, they went skiing in the Poconos for a weekend, which she really enjoyed. During one ski trip, her mother accidentally took her on a more advanced course, and shared that Michaela crashed into a boy and both of them fell. Her

parents enjoy playing tennis. During the winter they play at a club and in the summer they go to a park. Michaela does not really enjoy tennis, but talked a lot about basketball. She also takes swimming lessons at the local YMCA, and her mother said she is particularly good at the breaststroke. Sometimes, they play board games together, such as Blockus or Sorry.

Family 3: 12 year-old 6th grader (Elaina) and 10 year-old 4th grader (Sasha)

“I’m amazed that they [his daughters] have completely different approaches to things.”

This family’s interview took place in early May, 2010, at a local restaurant after we had all taken part in a Lupus Walk to benefit a mutual friend. The older daughter, Elaina, was a 12-year-old sixth grader at the time of the study. She had been a student in my third grade class during the 2007-2008 school year and was in my first class of third graders. Her younger sister, Sasha, was a 10-year-old fourth grader during the study and was also a former third grade student. She had been in my 2009- 2010 class.

While physically similar, the girls had different personalities and interests. Elaina was extremely intellectual, loved reading and writing. She was a huge Harry Potter fan who appreciated the fantasy but who also appreciated the book themes. She completed an independent project titled “Light and Darkness in the World of Harry Potter” in the spring of 2008 that astounded me with her attention to depth and detail. Elaina enjoyed having long talks with individuals or small groups. She is active in her school newspaper, Young Astronauts’ Club, volleyball, and local children’s theater group. She is incredibly proud to be the only child asked to participate in the church adult bell choir. She loves that bell choirs are “unique” and is “proud that I can follow them” (the adults). The songs are “prettier than the kids’ songs” and thinks that the group dynamics are better than the

kids' choir. With the adults, "everyone knows what they're doing, but the kids don't always know what they're doing."

Elaina is an avid reader and has been as long as I've known her. She is a huge fan of the *Harry Potter* series and says she most enjoys reading material that is fantasy and unrealistic. She has also read through the *Mysterious Benjamin Society* series, Percy Jackson, Warriors, and a number of books by James Paterson. She likes to watch movies that are based on books she has read, but it "drives [her] crazy when the movies aren't like the books."

Sasha is jubilant and outgoing. She was part of my Odyssey of the Mind team during the 2009- 2010 school year. That year was the first year that the school housed grades 1-5, after having previously been a 1-3 school. She was the only third grader on that year's team, with the other six being fourth and fifth graders. Her personality made her a natural fit. She loves to dance, and takes jazz, tap, and ballet, and also participates in the church's children's bell choir. She loves that dance gives her "freedom to move" and that she is encouraged to be her "own choreographer." She likes that "you learn skills, but you still have the freedom to move and look however you want." Her mother is her Girl Scout leader, and they take part in a number of activities and service projects.

Sasha also enjoys reading and prefers humorous stories, ranging from the *Animal Ark* series to *Diary of a Wimpy Kid*. She keeps busy on Saturdays with soccer and theater rehearsals, or watching the Disney channel on TV. When it comes to memorizing lines, she ends up memorizing all of the lines in the play by taking the script up to her room, and working until she knows them all. Elaina, on the hand, "needs to have someone twist her arm" in order for her to memorize them, but in the end, she knows them all very well.

Family 4: 9-year-old third grade boy (Jason) and 7-year-old first grade girl (Laura)

“Creativity allows you to express yourself whenever you want.”

Jason was an 8-year-old third grade student in my class during the 2010-2012 school year; his younger sister Laura was a 6-year-old first grade student in a different school within the same district. Jason had been part of the district’s Academically Talented program since he was first eligible in the second grade, so he attended this elementary school where the program was housed, instead of his home school that Laura attended.

Jason has a warm, engaging personality. He clearly loved to learn and his extensive background knowledge helped him to share insightful comments. He was very interested in social studies, particularly U.S. History, and he had devoted much of his outside reading to books about Presidents and historical events. He was also intrigued by animals and liked to read and learn about their habitats and behaviors. As the year unfolded, Jason began experimenting with new words and phrases. After a few lessons on idioms, he began challenging himself to search for new idioms to incorporate into his writing. I was most captivated by his sense of humor; he had a knack for making timely quips that entertained both his peers and his teacher.

Laura was a spirited 6-year-old who ran around her older brother’s soccer games in her bare feet. When I visited the family’s home, she spent some time in her room and sometime in the living room with her parents, brother, and me. When I met with her and Jason to discuss the photos, she was much more outgoing and very enthusiastic. She loves writing and drawing, and spending time with the puppy that the family acquired in February, 2010. Jason had shared that he likes to go home from school and teach what he

has learned to Laura, and she has mentioned how much she learns from all three of her older siblings.

His parents have lived in the town for the past 5 years. Jason was actually born in California and the family moved to Boston when he was two. His younger sister, Laura, was born in Boston, and the family moved to New Jersey in 2006. Jason has two older half- siblings from his father's first marriage: Anna was 17 and a senior in high school at the time of the research, and Dan was a 15-year-old sophomore. Jason spoke of his older siblings often, indicating a close relationship both of love and extreme admiration. In fact, his brother shared his room during the weekends he visits from his mother's home in Pennsylvania. While his older siblings only visit on some weekends, Jason always noted that he was a "middle child" and one of four children.

This next section reports the finding from each family's interview and individual child photographs. It has been divided into two major sections, each with their own sub-sections. The first section is titled Creative Use of Time, Space, and Materials, and the second is titled Experience: Formal Extracurriculars and Informal Lessons from the Home. Figure 2 displays the overlapping terms utilized and insights offered by the focus groups.

Family Findings

The third research question sought to understand each family's creative literacy practices, and how parents view their significance. Initially, I noticed that all of the families spent time together, although in varying amounts and with unique activities. Some children participated in many formalized teams and extracurricular activities, while others had "free" time after school to pursue what interested them, be it playing with

friends or siblings or spending time alone (and others did both!) Regardless of how exactly they are structured, children need to live in environments rich with opportunities. Because one of the main objectives of this dissertation was to examine the perceptions that parents have about creativity, looking at how the family spends time together and apart, and the rich environments of which they are part helped me to think about how these conceptions shape rearing practices.

Creative Use of Space, Time, and Materials

Attending to children's needs and interests can offer many cues to creative living and learning, both at home and in the classroom. The children in this study live in environments that are rich in many different ways, from play around the house to organized extracurricular activities. It became necessary to looking at the creative literacy practices that take place at home, and how parents view their significance. The following three sections discuss how these children and their families make creative use of space, time, and materials in their quest to observe, question, learn, and explore the world around them.

Creative Use of Space: Creating a Home Environment

“They had to look beyond the individual. They had to understand the culture he or she was part of, and who their friends and families were, and what town their families came from. They had to appreciate the idea that the values of the world we inhabit and the people we surround ourselves with have a profound effect on who we are,” (Gladwell, 2008, p. 15).

Knowing that there is a relationship between creativity and personality, and that early literacy practices influence learning, has led us to carefully examine the

environment. We know that, “Successful people don’t do it alone. Where they come from matters. They’re products of particular places and environments” (Gladwell, 2009, p. 178- 179). Vygotsky emphasized the need for adults to scaffold opportunities for more abstract thinking, because children learn through the support and guidance they receive. Parents play a key role in offering this support, and exploring how each family operates has helped to paint a clear picture of the home environment that each has created. Understanding each child’s unique space means examining what the family, and the individual child, values.

My first visit to the first family’s (F1) home was 3 days before Christmas and the day before the schools closed for winter break. The family was eager to show me a plate of colorful Christmas cookies was on the table; the children had been allowed to stay up an extra half hour the night before when they baked and decorated the cookies together. They had used a special colorful cookie dough that enabled the children to create realistic wreaths, Christmas trees, and other designs.

This family is fortunate to have a large basement that is frequent site for parties and play dates. Right before it was repainted, the children were allowed to paint the walls however they chose, just for a few days’ fun. For one of Kelly’s birthday parties, Amanda and John created a “runway” for her “Fashion Party,” with the party guests taking turns dressing up and walking down the runway. One Halloween party found the guests struggling to eat donuts off of strings tied from the ceiling without using hands.

When asked about creativity, Josh’s first response was that it should be “funny.” The family added in that creativity is something original, where you “think outside the box,” and stretch your imagination; it shouldn’t be dull. Kelly added that art is creative,

based on her art classes and paintings. Josh also thinks that paper airplanes offer him a chance to be creative; he has been reading *The Klutz Book of Paper Airplanes* and he loves the unique designs that evolve into flight. Some of his favorite toys come from the *Toy Genius* store, a line that specializes in unique toys. Creativity allows “you to express yourself whenever you want,” and Amanda feels it “starts with us but hopefully continues” with the children. She feels that she and her husband try to encourage independency without “pigeon-holing” their children into their set notion of what is “right.” John chimed in that even at work, he is not a micromanager. He is a computer technologist who writes applications for financial institutions. (Amanda says that even she really has no idea what he does!)

Creative influence is not limited to home; both Amanda and John, along with Kelly and Josh, feel that school plays a significant role. Amanda thinks Kelly feels the need to please, whereas Josh challenges more. Their decision to take risks does tend to be based on grades. Risk-taking also depends on a level of comfort because children do want to please the teacher in a way. Amanda spoke about both of her children’s experiences in my class, noting that we had discussed Kelly’s writing developing in a way where she learned to be more concise, whereas Josh learned to elaborate more. This year, Amanda is concerned that Kelly feels “defeated.” I think it’s important to note that Kelly seemed uncomfortable at this point, and actually spoke much less, when up until this point she had been chiming in frequently to the discussion and sharing her own thoughts and anecdotes. Amanda reassured her that all of her thoughts and comments were to help me understand kids’ thoughts and that she didn’t need to worry about my repeating anything to her teacher. I reiterated this, and Amanda went on to explain that this year, Kelly is

working to do exactly what the teacher wants but her “interpretation is too pigeon-holed.” Kelly isn’t comfortable experimenting with “crazy things” anymore because her grades are not what she is used to getting and, despite her best efforts, she can’t seem to achieve what she has in the past. She appears frustrated because she can’t figure out what the teacher wants.

Yet, despite this awkward twist in the conversation, the family strongly feels that part of being creative is *not* listening to anyone. As per the research question, this is a perception that affects rearing practice. “Just do it, so no one tells you to do this or that.” You may choose to follow guidelines, but being creative is putting your own twist on it. One of the traditional projects of the school district’s Academically Talented program is the Morning Minute, which challenges students to self-select a topic, research it, and present their findings. This year, as a fifth grade student, Kelly was expected to present for 12- 15 minutes. Her selected topic was movies, and she planned to present her information like an award show. She arranged her information into categories, including classic films, humor, famous actors and actresses, and series. Amanda admitted that at first she was watching Kelly and wondering how she could possible organize all of the information into meaningful categories, since the topic of movies is very broad, but, she really wanted to step back and allow Kelly the chance to work independently. Amanda also feels that Kelly’s experience with dance has really influenced her creative expression. The way Kelly spoke and even moved when practicing her Morning Minute presentation at home is a result of her dance background. Preparing for dance competitions has also taught her how to practice, balance her time, and manage any feelings of anxiety that may arise before presenting.

Family 2 returns to visit Bulgaria every other summer and is planning a visit for the summer of 2010. Their Bulgarian heritage is a crucial part of their home space and identity. Sofia's mother had several Bulgarian schoolbooks available to show me, the type of books that would be given to a child in grades one, two, and three. She recited the alphabet to me; there are 30 letters. She kept them because she had intended to teach Sofia to read and write in Bulgarian. A gallery in the nearby town of New Brunswick honors May 24, a holy day of Bulgaria. Last year, Sofia took part in the gallery's day of events by reciting a poem in Bulgarian, even though she did not know what it meant. This May, she is likely to do the same.

On the weekend, Sofia's family spends time together. On a few occasions, her family has gone ice skating together. She shared one particular occasion when she "fell a lot," although her parents "were pretty good." She also takes swimming lessons at the local YMCA, and her mother said she is particularly good at the breaststroke. Sometimes, they play board games together, such as Blockus or Sorry. They are proud of their daughter and are happy that she likes math, since they both do. They shared that there is an expression in Bulgarian that translates to, "The pear isn't far off the tree," and I shared that is similar to an expression we have here: The apple doesn't fall from the tree. Sofia, inquisitive as always, says, "Well, does that make me the apple or the tree?"

In the third family (F3), mom has two older sons from a previous relationship, ages 32 and 29. The older son is married and has a son of his own; Derek is 5. Elaina and Sofia are so excited about being aunts and they spend lots of time with their little nephew. Mom is the self-proclaimed "homework helper" who assists the girls as needed. In this way, she scaffolds opportunities for success and learning by helping her daughters

to set reasonable deadlines for long-term projects, memorize lines for acting where needed, or playing the opposing role to help the girls practice. The family's policy regarding activities is that once you commit to something, you must follow through until the end (of the season). They encourage the girls to do one physical activity (such as soccer) and one other activity (such as art or acting).

Spending time with such welcoming families provided me with clear snapshots of their home life while simultaneously helping me to understand the values and experiences that make each family unique. I asked for everything I could think of, and they gave me everything they had: time, trust, respect, love, honesty, and abundant creativity.

Creative Use of Time: Formal Extracurriculars and Casual Home Lessons

“Outliers are those who have been given opportunities- and who have had the strength and presence of mind to seize them.” (Gladwell, 2008, p. 401)

While the teachers and administrators discussed students' prior experiences with creativity as having an impact on how this influences their ability to create freely, experience with creativity is also influenced by the different opportunities available to each child. These opportunities come in the form of formal extracurricular activities, and less formal, “around the house” lessons learned within the home. Extracurricular activities are fun ways to try new skills, meet people, and engage in extensions of academic and non-academic activities. In addition, research has found that youth who participate in extracurricular activities are more likely to have better grades (Marsh, 1992), higher standardized test scores (Gerber, 1996), higher self-concepts (Marsh, 1992), and higher educational attainment (Hanks & Eckland, 1976), and to attend school more regularly (Mahoney & Cairns, 1997). However, time spent in the home and

engaged in family activities can also have a significant, positive influence on students' lives. While some families chose more formal settings that encouraged creativity, such as classes and lessons, and others relied on informal "around-the-house" settings (and many children benefited from both). What was common among all of the families was the value they put on creativity. This supported the teachers' and administrators' notion that a family that places value on creativity is allowing that child the freedom to explore.

Formal Extracurriculars. In the first family's (F1) home, a schedule of organized activity and free play runs the family household. On week days, the oldest daughter, Kelly, is very involved with tap, ballet, jazz, and lyrical dance. She's been dancing since she was three and loves all dance, with tap serving as her favorite. The youngest daughter, Ally, takes beginning dance lessons, and middle-child Josh and Ally are enthralled by soccer. Josh plays in a travel soccer league and also takes individual lessons to strengthen his skills during the off-season. In the winter, Josh also plays basketball, and Ally was very proud to share that she was the only girl on the local T-ball team this past spring. All three children participate in after school religion for an hour once a week, with Josh's mother teaching his class. They also all take painting classes; their work was recently displayed at an exhibit through the art program. During my "tour" of the house, their mother showed me a number of their art pieces that the children having painted throughout the years.

During my interview with the second family (F2), Sofia's parents were considering sending her to a specialized summer camp in Massachusetts that offered a variety of classes in a camp setting. Course opportunities ranged from designing your own handbag and studying Japanese to creating web pages and kayak racing. At the time

of the interview, she had recently participated in a weekend extracurricular class titled “Communication Station.” The program was offered during a six-week period and taught research skills, public speaking, relaxation techniques, and vocal exercises, including “long sentences and tongue twisters” intended to help children learn to speak well in front of an audience. The culminating project was of a persuasive nature; the students were asked to research a topic of their choice and give a speech on it. Sofia chose to study skunks as house pets. She reported that skunks make terrific house pets when their scent glands are removed and that they are very similar to pet cats. She also included other “supporting details” in her work. The reports were taped and aired on a local television channel. Unfortunately for her, her parents found all of her research, including details she had found but hadn’t included in her final report because she they were facts against her argument, and her parents used her own research against her. Alas, she did not get a skunk for her as a pet. Her experience and involvement in these unique opportunities, coupled with other factors (to be discussed), helped her to hone different skills.

The third family (F3) splits their time between dance, acting, Girl Scouts, and volunteer activities. The parents encourage their daughters to participate in one “physical” activity, such as a sport, and one other activity. Eldest daughter Elaina enjoys the improvisational side of acting. She likes creating characters and giving each a distinctive “walk, talk, hair color, and job.” She learns her lines for local community plays best while walking around the house, reciting them aloud, and creating the right “feel” for the character she is portraying. Younger sister Sasha also enjoys acting, but she is drawn to more humorous, flamboyant characters, especially those in musicals, as opposed to Elaina’s more serious dramatic characters. Sasha always asks for her mother’s

help with her lines. Her mom reads an opposing character's lines while Sasha reads and memorizes her part.

In Family 4, Jason is an avid soccer fan and player. I had attended a few of his soccer games and, while physically small, he was an incredibly swift and powerful player. Monday morning conversations tended to include highlights from his team's weekend games. His younger sister, Laura, also played soccer, and her father was the coach. Their father was born in Argentina and emigrated when he was 12, and their mother was born in South Africa and lived there until she was 24. Because soccer is an important sport in both countries, it seems natural that both parents were fans and encouraged their children to play. In addition, both children took karate lessons. Jason attended Hebrew school once a week, and he was very proud that out of his father's four children, only he attended. His older siblings (from his father's previous marriage) and chosen not to participate, and his younger sister was too young.

Lessons from the Home. While the above takes into consideration formal activities that some students participated in, it must be noted that not all families have the financial resources available to send their to these camps and lessons, and I am by no means implying that experience can only come from a formalized setting. Many of my favorite vignettes came from hearing about the casual "around-the-house lessons" from the different families, and making connections between these activities and the children's developing creativity. From outdoor play activity to reading outside of school, lack of time is cited as a pressing problem in a society that is constantly changing. Between school, homework, projects, and after school activities, even children are beginning to feel that there is not enough time in a day. In addition to balancing work, school,

extracurricular activities, families are also striving to build crucial family time. This section will explore how families how they do so, and why they feel it's important.

The first family's (F1) love of play and games has influenced their children's choice of leisure play and activities. Josh has formed a habit of telling Ally stories at night before bed. He relies on books he has read, television shows and movies he has seen, and his own imagination to create stories with vivid characters and plots that keep Ally entertained each night. Kelly prefers to write her stories, and she keeps a journal of these stories, accompanying pictures, and daily events.

When the kids' friends come over, the parents find that their children imitate what they do by organizing games and events for their friends. Kelly and her friends will frequently head down to the basement for several hours to organize costumes, lines, and songs, and then "perform" an original show for any family members or friends that are around. Last summer, when the extended family met at "Papa's Cabin," Kelly organized games and activities, including an extensive scavenger hunt with clues and prizes, for the 4-day family vacation attended by nearly 40 family members. Kelly's willingness to organizing such events stemmed from years of watching her mother do the same, and then choosing to take over these activities herself. The family showed me a scrapbook that they had created from their "Clamless Clambake," the clever premise being that the family got together for a clambake without actually going through the long process of baking clams! The blue shirts commemorating the family event asked "Got Clams?" on the front, with "We Don't!" on the back. Kelly also took over the reins of birthday party planning and recently organized Ally's "Cowgirl Party" in the basement, complete with costumes, games, prizes, and decorations.

Because week days are so busy, the first family (F1) considers weekends to be an important family time. The family likes to visit Long Beach Island throughout the year, swimming in the summer, taking long walks in the spring and fall, and staying inside and looking out in the winter. In the winter, they like to visit “Papa’s Cabin,” Amanda’s father’s cabin in the Catskills of New York. Sunday mornings are reserved for church, but the family likes to squeeze in trips to the park up the street; they are excited that all of the kids can now ride their bikes well enough to reach the park. In addition, they recently rode the Henry Hudson Trail, a tree-lined, 22-mile trail in Monmouth County, NJ. Weekends are ideal for visits to Storybook Land or the Popcorn Park Zoo. This zoo is a haven for abused or neglected animals; the family sponsors a dog at the zoo that they are free to pet and walk on their visit. Movie and Game Nights are also regular events; Josh’s favorite is Monopoly because he likes to strategize.

Weekends are also times for trips to museums and theaters. Vacations are a must; as self-proclaimed “Disney people,” they take annual trips to Orlando, Florida, to visit the different Disney theme parks. The family likes to talk about the “creative side of Disney,” meaning they like to discuss the design of the rides and themes of the parks to appreciate the thought and imagination that went into every design. At times they have flown to Florida and other times they have driven. Long car rides pass by quickly with songs and made-up games: Who Am I, What’s my Favorite Ride, Guess the Ride, the license plate game, and car scavenger hunts. The family has also been to Colorado, Florida, and Washington, D.C. In general, all electronics, including mp3 players and personal video games, are banned from restaurants and a part of long car rides in order to allow the family time to talk and recap the day’s events. Even at the home dinner table, the family

plays these games and others, sometimes challenging one another to take a number and turn it into a picture.

During the summer of 2006, Sofia (F2) spent three weeks in Bulgaria visiting relatives by herself, and when her parents joined her at the end of her time there, she spoke Bulgarian very well. They pointed out that she really had to learn to speak out of necessity, as her relatives do not speak English. During a subsequent trip in 2008, her parents were with her the entire time, and she spoke more English because her parents were there to translate as needed. While she never attended any formal “Bulgarian language lessons,” I found it very interesting, yet not surprising, that she began speaking a language out of a need to communicate, when she had no one with which to speak English.

The idea of informal learning stems from her parents, who have shared a fair amount of information with their daughter about growing up in Bulgaria. One difference they note (which can also be a point of confusion for them) is that their school was different than her school in a number of ways. Instead of simply having “science” or “social studies” as subjects, starting in fourth grade students took specific courses: biology, chemistry, or physics, instead of science, geometry and algebra, as opposed to math, literature and grammar, instead of reading and writing, and world history and geography, instead of social studies. As a child, Sofia’s mother played a geography game with many children in the neighborhood. They had memorized many different countries, their locations, capital cities, and populations, and children would call out a country name and they would all call out the corresponding information. What a creative way to learn geography! Both parents lived in villages (she in a small village in the north and he in a

smaller village in the south), and they frequently played a lot outdoors: soccer (of course called football- Sofia was excited to share!), improvising with two bricks and a gate to serve as a goalpost, volleyball, badminton, and dodge ball. There were not many organized sports teams, as there are here, but there were some extracurricular activities available through the school. Her parents pointed out that here, school is fun, and there is no emphasis on having fun. The point of going to school is to learn, and it is very serious. Children go to school in the way that adults go to work. Her mother recalls that her parents would tell her to “study, so you don’t have to farm!” Her parents were both well-educated (accountants) but also farmed in the evening and on weekends for extra income.

The third family (F3) is one that spends their fair share of time at dance, acting, homework, projects, Girl Scouts, and volunteer activities. However, what struck me during our conversation was how much time they also spent together as a family, taking part in a multitude of unique activities. Their father feels that he and his wife have a wide variety of interests that influence their daughters’ interests. For example, different music and shows are an important part of this family’s free time. The parents took the girls to see *Wicked* three years ago, and Elaina “loved the story.” They’ve also seen a number of other musicals, including all of the recent Disney productions, so that they can compare them to the movies. When driving home from shows in New York City, they always rate them, “which leads to big discussions” about favorite actors, parts, scenes, and songs. The parents love “70’s music, the Beatles, and Elvis,” which has built a sense of recognition and appreciation in both girls. Sasha prefers concerts while Elaina loves plays. A few times a year, the family heads to the Count Basie Theatre in Red Bank to see different shows; these range from Elvis impersonators to comedians. In addition to

appreciating the arts, they are also big baseball fans, with a gentle family rivalry forming between the Mets and Yankees. For “free” days, the town library is “literally around the corner.” The family visits frequently to borrow books and occasionally to attend events there.

While the family spends a lot of time together, each girl is busy with her own schedule. Their father notes that even the way the girls organize their personal time is quite different. The family tries not to schedule events or lessons on both days of the weekend so that one day can be left for projects, family events, and church. He is always “amazed that they have completely different approaches” to doing things. Saturday is Elaina’s “downtime.” She likes to spend the day listening to music on her I-pod, texting, and reading. After a busy week, she finds that this helps her unwind, relax, think about the past week, and ponder upcoming events. Elaina “can always pull it together,” even if it means she is up late finishing up homework or projects.” She has a clear idea and seems to thrive “under pressure.” While an initial idea for a project or paper may come to her head in the car, she finds that she “needs pressure” to put it all together, and when she does, she does it well.

Creative Use of Materials: What do Children Use?

Because prior family and life literacy experiences are so unique, yet important, the notion of creating a comfortable learning space is invaluable. Knowing that there is a relationship between creativity and personality, and that early literacy practices influence learning, leads one to next examine not only the family, but the physical environment as well. While parents may be willing to teach their children skills such as carpentry or sewing, a child needs access to certain materials in order to be able to execute and hone

these skills. Exploring materials also allows children to further develop their creativity by asking “what if” type questions such as,

- “By altering the materials how could we . . .?”
- “What might happen if we changed its shape?”
- “How could we adapt it to make it move faster?”
- “How can we make it smaller, lighter, etc.?”

In addition, experimenting with different materials helps students to avoid the issue of functional fixedness, which is the tendency to perceive an object as being able to carry out only the function for which it was designed (odysseyofthemind.com). The tendency to apply only one function to an object limits the number of possible resources an individual can use when faced with certain tasks.

Although not designed for these functions, a toothbrush can be used to clean golf clubs, a coin can be a screwdriver, an old sock can be a rag, or a rubber band can be used as a hair band. Similar to redefining a problem, redefining an item’s function allows individuals to go beyond preconceived notions. The purpose of this section is to describe the physical materials in each child’s environment.

While F1’s basement is the ideal location for group play, each child has their own room that is decorated to suit their personal tastes. Kelly’s room is painted a shade of pale green and is accented by her paintings, dance trophies and medals, school projects, and photographs of friends and family. Josh’s room contains his beloved *Toy Genius* toys, a large collection of plastic dinosaurs, photographs of him at various ages, a small drum set, and soccer trophies. As the youngest child, Ally is the only child who doesn’t have a full-size bed just yet. Instead, she loves her self-proclaimed “taco bed,” a futon that she

prefers to sleep in when it is set like a couch, as opposed to opening it to make a bed. This allows her to sleep in the fold of the mattress, making her “feel warm and snug like a taco,” as she told me. Ally showed a picture of a school bus that she had drawn; this picture serves as a special code with her mother. Kelly and Josh walk to the bus stop with their mother for pick-up at 7:30 AM. Amanda leaves the picture of the school bus next to Ally’s bed before taking the older kids to the bus stop (Ally is usually sleeping at this point because kindergarten starts at 9 AM). If Ally wakes up and sees the picture of the school bus by her bed, then she knows her mother is still with Kelly and Josh at the bus stop and she needs to stay in bed until her mother comes to get her. If the school bus picture is not by her bed, then Ally knows her mom is home and she can get up.

In the evenings, Sofia (F2) likes to “relax” in her bedroom, because it has everything she “needs except for food.” To her, this means a lot of art supplies. She likes to draw, either on sheets of paper or in sketchpads, and likes to make items for other people. She displayed some of her artwork that was made using crayons and watercolors: a pink and purple rainbow with birds, bees, and butterflies, a dog, a cartoon girl, and a bunch of grapes. She mentioned making birthday cards for friends and family, especially pop-up cards, and showed a card that she was taking to a birthday party that afternoon. Specifically, she recalled making a card for her mother last Mother’s Day with a pop-up heart. In the evening, she watches television in her own room, particularly the Disney channel, although her parents mentioned that she likes movies with Jennifer Aniston. She also shared that she really likes Anne Hathaway, particularly in the *Princess Diaries* movies and *Ella Enchanted*. Her parents watch television downstairs, since they watch “adult shows.” She has two tiny frogs, Polka Dot and Pebble, which went along with the

“sea” theme in her room: she has dolphins on her pillows and a beautiful picture of fish and other marine life above her bed. In her room she has a collage hanging on the OM team from last year that I gave to her last spring, as well as a shamrock headband that she had won in my class as part of a St. Patrick’s Day game. There is a bookcase in her room, filled with a few Bulgarian books that were given to her by family friends, even though her mom pointed out that she can’t read them. She likes Andrew Clements; we had read several of his books aloud together as a class this year so it was really nice for me to see that she has continued reading his books on her own. Her mom bought her some “classics:” *Pippi Longstocking*, which Sofia read partly but never “really got into,” and *20,000 Leagues Under the Sea*. Sofia shared the *39 Clues* series that she likes, because they are “sort of science-y” and “suspenseful.”

One part of the Academically Talented program that both Elaina and Sasha (F3) participated in is the Morning Minute, a research project on a self-selected topic that is designed to help students develop research skills while learning to manage time, incorporate technology, and hone presentation skills. For each of the years the girl completed this project, they came up with their own ideas for the presentation and visuals, and the parents help them figure out how to go about making their ideas realities. Recently, Elaina wanted to make a coin with real ridges, and she tried burning wood to make one. Her father helped her to experiment with cutting and burning different types of wood because she really wanted it to have the feel of an actual coin. However, she had the independence and voice to speak up and say, “I have a different vision,” when she wasn’t getting the result she wanted, and he was comfortable enough to say, “I want this to fit what you want.” When gathering information for the presentation, Elaina tends to

collect “one hundred times more information than is actually needed. I love reading and reviewing.” Dad actually has to encourage her to stop and put it all together. Elaina doesn’t use any note cards when she presents; she is more comfortable speaking directly to her audience..

In contrast, younger daughter Sasha tends to “make a list and get it done step by step- she plans it out.” She thinks about “everything- how much she needs to read, what books she needs, what topics to study, and then she uses a planner to make her own plans for the week.” She “is tired by 9 PM,” so her careful planning helps her to put herself to bed when she knows she needs to sleep. When preparing for presentations, Sasha loves experimenting with Power Point “because you can do whatever you want to do, and it’ll still work.” She likes incorporating sound clips into the slides. Unlike her sister, Sasha writes detailed note cards for herself to use during a presentation. When researching, she puts every fact she finds in; she researches until she has the right amount. As per the research question, this is an example of this child’s creative literacy practices.

Student Discussion: Examining Creative Artifacts

In a subsequent meeting with each family, the children met with me to discuss their photographs. Some were blurry or out of focus, and many were taken of the same subject. The photographs discussed in this section reflect the “best of the best;” they are photographs that convey true creativity. The *Design and Technology of the National Curriculum in England* (2004) came up with a list of characteristics of innovative and non-innovative work, with the words exciting, unusual, risky, and unique among the traits of non-innovative work. This is what these pictures strive to be. The photographs were

classified into three types: aesthetic, arranged, and accidental creativity. Proctor and Burnett's Creativity Checklist (2004) was used to triangulate the three types:

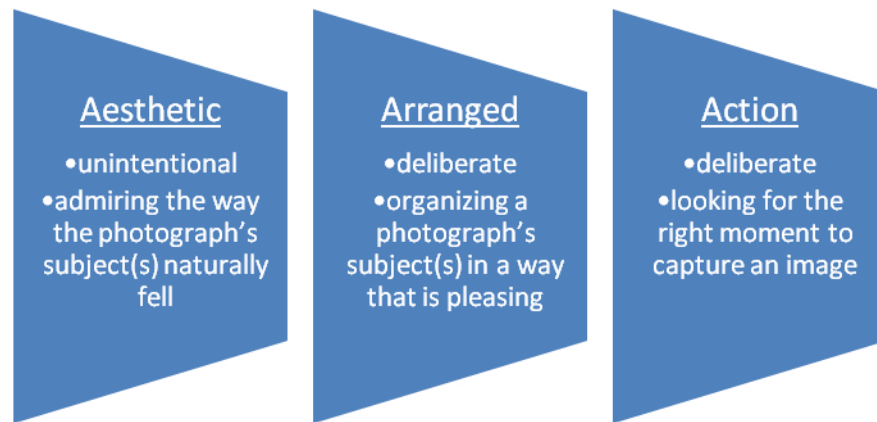


Figure 5: 3 Types of Creativity (based on students' photographs)

Aesthetic. The first type of photographs was categorized as “aesthetic” creativity. This is where students took pictures and then later found out they liked the way the pictures came out. Students admired the way the photograph's subject(s) naturally fell. Just as Vernon referred to “new or original ideas, insights...or artistic objects,” being creative means creating something both new and meaningful to the individual child. According to Kress (1997), students learn when interest serves as a motivating factor. Taking this type of photograph allowed these children to engage in imaginative activities. Unlike the other two types of creativity, this type was not deliberate or intentional. Laura (F4) took pictures of three flowers and thought the way the picture came out was “really cool.” When I asked why, she said because the flowers looked like “real flowers” and seeing this photo made her want to take more because she's “fascinated with them.” Laura also took photos of a tree (“I liked the way the tree fell”) and a curve (“I liked the curve in the driveway.”) Right away I noticed that Laura and Josh (F4) had very different

styles. Laura's mom thought that her daughter was "more artistic in general, eyeballing what is naturally creative," and it is this "natural creativity" that leads her to admire and capture what nature has made. Her mother shared that "the colors she picks and the way she looks at something...it makes her very advanced for her age," (F4).

I love the debate that came out of one photograph from Family 1. When the film was developed, all of the pictures had been mixed up in an envelope, so the children spread them out over the dining room table and claimed each of their images. For the most part, this worked out just fine, but this photograph was so intriguing that all three claimed to have taken it. I liked that they recognized how truly unique it was. Josh explained that the photo was of a tree after December snowstorm. Indeed, at first glance it looked like a tree covered in snow. After examining it closely, they decided that the tree looked like a dinosaur "leaning over, and it looked like it already had a head so we added teeth and eye and we made it look like a dinosaur," (F4). Examining this aesthetic photograph and hearing the children's explanation allows me to see an example of Proctor and Burnet's Elaborative Thinker can "see new possibilities in the familiar." Likewise, functional fixedness is the way individuals tend to perceive an object as being able to carry out the function that it is intended for, such as seeing a sock as an article of clothing. The ability to reexamine the object and come up with new functions allows students to go beyond their preconceived ideas. Being able to see a tree as something other than a tree, and then add items to it to further enhance that modified image shows that the child is flexible enough to let that tree be something more than just a tree. Just as Vygotsky saw the use of objects in symbolic play as part of a developing imagination, these students are make connections between an object's intended use and other possible

uses. Similarly, Proctor and Burnet's flexible thinker is one who "can ...adapt, modify, rearrange, reverse...and mentally builds and rebuilds." Laura's way of acknowledging the beauty on a tree or a curve, and Kelly, Josh, and Ally's ability to see a dinosaur in a snow-covered tree shows originality, ingenuity, and an appreciation of uniqueness. Others might see a tree; it takes a creative thinker to see a leering dinosaur.

Arranged. The second type of creativity classified by the student photographs is "arranged" creativity, where a student deliberately arranged or organized a photograph's subject(s) in a way that they thought was pleasing. One example is how Laura is posed in a bunch of flowers and is holding an umbrella as if it were raining. Jason took this photo and thought "it looked pretty and creative." Laura liked how she was kneeling in flowers; "it looks like I'm smelling a flower," (F4). Jason (F4) took a photo of the blanket fort made it with his older half-brother. He used of the blankets they had and propped them up between a bed and a rocking chair. He hung up a flashlight on the inside; Jason estimated it about 10 feet tall because "I could stand in it," and that is as high as his bunk bed goes. Just as Vygotsky (1978) saw the use of objects in symbolic play as part of a developing imagination, this child making connections between an object's intended use and other possible uses. Likewise, Proctor and Burnet classify a flexible thinker as one who "can solve, change, adapt, modify, magnify...is constructive and mentally builds and rebuilds" (2004, p. 426). In arranging and rearranging the flowers, blankets, or other subjects, the students are demonstrating versatility, flexibility, and sensitivity to new ideas.

Kelly (F2) took a photo of a dinosaur skeleton that she had put together with wood. She was amazed that "using wood you can make all this by putting together all of

the pieces,” and thought it “took someone really smart and creative to make the set to see how it all fits together,” (Source: Kelly). I liked how she saw not her own creativity, but the creativity of the designer. Her brother also took a picture of a wooden stegosaurus, but he did his differently. He started start out with the same wood, but his set had no directions for putting the stegosaurus’s plates on. They were “different sizes, but you could put them wherever you want them...you can color this so everyone can show their sense of style.” Josh liked the fact that he was not limited to the directions, and that he had the freedom to design his stegosaurus however he liked. Just as a fluent thinker “finds different ways of doing things,” Josh did not want to be status quo and follow the directions that everyone else is following. Likewise, an imaginative or intuitive thinker “will fantasize, create...invent” and “can make mental leaps from one idea to another and from the known to the unknown.”

Laura thought that one of her photos “didn’t work out,” but I included it because she had clearly put such effort into thinking about and arranging it. She had tried to get a picture of pollen and five strands of nectar; I was impressed by her attention to detail. “I wanted to get in the flowers and get a close-up, but it didn’t work out...I liked the way it was organized, especially the yellow flowers. I should have taken it on the grass because you can see the concrete this way. She tried to capture this image, but she hadn’t gotten close enough.

Action. The final set of photographs is categorized as “action” creativity. These photographs were taken at the exact right moment, often when the students were looking for the right opportunity. It is also intentional, versus the aesthetic photographs that were taken and then celebrated for later; these action images were deliberately captured, and

often the student had many similar photos. You can tell how hard they tried to capture the subject at the exact right second. Proctor and Burnett's original thinker "can create... make up...improve and design" and "is attracted by novelty" (2004, p. 426). However, I think an even more applicable thinker is a curious student who "tries to discover the unusual or find out more about a topic of interest; unable to rest until the work is complete; possesses a sense of wonder and intrigue; possesses a high energy level; is adventurous and engages in spontaneous action" (2004).

One such photograph was when Jason took a picture of his sister's "bicycle kick" in the air; it captured her move mid-air. (Jason told me that a bicycle kick is an actual soccer move where you are supposed to land on the ground on your back after kicking.) He liked it because "she's jumping in the air and kicking at the same time. I like how the picture was at the right moment. If there was a second picture, it would be cool if she were scoring," (Source: Jason, F4). Another example of this type of photo was also by Jason. He captured an image of soccer players were positioned on the field during the Red Bulls game he had seen with his soccer team. He intentionally got a shot of every player in their respective positions, all in one photo. Similarly, Josh took another photo during the Red Bulls soccer game; "everyone went up to the goal with the ball and Red Bulls had the ball and I thought they would shoot...they did!" A final soccer game shot was when "they blew all the mist up and there were all the players up there singing the national anthem, so I took a picture of that to go with the people on the field (the players)." The photo shows the players standing on the stage, surrounded by a falling silver mist.

Sofia (F2) has two tiny frogs, Polka Dot and Pebble, which went along with the “sea” theme in her room: she has dolphins on her pillows and a beautiful picture of fish and other marine life above her bed. A number of her photographs made an effort to capture Polka Dot and Pebble while they were on either side of their tank, and in one photo, she arranged her plastic frogs in a semi-circle around her real frogs. It is especially interesting to think about how each child tended to be drawn to a certain type. According to Vygotskian theory, formal schooling and life experience contribute to the richness of one’s imagination, the catalyst for creative activity. We also know that personality factors and experiences may also influence the process of creativity (Esquivel & Hodes, 2003). Jason said that he likes animals and sports “at the right moment so it looks cool;” this is action creativity. Laura said that “stuff is creative in my house the way it’s laid out,” which is arranged creativity. Sofia was also an arranger; even the way her bedroom was laid out with her art supplies, stuffed animals, books, and school artifacts is arranged in a special way. Josh, Kelly, and Ally (F1) loved aesthetic images, and if you could see their house at Christmas time, you would know why. Their love of beauty, rich color, and family history is reflected both in their home and their photographs.

The third research question examines the family’s perceptions of creativity, and how this ultimately shaped rearing practices. Therefore, it became necessary to looking at the home creative literacy practices, and how parents view their significance. The major categories that emerged were how these children and their families make creative use of space, time, and materials as they observe, question, learn, and explore the world around them. Just as Vygotsky suggested, these parents are scaffolding opportunities for abstract thinking in their young children. In the second chapter, we used the three words *quality*,

novelty, and *value* as the framework for creativity, with the idea to emphasize what the participant feels is high in quality, novel, or valuable. Each of the types of creativity takes this into account. In the following chapter, I discuss these findings in light of the current standardized testing climate and recently adopted common core standards.

CHAPTER 5

Introduction

This dissertation explores the notion that creativity can be developed through specific home and school practices, and includes the environmental qualities and strategies that teachers, administrators, and parents find to encourage it. In this final chapter, I discuss the findings in light of these research objectives, using sociocultural theory (Purcell-Gates 1995, Heath 1983) and Vygotsky's notions of scaffolding and the zone of proximal development (1978) to help me explain the ways that creativity is a social, cultural, and personal process. In so doing, I also focus on Proctor and Burnet's "Creativity Checklist" (2004) to aid in the analysis of the educators' and family's responses and the students' creative photographs.

Purpose of the Study

This dissertation looks at the nature of creativity and what it takes to create a creative environment in early childhood classrooms and it could extend to middle school. In this study, texts, practices, and identities are examined together to shed light on the ways students, parents, teachers, and administrators understand and value creativity in the elementary years. In addition, it calls attention to the unique ways that teachers and administrators design lessons and curricula. Examining notions from three different populations within education is important because this research reflects the many perspectives that influence the classroom and home practices. Examining the experiences and circumstances that allow individuals to become more creative has implications for the future encouragement of students' creativity.

Theory

This research is framed by three bodies of work: a sociocultural approach to the study of literacy, research on situated identities and literacy practices, and examination of the importance of students' creative artifacts in their efforts to become literate. Learning was viewed through the social-constructivist perspective as we examined the recent push for creativity and innovation. The theory for this research is built on Vygotsky's zone of proximal development alongside Gunther Kress and Mihaly Csikszentmihalyi, using theory that children make meaning best through play, creativity and problem-solving. Vygotsky believed that imaginativeness of a child's play is linked to their understanding of daily social events; "human learning presupposes a specific social nature and a process by which children grow into the intellectual life of those around them," (Vygotsky, 1978, p. 88). For Vygotsky (1978), discourses are embedded in communities of practice. Therefore, literacy curricula becomes less about teaching literacy skills and more about scaffolding opportunities to learn forms of language that give children equal access to status. Vygotsky (1978) stressed that community was a major factor in the child's ability to "make meaning." Formal schooling and play at home contribute to the richness of one's imagination, which is the catalyst for creative activity. The imagination of a child's play is linked to their understanding of the daily events in their own lives, and children's use of objects in symbolic play as key to the development of imagination. Through scaffolding, families and teachers help learners find connections between school and their home life. Within the zone of proximal development, the child has mastered early literacy and creative skills and can achieve more with guidance and modeling from families and teachers.

Kress's notion of representation (1997) acknowledges how children's choices illustrate the flexibility in their imaginative play. Children create unique representations for the items in their home environment, and these are a way of making meaning. Such make-believe play requires flexibility from the child. Theories from Vygotsky and Kress have also been mediated with Csikszentmihalyi, whose work emphasized the importance of individuality and uniqueness in understanding the personality of the creative. Characteristics such as flexibility, sensitivity, and autonomy are traits that creative people possess, in addition to openness to experience, self-confidence, introversion, aloofness, and rebelliousness (1996).

Literature

Providing a definition for creativity has been a constant challenge due to its abstract and subjective nature, and also because it can be viewed from different perspectives. There is no universal agreement on the definition of creativity Getzels (1975). In this dissertation, creativity was defined from a social perspective, which meant examining the specific personality traits that are characteristic of creative individuals. This dissertation used the definition that creativity is novelty, or the ability to present concepts and ideas, while new or previously existing, in an original way. This emphasizes not only the role of the individual, but also the importance of what is high in quality, novel, and valuable (Piiro 2004, Sternberg 2001, Perkins 1988, Gardner 1983, MacKinnon 1962).

Early literacy serves as the catalyst for creativity and early meaning-making from a young age. According to both Dyson (1993) and Purcell-Gates (1995), children create meaning while they develop perceptions, values and goals relevant to their own schema.

Likewise, literacy is an active process where children to create meaning and purpose (Morrow 2008). Children can take their home literary practices and shift it into a way to learn in the formal classroom (Kress 1997, Heath 1983). Emergent literacy knowledge provides a necessary foundation on which to build other learning. Experiences with print through reading and writing help young children develop an understanding of the function and purpose of print. Children learn about print from a variety of sources, including books and other media. This is seen in young children as they experiment with writing through scribbling, where the child scribbles but intends it as writing. A child progresses by writing letter-like forms, where the child makes marks that resemble letters by using lines and curves.

The development of creativity can be sorted into three sections: the role of the individual, environment, and parental involvement. Examining the individual means considering personality; “the dynamic organization of distinct psychological characteristics of an individual that determines his or her adjustment to the environment” (Allport, 1937, p. 48). Although these traits are generally of a temperamental, motivational, and social affective basis, they are closely related to the cognitive nature of creativity. Terman’s work in the 1920s was one of the first to view personality as an integral part of creativity (Houtz, 2003). Dacey reported eight essential personal qualities of the creative mind (1989): tolerance of ambiguity, stimulus freedom, functional freedom, flexibility, risk taking, preference for disorder, delay of gratification, and androgyny. Creative individuals are distinguished more by their interests and attitudes than by their intellectual abilities.

Knowing that there is a relationship between creativity and personality, and that early literacy practices influence learning, leads one to next examine environment. Viewing learning, and specifically creativity, through a social lens assumes that students are more likely to develop and retain knowledge, skills and understanding if they see them as relevant to the problems and challenges in their own lives. Therefore, creative practice is made relevant by settings and identity. Creativity can be fostered within environments that focus on the individuals who create meaning while they develop perceptions, values and goals relevant to their own schema. In addition, environments that encouraged creativity exhibited freedom, strong project management, and sufficient resources (Amabile 1988).

Parental involvement plays a large role in the developing child. Lareau (2003) coined the term “concerted cultivation,” where middle class families foster and assess a child’s talents, opinions, and skills. Other families utilize a strategy of “accomplishment of natural growth,” type of childrearing that yields less organized activities and more free time for their children to play with other children in the neighborhood. This led Lareau to conclude that these children were less whiny, more creative with organizing free play, better behaved, and had a well-developed sense of interdependence. From all her observations and analysis, Lareau concluded that the different types of childrearing have more to do with class than race. She also emphasized that one style is not morally better over the other; there are benefits and shortcomings of raising children through either concerted cultivation or natural growth.

Likewise, Heath (1983) studied effective learning environments offered in the non-school hours to young people in different settings around the world, seeking to take

into account the cognitive and situational learning that takes place. Heath carried out ethnographic research in three communities in the Piedmont Carolinas and found that children whose home cultures and use of literacy were similar to the culture of literacy and communication in schools were more successful in school than children. Heath also identified the term “third arena” (p. 10, 2001) that which takes place beyond classroom and home, is generally left unattended, minimally supported, and almost completely unexamined” (p. 10, 2001), and its positive learning opportunities for students.

Previous research has explored the connection between creativity and literacy. Through the lens of the New Literacy Studies (NLS), Pahl explored a deeper understanding of creativity and literacy. Pahl (2007) undertook a study to explore a way of approaching creativity that focuses on examining how children use different experiences from home and schools to create text. It is proposed that more complex and different domains result in a multi-layered text. Children’s creations can be seen, “in the context of the multiple events and practices sedimented within them, and then extend that understanding” (p. 91, 2007). This allows for, and encourages, educators to appreciate that literacy exists outside of school.

In terms of directing children “how to” be creative, Guilford (1950) was among the first to describe characteristics of creative thinking: fluency, flexibility, originality, and elaboration. These were expanded upon by Davis and Rimm (1985). In addition to these four skills, they added sensitivity to problems, problem defining, visualization, ability to regress, metaphorical thinking, logical thinking, evaluation, analysis, synthesis, transformation, extension of boundaries, intuition, predicting outcomes, concentration, and resistance to closure. They noted that these skills are behavioral and natural, and

could be used as goals for an educational program (1983). Similarly, Treffinger (1990) described a six-step model for creative problem-solving. The six steps include mess finding, data finding, problem finding, idea finding, solution finding, and acceptance finding. Proctor and Burnet (2004) developed a “Creativity Checklist” recognizes the different types of creativity in nine different types of creative thinkers, including: fluent, flexible, original, intrinsically motivated, elaborative, curious, risk-taker, imaginative, and one who is engaged in complex tasks. Rather than following a scripted recipe to “teach” creativity, students are able to observe and question, and then take appropriate actions based on what has occurred. There is no perfect “how to” instruction that will promote creativity in all children. The efficiency of creativity is rooted in the fact that it is tied to subjectivity, because issues of identity bring forth different ways of knowing and understanding.

At school, the emphasis is often placed on convergent questions, or finding the “right answer.” When nurturing creativity, though, educators could ask, “Are there any other answers to that question?” Following the notion that creativity can be fostered, it is important for students to feel that their ideas are accepted and validated. Creative teaching techniques should also “include the use of brainstorming, open-ended questions, problem-solving, and imaginative activities that enrich visual, language, and kinesthetic imagery” (Esquivel & Hodes, p.241, 2003). In teaching, educators should be careful not to unintentionally stifle imagination and exploration, or to allow their personal feelings to hinder creative exploration.

Methodology

This ten-month-long qualitative case study of administrators, teachers, parents, and students utilized interviews, artifacts, and focus groups. It studied the phenomenon of creativity (Patton 2002) while taking an ethnographic approach (Green & Bloome 1997). The observational work took place in families' homes and at a school in a suburban school district in an upper-middle class community.

The data collection was divided into four main categories: interviews, a focus group, field notes, and collection of student artifacts. In order to assess teacher perception of creativity in the classroom, eight elementary teachers and four administrators were interviewed individually for their input. Interviews were used as a way to hear and understand teachers' and administrators' thoughts concerning creativity. The interviews ranged from 25- 80 minutes, based on each individual participant's response length. This study also included school administrators because administrators design curriculum, guide instruction, and make decisions, all of which can influence the presence of creativity in the classroom. A focus group was conducted with teachers about how they define, identify, and apply creativity in their planning, teaching, learning, and assessing. It provided insight into the ways students have experienced creativity, where it comes from, and what experiences, circumstances, and activities allow for it. A general interview guide approach was employed, while also relying on the conversational approach to guide general conversations before officially starting the interview.

Five families were used in order to explore the home-school connection and as a way to measure their perceptions of creative practices at home. The use of an interview also provided an in-depth look at the parents' roles and responsibilities at home, in addition to their knowledge and perceptions concerning creativity development. Parents

are uniquely able to reinforce their child's learning through interactions and by understanding that, a child's home provided an excellent place to learn. In addition to the family interviews, each of the children was given a disposable camera; their assignment was to take pictures of what they considered to be creative. Overall, the study emphasizes teacher and student reflection, providing me access to the "individual lived experience" (Marshall & Rossman, 1999) through the lens of each student.

Data analysis was done from the interviews and students' explanations of their photographs, and patterns were derived from the subsequent field notes and transcripts. Grounded theory combined with discourse theory was used to track terms, concepts, and ideologies that recurred in the data. Content analysis was used to analyze the participants' responses to interview questions. Using an inductive framework, each transcript was reread multiple times, with patterns and themes concerning creative practices emerging through this inductive investigation. Coding was established using the research questions and interview protocol to organize data in an attempt to find ways of understanding the links between objects and narratives. Using Vygotsky and Kress during the coding process, categories and sub-categories were formed. These codes were analyzed for similarities and differences between the three populations: families, teachers and administrators.

Corroborating and validating the results is an essential component of qualitative data analysis. This was done throughout the data collection, analysis, and writing process in order to ensure trustworthy results. A number of strategies were used to improve validity and reduce bias.

I relied on researcher reflexivity, triangulation, and peer debriefing (Creswell & Miller, 2000) in an effort to establish validity. In addition, it was necessary to triangulate varied data sources. Triangulation of interviews, the focus group, and field notes provided a more complete account than any could alone.

Like most studies, there were limitations. The sample size could be viewed as a limitation because of the limited number of subjects used. Generalizability of this study is limited to suburban middle class students in grades one through five. The fact that the participating teachers were my colleagues may have influenced their responses; I am aware of research of instances where participants try to please the researcher.

Summary of Findings

This research was inspired by the belief that children come to school with many innate abilities to think and create. Students grow as readers, writers, thinkers, and principled people who express their thoughts and ideas. Assuming this is true, revisiting the research questions leads us to examine the perceptions that teachers, administrators, and families have about creativity, and how these conceptions shape practice.

The findings of the teachers and administrators were coded into four major categories, with corresponding subcategories: the classroom environment (safety, comfort, risk-taking, and ownership), the role of the teacher (guided exposure, encouragement, flexibility, and scaffolding), the home connection (value, experience, and effort), and difficulties (time, testing, and creativity assessment). The interviews and one subsequent focus group session encouraged participants to discuss their experiences and beliefs about the learning environments they are creating. Personal choice and opportunities to share their thinking motivated teachers to participate and learn from each

other. The guiding principles shared by these participants support the empowerment of students and the growth and development of teachers as the facilitators of student thinking and learning.

Teacher Discussion: Making Change Relevant

Over the last two decades, schools have become places in which increased pressure has been levied on teachers, administrators, superintendents, and boards of education to create effective schools. The public demands for schools to be places where effective learning takes place. The question and complexity of how best to achieve this is an issue of considerable debate.

One example of creativity in the classroom concerns the teacher's ability to take advantage of teachable moments. A teacher sculpts their lesson plan with an objective in mind. They start delivering that instruction and they are constantly assessing their students' progress and attainment of their preconceived objective. But, they may realize that the students' conversation is driving their original intent in a different direction. So, the creative teacher has to be able to take advantage of that teachable moment and still bring the conversation back to where s/he knows the need to be, based on the standards.

I used Proctor and Burnet's (2004) "Creativity Checklist" (see Chapter 2, page 11) as a way to explore the findings from both the home and school environments. The first four characteristics (fluency, flexibility, originality, and elaboration) are those that were stressed by Teachers 4 and 5 in their classrooms, and that Teacher 7 expressed an interest in implementing in her physical education classes. I also found that the "Morning Minute" referenced by both Teacher 4, Administrator 1, and the first and third families fits all of the characteristics, but especially the latter 5 (intrinsic motivation, curiosity,

risk-taking, imagination, and challenging tasks). The Morning Minute is a research project that had been unique to the district's Academically Talented program because it gave the students the opportunity to self-select topic to their own liking. Students learned how to manage time, develop research skills, incorporate technology, and build presentation skills. In the past few years, due to changes in the district as a whole, the AT program has diminished from 9 classes to just 3. In addition, the district has added a pull-out enrichment program. While the district is still making an effort to differentiate for all students, what interested me most was not the change in the program. Rather, we are constantly hearing about the new common core standards and how all students are being held to a higher standard. There are standards that require students to be able to research and synthesize material, including:

- Reading: Informational Text- Integration of Knowledge and Ideas- “Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.” (4.RIT.9) and “By the end of the year, read and comprehend informational texts...in the grades 4-5 text complexity band proficiently, with scaffolding as needed at the high end of the range,” (4.RIT.10).
- Writing- Research to Build and Present Knowledge- “Conduct short research projects that build knowledge through investigation of different aspects of a topic,” (4.W.7).
- Speaking & Listening- Presentation of Knowledge and Ideas- “Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understanding pace,” (4.SL.4).

This Morning Minute project fits the above standards and more, in addition to aligning with Proctor and Burnett's characteristics. We also know that creative potential is not limited to gifted children (Gladwell 2008, Kersting, 2003, Terman 1920, Terman 1947). While the AT program is being reconfigured, the good news is not only *can* all students benefit from a similar type of project, it is mandated that they *should* be.

Likewise, many similar projects also match the characteristics of work rated as highly innovative (different, exciting, novel, unusual, risky, bending the rules, brave, determined, marketable, professional, “wow, ” confident, powerful, unique) from the *Design and Technology of the National Curriculum in England* (2004). All students should be working to increase their literacy, research, and speaking skills in a challenging, engaging manner that encourages fluency, flexibility, originality, elaboration, intrinsic motivation, curiosity, risk-taking, and imagination. As we learn more about how students learn, and continue raise our standards, critical thinking projects and activities should no longer be reserved for a select few students.

During qualitative analysis, the category of testing emerged as a major factor that concerned and often frustrated teachers. “Sometimes tests are the only things that make the kids see consequences. Part of the deal is putting in effort. We have to and the kids have to.... There are time constraints. There are a lot of factors we can’t control,” (Source: Teacher 8). A veteran teacher shared her concerns regarding the need for change and revitalization, regardless of age or experience level. “I’m resistant to change but I am trying not to be. Like the SmartBoard. I told myself I would learn it even if it killed me. I don’t want to be the one who doesn’t accept change and is stuck in her ways. It may take a while, but I’ll get it... Change for the sake of change is no good. It has to be relevant to what we are doing.” (Source: Teacher 4). Her colleague joined in, “It’s like the kids. Kids need repetition; they need to hear something over and over” (Source: Teacher 3). Some research has indicated that a teacher’s sense of efficacy influences his/her ability to remain in the profession (Johnson, Wallace & Thompson, 1999; Woodruff, 1999) In addition to a positive correlation with the likelihood of remaining in

the profession, teacher efficacy has also been linked to positive attitudes toward teaching (Guskey, 1984) and a willingness to implement innovations (Berman et al., 1977; Smylie, 1988). Increased levels of efficacy may also contribute to teachers' continued interest in the profession and adaptability to change.

Administrator Discussion: Creative Problem Solvers in Action

Effective schools research emphasizes the integral role the principal holds in the shaping of effective schools (Bossert, Dwyer, Rowan, and Lee, 1982; Glassman and Heck, 1992; Sheppard, 1996). In order for schools to be effective, they must have effective leaders. However, the complexity of the role of the principal and his/her ability to impact upon student learning is a complicated undertaking. Teacher morale is also a crucial aspect of a school's organizational climate. While administrators may indirectly influence student learning, it is the principal that directly influences school organizational climate, and more specifically teacher morale (Buffie, 1989; Kirby & Paradise, 1992). The administrators and teachers in this study spoke about the need to secure a safe environment that encourages risk-taking as a springboard for creativity. To do so, they need to value the different discourses brought to school because they are part of the students' identity. Without acceptance, there cannot be growth.

An administrator, particularly in this climate, has to be able to creatively problem solve around budget constraints; "We don't have the money to use our traditional resources or our traditional intervention, yet we still have kids with needs. We can't ignore them," (Source: Admin 1). Creative scheduling was one example given, if perhaps the school doesn't have the number of staff members or the necessary availability of staff members, they may need to consolidate the children or be most efficient in arranging

support staff schedules so that “we can get the most bang for our bucks so to speak,” (Source: Admin 1). The districts “cluster classes” are a second example of problem-solving. In these classes, children identified through test scores as being academically talented in language arts or math are identified as “cluster students.” These students are grouped together in a class (generally about 4-5 math or language arts students) so that the teacher can make a specific effort to differentiated for these students and challenge them. Often, high achieving students are split up among the classes, and sometimes it becomes easy for teachers to give them alternate assignments without actually teaching to challenge them.

While teachers were quick to share their frustrations over testing, so were the administrators:

Administration above us is saying do not teach to the test because there is no greater life lesson to be gained from that. Learning how to bubble multiple choice answers is meaningless. The theory is you have good teacher practices and you’re teaching children, not content then regardless of what the evaluation is, whether it is a classroom test or standard test, the kids are going to do well. At my administrative level, we believe that in theory but the practicality doesn’t match. So then it’s tough for us being the middle people. We are hearing one message but in our hearts we are trying to believe it but when it plays out in the classroom there will be a disconnect somewhere (Source: Admin 3).

I appreciated her honesty, especially because this administrator was the one who kept talking about the value of creativity, while also repeatedly referring to the need to get “the right answer.” I can see how this administrator is caught between the ideology and pedagogy that she truly believes, and the reality that now, more than ever, there is accountability for test scores as the new evaluation system is being introduced and explored. Likewise:

I dislike and don't believe in standardized testing and I think deep down on the district level that also has to be other people's thoughts. I think it's illustrated by the fact that we change and add tests so frequently in house. I question the usefulness of data we get from these tests both in isolation and when trying to make longitudinal data comparisons, watching a kid progress through the grades; it's not telling information. I personally feel frustrated. I think there are better choices if we have to do standardized tests and we need data. There are better choices for standardized tests that can give us meaningful data connected to actual Tier 1 of RTI intervention. Teachers don't have to sit down and pour through the numbers and make sense of it and come up with a SMART goal. There are programs that will do all that with real data for us and it will be ongoing. I don't like testing for the sake of testing. And the money is not getting in the way of making the smarter choice (Source: Admin 1).

Because these interviews were conducted during the 2010- 2011 school year, before the introduction of the common core standards, no one mentioned them. Yet, two years later, the standards are being implanted, along with a new model for teacher and administration evaluation. The common core standards really seek to pare down and emphasize the skills and concepts that are most important. In this case, it is depth, over breadth, that is important. Both Danielson's Framework for Teaching and the new common core standards assume that "the primary goal for education is for students to understand important concepts and to develop important cognitive skills, and that it is each teacher's responsibility, using the resources at hand, to accomplish these goals" (Danielson, p. 15, 2007).

Over 70 years ago, Vygotsky, after studying the role of culture and social interaction in child development, believed that play was crucial. Early-childhood programs that follow his model not only focus on play, but actually use play to build the capacity to self-regulate. Seventy years later, this philosophy is prevalent in Danielson's Framework for Teaching (2007), the district's chosen evaluation tool, and the new common core standards Teachers who follow Vygotsky's constructivist approach

“understand that they are the adults and that they, together with their colleagues and in line with state standards, determine what it is that students will learn” (Danielson, p. 15, 2007). Children still need literacy and math instruction, but embedded in lessons are exercises designed to stimulate self-control. This approach “does not hold that educators relinquish control of what students learn to the students themselves. It is not an ‘anything goes’ approach,” (Danielson, p. 15, 2007). Instead of forcing a choice between academics or play, it puts learning in a play context; it “is the *learner* who does the learning” (p. 15). Children grow accustomed to following defined roles, acting on their own, engaging with materials and routine, and owning their classroom and learning.

Parental Discussion: Incorporating Creativity Values

Because one of the main objectives of this dissertation was to examine the perceptions that parents have about creativity, looking at how the family spends time together and apart, and the rich environments of which they are part helped me to think about how these conceptions shape rearing practices. The children in this study live in environments that are rich in many different ways, from play around the house to organized extracurricular activities. It became necessary to looking at the creative literacy practices that take place at home, and how parents view their significance. The major categories that emerged were how these children and their families make creative use of space, time, and materials in their quest to observe, question, learn, and explore the world around them.

Lareau’s observations led her to develop the term “concerted cultivation,” where middle class families foster and assess a child’s talents, opinions, and skills (2003). Some examples of this type of parental teaching are engagement in critical thinking, the use of

advanced grammar, and problem solving. In the case of all of the family participants, the parents were able to provide a structured life for their child through extracurricular activities and parental involvement in education. All of the families had children who were actively engaged in formal extracurricular activities, from soccer (F1 and F4) and acting (F3), to art (F1) and school activities (all 4 families). Family 2 and Family 3 spoke those most about less formal activities around the home that gave the children the opportunity for freedom and creativity, including decorating the home and planning birthday parties and family events, (F2) and using paper and other household items to design original crafts (F3). While I would not consider this to be an example of “accomplishment of natural growth,” I do think it is representative of the less organized activities and free time that leads Lareau to determine that these children were more creative with organizing free play, better behaved, and had a well-developed sense of interdependence. I think the combination of both styles begets the benefits of both.

Robert Sternberg raised the idea of “practical intelligence,” which includes “knowing what to say to whom, knowing when to say it, and knowing how to say it for maximum effect” (2000). Gladwell likens it to “the particular skills that allows you to talk your way out of a murder rap, or convince your professor to move you from the morning to the afternoon section...it’s knowledge for its own sake. It’s knowledge that helps you read situations correctly and get what you want” (2008, p. 150). Elaina, the 12 year-old 6th grader in Family 3, is who I thought of first when reading about practical intelligence. I’ve known her since she was 8, and she has always been responsible and mature for her years. Her love and appreciation of the *Harry Potter* series led her to complete an independent project titled “Light and Darkness in the World of Harry

Potter.” It examined the role of good versus evil through light and dark imagery, and this was done when she was in the third grade. Her ability to do this independently stems from her capacity thrive to “under pressure” as she says. At 11 years old, she knows exactly how she works best: with pressure, at night, and once she has a general place.

I see similar qualities in Kelly, the 11 year-old 5th grade girl in Family 1. Perhaps it is because both girls are the oldest in their families (although Elaina has two much older brothers who live on their own). Kelly is the one who learns from her mother’s example when it comes to coordinating family trips and events, and then tries it out herself. When the kids’ friends come over, the parents find that their children imitate what they do by organizing plays, games, and events for their friends.

As mentioned previously, Piirto noted that, “creativity is in the personality, the process, and the product within a domain in interaction with genetic influences and with optimal environmental influences of home, school, community and culture, gender, and chance” (2004). As seen with all of the families, but especially Family 1, modeling allows a child to see you do engaged and incorporating creativity values into the family. Providing a private place for creative work to be done, specific materials (such as art supplies or musical instruments), and relevant experiences or lessons encourage the child’s creative work. By setting a creative “tone” at home, the family is showing that they value creativity and the creative work of others.

In addition to family interviews, the children in the study were given disposable cameras to capture images of what they considered to be creative. The photographs included reflect the “best of the best;” they are photographs that convey true creativity. The photographs were classified into three types, aesthetic, arranged, and accidental

creativity, using the *Design and Technology of the National Curriculum in England's* (2004) list of characteristics of innovative and non-innovative work, with the words exciting, unusual, risky, and unique among the traits of non-innovative work. This is what these pictures strived to be.

Implications for Practice and Research

This dissertation contributes to the growing field of creativity, and equally importantly, it calls attention to the current testing environment and the need for students to develop critical thinking skills through meaningful, authentic teaching and activities. Over the last decade, the increasing importance placed on assessment, instructional strategies, and standardized testing has placed immense pressure on teachers, administrators, and students (Bronson & Merryman, 2010). Even parents are feeling the effects, as they hear about the testing from school staff and their own children. Many feel at a loss as to how to help. Teachers are challenged with the introduction of new literacy resources, assessment prediction measures, and the tests themselves. This study provides educators and parents with examples of how creativity can inform students' literate activities, and it raises questions for future research and classroom practice.

Implications for Practice

Much of the research on creativity has focused upon the implementation of programs in a holistic approach (Craft 2001). There has been very little in the way of discussion of specific behaviors and their relative impact on aspects of school climate. It is my belief that delving into the specific behaviors as well as categorizing them can be beneficial. Naturally, principals' behaviors have a significant impact on how teachers' view their work environment, and they have a have an indirect impact on student

learning. It is interesting to note that, when using some of the same teachings during a 2008 pilot study, the overall “climate” was extremely positive. Two years later during the interviews for this research, while there was still positivity, there was also some sense of frustration. Two years after that, as I am writing up the findings and discussion, there is again another shift, this time a step farther away from positivity and towards even more frustration. Schools have changed. We are deeper into a “testing frenzy” and both teachers and administrators are in the midst of it. Worse yet, so are our children. While this dissertation speaks only to one school and the district it is part of, we are certainly not the only school facing change. Naturally, the year of any new program is daunting and overwhelming. The new common core standards introduced in early 2012 for the 2012- 2013 school year are just that and teachers, as well as administrators, are working out what implications they really have for instruction and student needs. Creativity can be infused into an authentic curriculum and that it can be used for problem solving and critical thinking skills. Instead, I fear the opposite happening. There are practical creative applications that principals should incorporate that can naturally be taken from the findings of teachers involved in this research. More specifically, these findings encourage principals to utilize active listening, being a visible presence, being a team builder, using resources creatively, and leading staff through change.

Implications for Research

The conclusions from this study indicate that home and school environments significantly impact a child’s ability to develop creativity. Other areas exist which can be studied to further investigate these findings. A further study could be conducted targeting the administration of the participating district to determine how their support influences

teachers, and the challenges of teachers to become educators who support and develop creativity. The reported findings of creativity could be explored with a different sample of participants to see if they remain consistent. The study could also be replicated using different demographic variables, such as gender, age, or years of teaching and/or administrative experience. In addition, the study could not be limited to teachers from within the same school or even the same district. Finally, developing and using a quantitative component to the methodology is unique and appealing. Finding a survey instrument concerning creativity perception would give a fuller picture of the dynamics at play within the home and school environments.

Future Direction and Conclusion

Throughout my time at Rutgers, my ideas, conceptions, and goals have been continuously stretched and honed, teaching me to apply what I have learned in graduate classes to my own classroom. Over the past few years, I spent my school year teaching and my summers volunteering, and while I was passionate about both, rarely did I connect the two.

I opened the first chapter by sharing about a “real life” experience with creativity in Indonesia. My work that April, and in July a little over a year later, brought me to this island to create an assessment of the current educational system in Meulaboh, Indonesia. From the interviews and observations, I learned about each school’s perceived strengths and weaknesses, and the challenges that the students face. Specifically, she shared that in Chalang, where the 2004 tsunami wiped out 80% of the population, they have a real need for people to learn how to teach the children. Many of the people who were teaching died in the tsunami. Literally, an entire generation of knowledge was wiped out from the

community. Poverty is increasing as children are unable to receive the education they need. From the initial interviews and observations, and a subsequent experience the following year, I learned about each school's perceived strengths and weaknesses, and the challenges that the students face. I was pleased that every school, even the most rural, struggling ones, had something positive taking place. Most encouraging is that the community is eager and willing to learn. One school set up after school groups, where students who lived near each other could share books and meet for discussions. Another school had a teacher-initiated chess club that competed with other schools in the province. Several had after school sports clubs. One teacher admitted that she was so worried about one student that she picked him up on her motorbike everyday to ensure he made it to school. There are many challenges, but this is creative problem-solving at its best. The short term work of rebuilding homes and school is over, but the long term work of dedicated staff is leading to change. The parents we met are active in the community and hopeful for their children, and teachers are eager to learn.

How does quality, novelty, and value fit into the real world? Education is essential to economic development. Citizens who can read, calculate, and think critically have better economic opportunities, higher agricultural productivity, healthier children, and better reproductive health and rights. Students across the globe may come from a myriad of backgrounds, but they all have one thing in common; a need, often unrealized; a need, many times unspoken, but a need that found its way to the surface through the attitudes and behaviors that had earned them a reputation as "poor" or "ignorant." Personal change begets societal change, and once focused and directed, this change will become a powerful force in the need for literacy across the globe.

In the past few years, creativity, literacy, and education have stopped being an “area of interest” and a “dissertation topic.” Summers have stopped being a time to think about “community development.” Finally, the two are merging.... education is a route to empowerment. Children’s creativity and literacy acquisition is a need across diverse communities. I see creativity as a constant; it is a natural human tendency to make new and better. Focusing on sustainable change and community transformation has allowed me to observe the creative problem-solving I study first-hand, as leaders and families become equipped and empowered to utilize their own resources and solutions for growing problems. This innovation, often in the midst of adversity, is the essence of creativity.

Appendix A

Letter Inviting Teacher Participants

Dear Teacher:

In addition to being a third-grade teacher in this NJ suburban town -Englishtown, I am also a doctoral student at Rutgers University in the Graduate School of Education. I am asking for your participation in a study that focuses on teacher and parent perception of creativity.

Your participation is requested in a two-part endeavor – the completion of an interview, as well as your involvement in a focus group discussion with approximately 8 other teachers. It is estimated that the interview will take approximately thirty minutes to complete. The focus group session will not exceed one hour and its date and time will be established based upon the participants' schedules.

The completion of the survey and subsequent focus group participation is completely voluntary and if you decide not to participate, no penalty or recourse will occur. Teachers may leave the meeting area at any time during the completion of the survey or focus group sessions without penalty or recourse. Non attendance is a sufficient indicator that you wish to discontinue your participation; no attempt will be made in an effort to encourage your involvement. In the event that you opt to participate in this study, no identifying data on the survey will identify you or any of the study's participants. Your responses will be held in the strictest confidence; all completed surveys will be maintained by the researcher in a secured, locked filing cabinet in my home.

Focus group questions have been designed to assess teachers' input and perception on creativity in the classroom. Focus group discussions will be audio-recorded and will be documented by my note-taking during the sessions. All results from the survey and focus group questions will be used for research purposes and will be displayed in summary findings. No names or identifying information will be included in any section or the research analysis or reporting. All data, including anecdotal findings, quotes, etc. will be included anonymously in the research.

Participation in this research study poses no anticipated risks, and no financial benefit. If you are interested in participating in this research, please sign and return the bottom portion of this letter in the enclosed envelope. I will contact you via your preferred method and inform you of upcoming meeting dates and times. Additionally, if you have any questions regarding the interview, focus group questions or any component of this study, please do not hesitate to contact me using the information listed at the top of this letter. I am also happy to share any research findings with you.

Thank you for your time and attention; I appreciate your input and consideration. If you have any questions about your rights as a research subject, you may contact the IRB Administrator at Rutgers University at:

Rutgers University, the State University of New Jersey
Institutional Review Board for the Protection of Human Subjects
Office of Research and Sponsored Programs
3 Rutgers Plaza
New Brunswick, NJ 08901-8559
Tel: 732-932-0150 ext. 2104
Email: humansubjects@orsp.rutgers.edu

Sincerely,

Sharyn Fisher
Graduate School of Education
Rutgers University

Contact Information: 61 Farnham Sq
Parlin NJ
732-316-0869

I am interested in participating in this research study.

 Name

 Phone Number or E-Mail Address

Appendix B

Letter Inviting Family Participants

Dear Teacher:

In addition to being a third-grade teacher this NJ suburban town -Englishtown, I am also a doctoral student at Rutgers University in the Graduate School of Education. I am asking for your participation in a study that focuses on teacher and parent perception of creativity in the classroom.

Your participation is requested in a two-part endeavor – the completion of an interview, as well as creative artifacts identified and explained by your child. It is estimated that the interview will take approximately one hour to complete. The interview date and time will be set based on your schedule.

The completion of the survey and subsequent focus group participation is completely voluntary and if you decide not to participate, no penalty or recourse will occur. At any time you may indicate that you wish to discontinue your participation; no attempt will be made in an effort to encourage your involvement. In the event that you opt to participate in this study, no identifying data on the survey will identify you or any of the study's participants. Your responses will be held in the strictest confidence; all completed surveys will be maintained by the researcher in a secured, locked filing cabinet in my home.

Interview questions have been designed to assess teachers' input and perception on creativity in the classroom. Focus group discussions will be audio-recorded and will be documented by my note-taking during the sessions. All results from the survey and focus group questions will be used for research purposes and will be displayed in summary findings. No names or identifying information will be included in any section or the research analysis or reporting. All data, including anecdotal findings, quotes, etc. will be included anonymously in the research.

Participation in this research study poses no anticipated risks, and no financial benefit. If you have are interested in participating in this research, please sign and return the bottom portion of this letter in the enclosed envelope. I will contact you via your preferred method and inform you of upcoming meeting dates and times. Additionally, if you have any questions regarding the interview, artifacts, or any component of this study, please do not hesitate to contact me using the information listed at the top of this letter. I am also happy to share any research findings with you.

Thank you for your time and attention; I appreciate your input and consideration. If you have any questions about your rights as a research subject, you may contact the IRB Administrator at Rutgers University at:

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 Institutional Review Board for the Protection of Human Subjects
 Office of Research and Sponsored Programs
 3 Rutgers Plaza
 New Brunswick, NJ 08901-8559
 Tel: 732-932-0150 ext. 2104
 Email: humansubjects@orsp.rutgers.edu

Sincerely,

Sharyn Fisher
 Graduate School of Education
 Rutgers University

Contact Information: 61 Farnham Sq
 Parlin NJ
 732-316-0869

 I am interested in participating in this research study.

 Name

 Phone Number or E-Mail Address

Appendix C

Letter Inviting Administrator Participants

Dear Administrator:

In addition to being a third-grade teacher this NJ suburban town -Englishtown, I am also a doctoral student at Rutgers University in the Graduate School of Education. I am asking for your participation in a study that focuses on teacher, administrator, and parent perceptions of creativity.

Your participation is requested in an individual interview that will take between thirty and forty-five minutes. It will be arranged at a time that is convenient for you. The completion of the interview is completely voluntary and if you decide not to participate, no penalty or recourse will occur. If you wish to discontinue your participation, no attempt will be made in an effort to encourage your involvement. In the event that you opt to participate in this study, no identifying data on the survey will identify you or any of the study's participants. Your responses will be held in the strictest confidence; all completed surveys will be maintained by the researcher in a secured, locked filing cabinet in my home.

Interview questions have been designed to assess input and perception on creativity in the classroom. The interview will be audio-recorded and will be documented by my note-taking during the sessions. All results from the interview will be used for research purposes and will be displayed in summary findings. No names or identifying information will be included in any section or the research analysis or reporting. All data, including anecdotal findings, quotes, etc. will be included anonymously in the research.

Participation in this research study poses no anticipated risks, and no financial benefit. If you are interested in participating in this research, please sign and return the bottom portion of this letter in the enclosed envelope. I will contact you via your preferred method and inform you of upcoming meeting dates and times. Additionally, if you have any questions regarding the interview, focus group questions or any component of this study, please do not hesitate to contact me using the information listed at the top of this letter. I am also happy to share any research findings with you.

Thank you for your time and attention; I appreciate your input and consideration. If you have any questions about your rights as a research subject, you may contact the IRB Administrator at Rutgers University at:

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3 Rutgers Plaza
New Brunswick, NJ 08901-8559
Tel: 732-932-0150 ext. 2104
Email: humansubjects@orsp.rutgers.edu

Sincerely,

Sharyn Fisher
Graduate School of Education
Rutgers University

Contact Information: 61 Farnham Sq
Parlin NJ
732-316-0869

I agree to participate in this research study.

Name: _____ Phone Number or Email: _____

Appendix D

AUDIO/VIDEOTAPE ADDENDUM TO CONSENT FORM

You have already agreed to participate in a research study entitled “Teacher and Family Perception of Children’s Creativity,” conducted by Sharyn Fisher. I am asking for your permission to allow me to include an audiotape (sound) as part of that research study. You do not have to agree to be recorded in order to participate in the main part of the study.

The recording(s) will be used for analysis by the researcher. The recording(s) will include a code linked to subjects’ identity. The recording(s) will be stored in a locked file cabinet and will be destroyed after a five year period.

Your signature on this form grants the investigator named above permission to record you as described above during participation in the above-referenced study. The investigator will not use the recording(s) for any other reason than that/those stated in the consent form without your written permission.

Participant (Print) _____

Subject Signature _____ Date _____

Principal Investigator Signature _____ Date _____

Appendix E

Teacher Interview Questions

Participation in this study is voluntary and confidentiality will be maintained. Teacher responses will be held in strictest confidence; all data will be maintained by the researcher in a secured location. District and teachers' names will not be revealed.

Interview and focus group discussions will be audio-recorded and will appear anecdotally in the final research dissertation. Teachers are welcome to contact the researcher to discuss my research or the purpose of this study.

Interview Questions:

1. What qualities and/or characteristics do you feel are important for creativity in the classroom?
2. How do you think teacher input affects student performance at home?
3. What role do you feel parents play in the enhancement of creativity?
4. How do you think parental input affects student performance in the classroom?
5. What do you feel you can do to improve students' creativity?
6. How do you use creativity to plan your lessons? Can you give an example of a lesson that relies on creativity?
7. Do you have anything else you would like to add?

Appendix F

Administrator Interview Questions

Participation in this study is voluntary and confidentiality will be maintained.

Administrator responses will be held in strictest confidence; all data will be maintained by the researcher in a secured location. District and administrators' names will not be revealed. Interview and focus group discussions will be audio-recorded and will appear anecdotally in the final research paper. Administrators are welcome to contact the researcher to discuss my research or the purpose of this study.

Interview Questions:

1. What qualities and/or characteristics do you feel are important for creativity in the classroom?
2. How do you think teacher input affects student performance at home?
3. What role do you feel parents play in the enhancement of creativity?
4. How do you think parental input affects student performance in the classroom?
5. What do you feel you can do to improve students' creativity?
6. How do you use creativity to plan your lessons? Can you give an example of a lesson that relies on creativity?
7. Do you have anything else you would like to add?

Appendix G

Parent Interview Questions

I'm working on a project is to learn about family literacy practices. I'd like to hear about what activities you do together and how these might contribute to a child's creativity.

1. Take me through a typical school day. I'd like to hear about the activities you and your child do together. What happens before and after school? What does your child do after dinner and before bed?
2. On a weekend, what kinds of activities do you and your child(ren) do together that is different or additional to weekdays?
3. How would you define creativity?
4. What kinds of creative activities does your child engage in at home?
5. What role do you feel you play in the development of creativity?
6. What do you feel you do to improve your child's creativity?
7. Are there other things that you could see yourself doing? What would need to happen for you to be able to do that? (Or, what hinders your being able to do that?)
6. Where do you feel are all the places you think that kids should learn about and develop their creativity? Out of these, which are most important?

Appendix H

Interview Questions for Focus Group

Focus Groups- A group of teachers will gather together to discuss their experiences with creativity in the classroom. The qualitative component of the research will be addressed using focus group questions developed by the researcher.

1. How important is creativity in the classroom?
2. What do you think creativity looks like in the classroom?
3. Do you feel that it is important to teach creativity so that your students can utilize it in the classroom? Why or why not?
4. To what extent is creativity an important component of science, social studies, and/or math?
5. How do you think teachers' expectations for students will affect the children's demonstration of creativity?
6. To what extent do you feel responsible for creativity instruction? Do you feel it is best left to teachers of certain subject areas?
7. How confident do you feel in your abilities to integrate different creative activities into the curriculum, with standardized testing serving as a major presence in school?

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