ONE TEACHER’S JOURNEY IN IMPLEMENTING AND LEARNING THROUGH SYMBOLIC LANGUAGES IN A PUBLIC KINDERGARTEN- A CASE STUDY

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A thesis submitted to the faculty of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Master of Arts in the School of Education (Early Childhood, Special Education, and Literacy).

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ABSTRACT

SHIN-YU TZENG: One teacher’s journey in implementing and learning through symbolic languages in a public kindergarten classroom- a case study
(Under the direction of Rebecca S. New)

In early childhood education, symbolic languages such as art, drama and music are still considered an essential element in the curriculum, although current policy places greater emphasis on reading, writing and mathematics. The aim of this study was to explore how one teacher integrated symbolic languages into a public kindergarten curriculum, including her methods, motivations, and obstacles. This research was conducted using qualitative methods including Participant Observation in the classroom and semi-structured interviews with the teacher, whose approach was heavily influenced by ideas from Reggio Emilia, Italy. Data analysis highlighted the teacher’s decision-making process and her reflections on teaching through symbolic languages, including the challenges that she faced given district mandates and her students’ different learning needs. Findings of the study include how the teacher interpreted art as being significant in early childhood education, even though she rarely used the term “symbolic languages,” as discussed by Reggio Emilia educators. The teacher described her motives in the implementation of Reggio Emilia ideas, particularly the use of projects to achieve mandated curriculum goals. The study highlights challenges the teacher has faced, and then overcome, as reasons for persisting in her belief of using art in children’s learning. Further research is suggested to see how other teachers attempt to employ Reggio Emilia ideas about symbolic languages in a different context.

Keywords: Reggio Emilia, symbolic languages, children
To my husband, family, and friends, I couldn’t complete this thesis without you.

Thank you for your support.
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CHAPTER 1: INTRODUCTION

The infusion of art in an early childhood curriculum is intended to promote learning in various aspects of child development (Bowman et al., 2001). However, current early child educational policy, such as Common Core State Standards (CCSS) and No Child Left Behind (NCLB), has favored children’s academic performance in literacy and math over art (Copper & Bredekamp, 2009). Still, many scholars continue to believe that the use of art, also described as symbolic (or multiple) languages, in the early childhood classroom helps enhance children’s learning in all areas: cognitive, affective, physical, and social (Ibid.).

Some scholars on early readiness suggest that, in order to cultivate “a whole child”, a more holistic emphasis on children’s cognitive, emotional, physical, and social development is needed (Bowman et al., 2001). Using art in a curriculum provides a holistic learning environment for children.

From Dewey to current scholars, art’s meaning and functions have changed over time. Art’s purpose has shifted from self-expression to a new vocabulary, an interpretation which expanded upon previous theoretical interpretations and became a discussion about the ways to utilize art in learning environments. This was especially true when ideas from Reggio Emilia, Italy came to the U.S. 30 years ago, casting art in the context of symbolic languages, through which “children represent their understanding and learning in a great variety of ways” (New, 1990, p. 8). As a founder of Reggio Emilia’s municipal early childhood services, Loris Malaguzzi (1998) argued that children represented their ideas instinctively through the use of symbolic languages and also advanced their thinking through the process of manipulating these languages. “Symbols can be said to be bearers of culture for a person…through symbols the child learns an economical means of expression. The child
learns a way to keep the concepts at hand ready to be transferred to another situation or context.” (Malaguzzi, 1998, p. 93). Thousands of teachers since then have tried to understand and apply some of this “Reggio Emilia approach” to their own classrooms. However, few studies have focused on how public school teachers can implement this interpretation of art in a curriculum that is under the current educational policy constraints. My study explored how one public kindergarten teacher interpreted and applied Reggio Emilia ideas as part of her teaching philosophy in a public kindergarten classroom. Because the study takes place in a school originally dedicated to creative activity, but which now emphasizes academic performance, my study thus also investigated how one teacher has persevered in utilizing art in her class.

This thesis begins with a brief review of literature on art and children’s learning, including Reggio Emilia’s interpretation of symbolic languages and its influence on U.S. early childhood educators. Subsequent pages describe the conceptual framework, research questions and methods, followed by presentation of results. The concluding discussion highlights the importance of one teacher's beliefs about art and symbolic languages, her strategies of implementation, and the challenges she teacher faced while using art in an increasingly academic environment. Because the teacher in this study is effectively working in a silo environment, implications for teacher education reform are also considered, including the need to provide special time or opportunity for teachers with good ideas to do their work with others and professional development opportunities that encourage teachers to keep coming up with creative methods to teach children.
CHAPTER 2: LITERATURE REVIEW

This literature review includes a history of theorizing about children’s art, scholarship on symbolism from different perspectives, and the impact those theories had on Reggio Emilia’s educational philosophy. The literature review concludes with a review of research on U.S. interpretations of this Italian approach to art and early education.

Art and Children’s Learning

This literature review highlights the evolution of how we understand art in early childhood education. Early childhood education changed dramatically in the beginning of the 1900’s due to the work of Friedrich Wilhelm August Froebel. A pioneer of educational theory in Germany, Froebel coined the term “kindergarten” to describe an educational opportunity for children aged four to six. Froebel (1908) saw children as creative human beings, saying, “they yield themselves in childlike trust and cheerfulness to their formative and creative instinct” (Ibid., p. 31). He believed that educators should provide “creative and productive activity” for young learners (Ibid., p. 34). He also believed that art was a foundational expression of one’s true self, saying that works of art are “always representations of the most individual, the most personal inner life of the artist” (Ibid., p. 154). Through their works of art, an artist allows us to understand their inner thoughts and feelings – their creative spirit (Ibid., p.153).

Over the course of the twentieth century, Froebel’s ideas linking art and early childhood education were expanded upon by numerous scholars in US education. Although there is agreement on the importance of art in an early childhood curriculum, the role of art has been interpreted differently, as has the role of teachers. Many have considered art to be a
way of guiding children in their knowledge acquisition through creativity, providing various vehicles to express their understanding. John Dewey, an American philosopher, psychologist and leader of the Child Study Movement, believed that young children learn in a cooperative way through multiple activities, including music, games, art, play. and that these activities are dictated by the children’s interest (Dewey, 1915). Dewey advocated that the mission of teachers was to help children express their ideas, and also explained that an environment rich with art is integral to children’s learning. He said, “make each one of our schools an embryonic community life, active with types of occupations that reflect the life of the larger society and permeated with the spirit of art, history, and science” (Dewey, 1934, p. 27). That is, a learning environment with art guides children through the real world. Moreover, art serves as expression, because “words taken by themselves are not the expression; they only hint at it. The expressiveness, the esthetic meaning, is the picture itself” (Ibid., p. 86).

Another advocate of the arts in school was art educator, Victor Lowenfeld, who shared Dewey’s belief that it is important for teachers to support the arts as an essential component of learning. The first book, Creative and Mental Growth, about those ideas, was published in 1947. In his following editions, he explained, “Because perceiving, thinking, and feeling are equally stressed in any creative process, art may well be the necessary balance for the child’s intellect and his emotions” (Lowenfeld, 1958, p.2). Believing that art is a form of children’s expression, Lowenfeld said that art becomes “a language of thought” (Lowenfeld, 1970, p.6). Lowenfeld believed that “No two children are alike, and, in fact, each child differs even from his earlier self as he constantly grows, perceives, understands, and interprets his environment. A child is a dynamic being” (Ibid., p.6). Children’s learning comes from the understanding of objects through their sensory approach, not merely from the knowledge that a teacher directly conveys. Lowenfeld further argued that coloring books with some forms and shapes were not helpful for children and could possibly impede children’s creativity.
because children unnecessarily think how to draw (Lowenfeld, 1982). Offering those books also weaken children’s self-confidence due to the fact that children impossibly drew like shapes which machines made. So, in his viewpoints, teachers should be warm and friendly and allow children to do what they were interested in and passionate about. Public school teachers should not merely provide a supportive and rich learning environment, but allow children to access material freely and flexibly. A healthy education system should focus on children’s cognitive and emotional development, instead of merely highlighting the acquisition of knowledge (Lowenfeld, 1982). The role of teachers in children’s learning through art was to provide “an atmosphere conducive to inventiveness, exploration, and production” (Ibid., p. 145).

Several scholars have addressed different roles of art in children’s learning since the era of Dewey and Lowenfeld. Arnheim (1990) explained art as a way of showing intellectual activity, believing that teacher could understand children through their artifacts. Howard Gardner, who designed the theory of multiple intelligences in 1983, expounded on the need to recognize visual-spatial art as an intellectual pathway. Gardner also believed that children, even those who are uneducated, could conceptualize something through their interpretation of works of art, thereby revealing their innate capacity of making art. Teachers who understand students with multiple intelligences can help them succeed in various fields (Gardner, 1990). Arnheim and Gardner agreed that teaching through art could benefit their students and teachers themselves.

Eliot Eisner, a former President of AERA, echoed these ideas and explained the importance of arts in children’s learning as,

“The Arts teach children that their personal signature is important and that answers to questions and solutions to problems need not be identical. There is, in the arts, more than one interpretation to a musical
score, more than one way to describe a painting or a sculpture, more than
one appropriate form for a dance performance, more than one meaning
for a poetic rendering of a person or a solution. In the arts diversity and
variability are made central” (Eisner, 2002, p. 197).

Those scholars and educators believed that art plays a crucial role in children’s
acquisition of knowledge, development and self-expression, and teachers have a vital
responsibility in guiding children how to use art.

Symbols as Ways of Expressing and Making Meaning

During this intellectually rich period in the US, theories of art, including the field of
semiotics, highlighted symbols as ways of meaning making. Although semiotics didn’t relate
directly to theories of child development and learning environments, some of this work had a
significant impact on future educational theorists. Charles Sanders Peirce, a well-known
philosopher, developed a theory about signs in the late 19th century. Over time, his semiotic
theory changed to focus on the expression of meaning through the identification of semiotic
types—particularly his distinction between symbols, icons, and indexes. He explained that
symbols indicated a sign that needed to be explained; icons referred to a sign resembling
something, and indexes drew a link between a sign and an object, providing meaning (Peirce,
1932). More than a few years, Saussure expanded upon this theory, proposing the “signifier”
and the “signified,” in which signifier meant a form being represented, whereas signified is
the concept being shown (Saussure, 1966). These ideas of icons, indexes, symbols, and
signifiers helped decode the meaning of pictures. During this same period, Jerome Bruner, a
psychologist, proposed a similar theory built upon Piaget’s and Vygotsky’s theories, but
associated children’s learning with three stages like Peirce’s theory. The theory defined three
stages of learning, but with different names: enactive (action-based), iconic (image-based),
and symbolic (languages-based) knowledge representation (Bruner, 1964). The enactive stage
refers to a time when children can learn through hands-on activity. In the iconic stage, children use shapes or diagrams for representing their thoughts. In the last stage, the symbolic stage, words and symbols are abstract, but they can inform children’s conceptual ideas (Ibid.).

Although this understanding of symbols, especially semiotics, has been more recently criticized as overly logical, rigid, and inapplicable to visual art (Elkins, 2003), those theories focused on meaning-making revealed through symbols influenced the philosophy of Reggio Emilia, in which curriculum was tightly associated with what many labeled as “art,” yet the Italian educators called “symbolic representation.” Reggio Emilia’s ideas began to attract educators from around the world who were interested in art as a way of fostering children’s physical, emotional, cognitive, and social development.

**Reggio Emilia and Children’s Multiple Symbolic Languages.**

Before describing these ideas about art as they are translated into this city’s early childhood settings, it is important to understand where they came from. The town of Reggio Emilia is located in a wealthy region of northern Italy. After World War II, parents needed childcare and decided to run small schools for their children by themselves. Parents worked with teachers both to learn from and guide the students, learning what was necessary alongside the children. “Well in advance of the 1968 national law that established funding of public preschools for all three- to six-year-old Italian children, the two councils of Reggio Emilia established the first public preschools [scuola del infanzia]” (New, 1990, p.4). By 1971, the community of Reggio Emilia also served infants and toddlers of working mothers in child-care centers [asili nido] (Ibid. ).

As a founder of the Reggio Emilia program and a constructivist, Loris Malaguzzi (1993) explained that the Reggio Emilia philosophy was influenced by several scholars, psychologists, and philosophers, including John Dewey, Lev Vygotsky, Jerome Bruner, Jean Piaget, and others. Dewey, Piaget, and Vygotsky were among the primary influences on
Malaguzzi’s ideas for Reggio Emilia’s municipal early childhood schools. John Dewey first raised an idea of project learning as “he was inspired to urge a method of education combining pragmatic philosophy, new psychological knowledge, and - on the teacher side – mastery of content with enquiry, creative experience for children” (Ibid., p.72). Malaguzzi also described his thoughts in relation to Jean Piaget’s ideas of children’s creativity, portrayed a way of “inquiring, ordering, and even transgressing the given schemes of meaning” (Ibid., p. 76). Vygotsky theories had an important impact on Malaguzzi’s interpretation of the role of teachers, as he believed they would be concerned with “how thought and language are operative together to form ideas and to make a plan for action, and then for executing, controlling, describing, and discussing that action,” (Ibid., p. 79).

Children could level up with assistance from peers with higher skills or teachers.

Malaguzzi understood these various theories and drew from them, transforming them into a new philosophy for the city’s early childhood services. However, Malaguzzi did not agree with every aspect of the theories about children’s art, particularly ideas from Lowenfeld and Gardner. For example, he did not accept Lowenfeld’s (1982) proposal that, in order to allow children to freely construct their learning, the role of the teacher was to provide a learning environment where children can address their ideas easily and flexibly, saying “When the teacher is accessible and democratic in nature, youngsters can express themselves freely, both in words and in artistic expression; but it also is vital that the teacher be able to provide the flexible format so that the expression can be formed into an art product” (Ibid., p.147). Malaguzzi also disagreed with Gardner’s concept of multiple intelligences, arguing that all children could be creative and teachers could foster this if they provided a proper learning environment and appropriate instruction.

Malaguzzi understood these various theories and drew selectively from them, transforming them into a new philosophy for the city’s early childhood services. These ideas
were not ‘translated’ into pre-planned art activities. Rather, Malaguzzi’s interpretations of children’s art and creativity were also found in—and fundamental to the success of—other features of the Reggio Emilia philosophy, including an image of the child as capable and creative, teachers as researchers, a concept of the environment as a ‘third teacher,’ and the critical importance of documentation and long-term projects as they support and build on children’s multiple symbolic languages.

Reggio Emilia educators’ image of children is as intellectually “active and competent protagonists who seek completion through dialogue and interaction with others” (Edwards, 1993, p.152), and who are full of curiosity and creative potential. They are trusted and allowed to access various materials such as “constructive play material” (New, 2007). Children can utilize any type of material to communicate with others or display their experience and learning. Teachers as researchers can scaffold children’s learning activities based on children’s interests and support ideas for problem solving, if needed, or ask wh-questions to encourage further exploration (Edwards, et al., 1993; New, 1990, 1993, 2007a). The learning environment becomes a third teacher who helps children learn to use materials efficiently and provides an aesthetically gorgeous classroom, full of authentic and creative materials. Based on children’s manipulation of those materials, teachers can collect their creative explorations with a variety of forms of symbolic representation, thanks to the presence of various art media and intriguing teaching tools that may peak children’s interest in learning (New, 2007a). Due to the benefit of children’s symbolic languages, teachers can also study and understand children’s experiences and learning based on the artifacts or symbolic languages collected by them as “documentation” (Edwards, et al., 1998; Malaguzzi, 1998; New, 1993, 2007a). Reggio Emilia educators often use long-term projects as a popular method for applying symbolic languages. This pedagogical method was influenced by psychologist Jean Piaget (1971) and revised by Jerome Bruner (1986) as a way for teachers to
gather artifacts of learning. In Reggio Emilia, through long-term projects, children have many opportunities to learn using hands-on materials and their symbolic languages, to share their understandings, and to show their creativity and problem-solving process. That is to say, documentation allows teachers and parents to know what children are learning, provide an opportunity for teachers to reflect on their teaching, and help children reflect on what they are learning (Edwards et al., 1993; Edwards, 1998; Edwards et al., 2012; Gandini, 1997; Gandini, 2002; Malaguzzi, 1998; New, 2007b). By the 1970’s, educators in Reggio Emilia had begun to share examples of these ideas using this documentation with European educators via travel exhibits sponsored by The City Administration of the Municipality of Reggio Emilia.

The Contemporary Context of “REA” in the U.S

The first English-language version of the exhibition from Reggio Emilia, Italy arrived in the US in 1987, the same year that the National Association for the Education of Young Children (NAEYC) published its first edition of Developmentally Appropriate Practice, hereafter referred to as DAP (Bredekamp, 1987). Three years later, NAEYC’s leading professional journal Young Children published a widely distributed article in which Rebecca New described the town of Reggio Emilia and its publically funded municipal preschools (New, 1990). The article was published when Reggio Emilia’s traveling exhibition took place and a special conference session where Reggio Emilia educators, including Vea Vecchi [the city’s first ATELIERISTA], at NAEYC’s annual conference in Washington, D.C. (Rebecca New, personal communication, July 12, 2017). Within the Reggio Emilia philosophy and of special interest to many in the U.S. was a new interpretation of art, described by Italian educators as “symbolic languages” (New, 1990). Following this initial exposure to the exhibition plus NAEYC leadership’s enthusiastic endorsement, U.S. delegations traveled to Italy, local and state organizations hosted Reggio Emilia conferences and teacher educators presented workshops on this increasingly popular topic. By 1993 –
another three years— the key features of this Italian community’s early childhood services, referred to by some as being similar to the “Project Approach” (Katz, 1989), had been transformed into the “Reggio Emilia Approach” (Edwards, Forman & Gandini, 1993). These Italian ideas about children, art, and early childhood inspired the first revisions in DAP Guidelines (Bredekamp, 1997; New, 1994).

The first edition of “The Hundred Languages of Children: The Reggio Emilia Approach” included a compilation of chapters based on interviews and research by scholars about the Italian origins and U.S. interpretations and adaptations of the Reggio Emilia Approach (Edwards et al, 1993). Its title was inspired by Loris Malaguzzi’s poem, The Hundred Languages of Children, and illustrates the foundational role of symbolic languages to the Reggio Emilia philosophy. The poem – and many chapters in this edited volume -- describes children’s hundred ways of using languages for articulating their understanding, knowledge, and ideas across a wide range. In the following years, two further editions were published (Edwards et al., 1998 & 2012). In each edition, Italian and U.S. educators continued to explore and define symbolic languages as ways that children visualize their ideas, reflect on their thinking, construct their knowledge, and even negotiate with peers. Sometimes these scholars agreed, and other times they incorporated diverse points of view.

For example, Rebecca New claimed “the most exciting and challenging aspect of the Reggio Emilia approach to the care and education of young children is the emphasis on children’s symbolic languages as a means of making sense of their world” (1993, p. 223).

Lilian Katz (1993), a past president of the National Association of Education for Young Children (NAEYC), agreed that children’s symbolic languages reveal their experience and knowledge, but added that teachers can benefit as well from the implementation of symbolic languages in the classroom, as it assists in their ability to understand children’s learning and simultaneously reflect on their teaching methods.
Other U.S. researchers suggested that teachers, too, even those with a solid understanding of Reggio Emilia philosophy, have varying interpretations of symbolic languages. For example, Roselyn Saltz, a former professor of education at the University of Michigan-Dearborn, had an interest in how teachers applied Reggio Emilia philosophy in practice and how they viewed the role of symbolic languages in children’s learning. Saltz (1997) interpreted symbolic languages as “written and spoken words, drawings, drama, movement, dance, music, computers, and more” (p.170), all of which teachers collected as documentation of children’s learning. Saltz further described the role of symbolic languages and their benefit in children’s acquisition of knowledge, explaining “I use documentation to tell a story about their [children’s] learning. Teachers, parents, and the children use this so-called documentation to piece together the learning that has occurred during a given project” (Saltz, 1997, p.172). This view is similar to another U.S. educator’s idea of symbolic languages that, when displayed, emphasized children’s thinking and ideas so that each one was represented differently, rather than merely the production of a beautiful object for children to bring home (Hertzong, 2001).

It wasn’t only professors or researchers who were challenged to understand Reggio Emilia’s practices. Two U.S. early childhood educators, Pam Oken-Wright, a teacher-researcher, and teacher Marty Gravett also worked to understand children’s symbolic languages (2002). They found that children address big ideas when they utilized symbolic languages. For example, a small group of five-year-olds constructed knowledge of a big cat through their symbolic languages - using a wire structure. One child brought a cat’s skeleton to school, and another child came up with a big idea of “do cats’ ears have bones?” The major focus shifted to investigate this question, and the teacher followed the children’s intent, guiding them to find the answers using symbolic languages.
American educators were intrigued with these ideas, e.g., that symbolic languages gave children the capacity to negotiate with people, reflect on their learning, and address new concepts or make hypotheses (Edwards, 1998; Hendrick, 1997; New, 2007a; Nimmo, 1998 & Saltz, 1997). As increasing numbers of U.S. teachers began to collect children’s symbolic languages in their documentation, researchers began to emphasize this combination (documentation and symbolic languages) as a way that allowed children’s thoughts to be visible (Edwards et al., 1993/1998/2002). A team of researchers from Harvard’s Project Zero explored this potential, in collaboration with Reggio Emilian educators, by conducting an in-depth study of children’s symbolic language as a means to a more authentic evaluation of learning through documentation. This way of “making learning visible” presented “the relationship of experience, skill, knowledge, and insight – the cognitive processes in coming to know something” (Guidici, Rinaldi, & Krechevsky, 2001, p.307).

Academics and Art in Early Childhood Education

In spite of this early, widespread and intense interest in Reggio Emilia’s overall “approach” and especially their uses of symbolic languages, ever since the first publication of NAEYC’s Guidelines for Developmentally Appropriate Practice” (Bredekamp, 1987), early childhood education has been experiencing a phenomenon described as curriculum “push down,” with increasingly greater emphasis on academic skills, such as literacy and mathematics (Copple & Bredekamp, 2009). Many consider this the result of federal government education policies that emphasize standardized assessments of child learning ‘outcomes. For example, after “No Child Left Behind” (NCLB) was passed in 2001 (Copple & Bredekamp, 2009), the Common Core State Standards (CCSS) were established in 2008. In many states, including the state where this study took place, standards were created for the youngest children in public schools. This state’s “Kindergarten Standard Course of Study”
identified a list of subjects that should be taught, and students were required to meet the standards for each subject (North Carolina State Board of Education, 2005). The “pushdown” effect in these new standards meant that kindergarten children were expected to learn what, in previous decades, would have been considered a first grade literacy curriculum, while a first grader was now expected to learn what had previously been expected of a second grader. The rationale for this heightened expectation for children’s learning was that they must be prepared to succeed academically, beginning at earlier ages. Although the standards for art in North Carolina were designed to understand it in terms of “visual literacy”, “contextual relevancy”, and “critical response” (North Carolina State Board of Education, 2005), the school’s curriculum was restricted to this instruction being given only by the art teacher in her classroom.

Not only have many in the field argued against these standardized expectations as inconsistent with what research has demonstrated about children’s early learning (Bowman et al, 2001). Furthermore, this narrow emphasis on early education has contributed to a loss of other types of learning opportunities. One recent report showed that state governments’ efforts to downsize the class to allow for better teaching of academics lead to budget cuts that threatened to eliminate of art classes, and teachers has more limited resources to support their teaching (Hui, January 17, 2017). Elizabeth Graue (2009) summarized this situation as “The value of learning through play was emphasized in yesterday’s kindergarten, but the value of what was learned became less clear as the rest of the elementary curriculum was clarified through standards and curriculum alignment. Today’s kindergarten is more focused on literacy and numeracy” (p. 11). Graue and other contemporary scholars argue that this shifting emphasis on children’s academic achievement might create a barrier for children’s social development (Graue, 2009). It also makes it increasingly difficult for teachers to facilitate children’s exploration of their symbolic languages (New, 1998).
Other challenges associated with growing concerns over children’s early school
achievement are sometimes traced to changing demographics in U.S. classrooms, including
increasing numbers of children of immigrants. Over the past 20 years, the number of children
in the U.S. whose first language is not English has increased, and children’s literacy levels at
the beginning of their school career have become more varied (Copple & Bredekamp, 2009).
The common assumption is that children, especially those whose first language is not English,
therefore need more exposure to literacy learning. The increasing emphasis on academic
achievement for students has placed additional pressure on teachers with culturally and
linguistically diverse populations of students in kindergarten (Dougan & Pijanowski, 2011).
This increased focus on pre-academics, especially literacy and mathematics, poses a great
challenge to curriculum design in states such as North Carolina, which has followed policies
that have reformed its kindergarten classrooms in ways contradictory to core ideas of the
Developmentally Appropriate Practice (DAP) and not easily open to the inclusion of
symbolic languages.

So, given the many educational policies that favor academic achievement, teachers
and educators who have remained steadfast in the belief that applying symbolic languages
helped children’s learning have often had to explore these ideas on their own (Wein, 2008).
While most early childhood educators agree that literacy and mathematics are, if taught in
ways suitable to young children, important learning goals (Copple & Bredekamp, 2009),
many U.S. educators inspired by Reggio Emilia also believe that symbolic languages, or art –
no matter its name - is still an important factor in early childhood education.

**Continued Gaps in Research and Implementation**

Research about Reggio Emilia has been limited over the past couple decades, and most of it
has focused on cognitive development. For example, researcher George Forman, who coined
the term *drawing to learn*, has studied many ways in which children are capable of drawing
their understanding. In order to demonstrate how drawing helps children’s learning, Forman (1996) conducted a case study in a private Reggio Emilia school and explored how a boy constructed a water wheel using five media. Forman describes how the child began by drawing a wheel, then making the concrete object, and finally demonstrated his understanding of how a water wheel works. The child’s drawings revealed the increasing complexity of his knowledge. Forman’s work has helped many educators understand the potential of children’s symbolic languages for their own learning.

Another teacher and researcher, Karen Gallas also believed that “art” can serve the same function as symbolic languages in Reggio Emilia ideas because it is a helpful way for children to gain knowledge without any learning boundaries. In one study (Gallas, 1991), she documented that children with learning challenges (e.g. with a diagnosis of attention deficit disorder) could express an understanding of what they had learned from a life cycle of the insects with different types of pictorial compositions. Children with special needs can also display their ways of understanding through various symbolic languages.

As noted previously, Lilian Katz (1998) drew attention to how teachers might also benefit from the use of symbolic languages in their classrooms, especially to assist in their ability to understand children’s learning and simultaneously reflect on their teaching methods (Katz, 1998). Mary Jane Moran took these ideas one step further as she examined pre-service teachers’ uses of symbolic languages to better understand the relationship between teachers’ thinking, their practices and children’s learning. In one long-term project she found that teacher reflection upon and documentation of their pre-service thinking and practice was beneficial in their own professional development and understanding of children’s learning (Moran, 2006).

While these and other scholars continue to explore diverse approaches to teaching and teacher education, including the use of ideas from Reggio Emilia, there have been few
documented efforts at applying them in public schools, where there are often significant
demands on time and structured curriculum standards. Cheryl Brig-Allen, as an associate
professor at MAT Early Childhood Education, and James Dillion, as a professor at University
of California at Riverside (1997), tried to implement Reggio Emilia ideas. They reflected that
they had to change their teaching approach from managing a tightly-scheduled curriculum to
slowing down everything for children, in order to allow them time to think about what to do
next (Breig-Allen & Dillon, 1997). One of the most extensive studies on adapting ideas from
Reggio Emilia to U.S. public schools was conducted by Carol Ann Wein (2008). She
described how several public school primary teachers inspired by Reggio Emilia were able to
use symbolic languages through the use of an emergent curriculum design, in which projects
have no regular schedule for completion each day. However, current research has explored
little on this topic: how a teacher applies Reggio Emilia ideas to her classroom if they are not
cored to use symbolic languages for teaching and learning.
CHAPTER 3: CONCEPTUAL FRAMEWORK

This study was grounded in social-cultural theory based on early ideas of Lev Vygotsky, who described how human development proceeds from inter-subjectivity based on social relationships to an intra-psychological awareness based on individuals’ past experience and cultural context (Vygotsky, 1978). His social-cultural theory placed emphasis on the contexts shaping values, social relations, and previous experience that also involved a person’s attention in their society (Vygotsky, 1987). This theory is used to explain how both child and adult behavior and human development are influenced by social-cultural settings. Many post-Vygotskian scholars have joined psychological anthropologists in the study of cultural influences on parental beliefs and childcare practices (LeVine, 1974; Rogoff, 2003). Children and teachers in a classroom illustrate many of the key features of socio-cultural theory, as they both bring their previous experiences to bear on what they learn from each other. They both will draw their own interpretation based on their culture traditions and more immediate environments. “We have learned that when primary classrooms open up social learning space and encourage collective use of the available multimodal tools of the classroom culture, children and teachers transform and, in the process, transform the very culture of the classroom itself. (Crafton, Brennan, & Silvers, 2007, p.517).

Vygotsky also emphasized the use of tools and of symbols in child development, helping us realize the importance of how children develop cognition and language through interactions and problem solving with others (Vygotsky, 1978). Vygotsky explained, “children solve practical tasks with the help of their speech, as well as their eyes and hands” (Vygotsky, 1978, p.26). Vygotsky also theorized that children make meaning through symbols in an activity. Jerome Bruner (1990) iterated similar ideas, but also emphasized
cultural differences, explaining that different cultures led to different narratives of experience. Bruner described one study of the kindergarten children by Joan Lucariello, in which the two opposite versions of the stories told to children were followed by different results (Bruner, 1990). Children learn through these types of interactions within the context of their society. That is, child development “is not so much a set of logical propositions as it is an exercise in narrative and storytelling. It is supported by a powerful structure of narrative culture- stories, myths, genres of literature” (Bruner, 1990, p. 138).

More recently, early childhood education researchers have considered the role of culture and educators’ beliefs about teaching and learning. For example, in Joe Tobin’s study, Japanese teachers were observed dealing with a disruptive child, according to their teaching beliefs. They explained that being a kind teacher was important, and they weren’t supposed to face a disruptive child with an unhappy voice or manners (Tobin, 2011). Instead, the teacher encouraged the child’s peers to help the child correct his behavior or let another strict manager do so. Tobin’s study of Japanese teachers noted their concern over how their own behavior would influence children’s development, which had a direct impact on their teaching style. And yet, although culture is a powerful influence, not all teachers who share a cultural background necessarily share the same beliefs. Rebecca New’s study of early childhood programs in Italy, including Reggio Emilia, Milano, Trento, Parma, and San Miniato, demonstrated that teachers in these diverse settings had different beliefs about children’s early learning and development, even if they shared some of the same cultural values (New, 1999).

Other scholars in teacher education have studied various ideas about teachers’ beliefs and their impact on practice. Wirth (1989) described the importance of teachers’ beliefs that a child is a meaning maker, not a “mechanism ” with which one thing should be worked out repeatedly. Cochran-Smith (1991) agreed with this idea as well, saying that teachers should
keep their beliefs about children as individuals, no matter what school policy stands opposite of their thoughts nor who disagrees with their ideas. She said, “…Teachers who work against the grain must name and wrestle with their own doubts, must fend off the fatigue of reform and depend on the strength of their individual and collaborative convictions that their work ultimately makes a difference in the fabric of social responsibility” (Ibid. p.23).

This story draws on theories of socio-cultural influences and research on the importance as well as diversity of teachers’ belief systems, in a study that explores a teacher’s belief that “art” is a helpful tool in children’s development. The context of this study includes several layers, including a state, a school district, a school and classroom; and considers classroom size, student demographics, common core standard assessments, and another local school inspired by Reggio Emilia - each of which had an impact on the teacher's ability to put her beliefs into practice successfully.

The Purpose of the Study

This thesis explored how a kindergarten teacher implemented Reggio Emilia ideas in a curriculum. Although researchers have observed and studied teachers in Reggio Emilia settings, relatively few studies have focused on U.S. teachers, especially public kindergarten teachers under the constraints of the Common Core State Standards (CCSS), and how they may have infused “symbolic languages” in their curriculum. This balance is especially difficult in states with strong allegiance to the CCSS. This study’s primary purpose is to address this research gap by deepening understandings of and contribute helpful ideas for supporting public school teachers interested in applying Reggio Emilia’s ideas about art and symbolic languages in U.S. classrooms.

Research Questions

The questions addressed in this study of one public kindergarten teacher are as follows:

1) What does the teacher think about ‘art’ in relation to children’s learning?
2) How have RE’s ideas about art influenced her interpretation?

3) What does the teacher do in the classroom based on these beliefs and interpretations?

4) What challenges does the teacher face while she is implementing symbolic languages?

The study of one teacher’s implementation of Reggio Emilia ideas will incorporate the theoretical principles as outlined previously, giving attention to the relationship between beliefs, practices and (cultural) contexts. Methods of data collection and analysis are described below.
CHAPTER 4: METHODOLOGY

School Setting

This study was conducted in a public kindergarten classroom in an urban school district in a southeastern state in the U.S. The school is a short distance from a prominent private university and has four kindergarten classrooms with approximately twenty children per class. This school serves students from a broad range of economic backgrounds, ranging from poverty to middle class. In the year this study took place (2015-16) State-generated School Report Cards, based on children’s math and reading performances on standardized assessments, assigned the school a grade of D, with only 48% and 50% of students in this school reaching academic proficiency in math and reading, respectively.

The school curricula from kindergarten through grade five were designed by the school district, with enrichment as well as state-mandated academic courses, including math, science, music, and English. The school is also designated as an “A-plus school,” a special designation of a school that “combines interdisciplinary teaching and daily arts instruction, offering children opportunities to develop creative, innovative ways of thinking, learning and showing what they know” (Durham Public School website). As a result of this special designation, there is an expectation that art will be incorporated into the curriculum. Other characteristics of the school include the use of a literacy evaluation using the mClass Reading Assessment, which assesses the reading level, strengths and weaknesses and determines instructional goals for children’s academic achievement in grade-appropriate foundational reading skills.
The kindergarten classroom chosen for this study was selected because of the teacher’s well-known interest in ideas associated with Reggio Emilia, including a project-based approach to the curriculum.

**Participants**

The classroom teacher who inspired this study has eighteen years of kindergarten teaching experience. She has an undergraduate degree in elementary education, and received her Master’s degree in literacy. She also has licensure in Academically Gifted instruction. She became interested in Reggio Emilia concepts while her son was enrolled in a Reggio Emilia-inspired preschool in the same town\(^1\). For the last five years, she has explored the use of art as a means of implementing symbolic language into her curriculum as a better way to promote and understand their learning.

At the time of this study, her classroom had 19 students: three Latino, four African-American, and thirteen Caucasian. All three Latino children were native Spanish speakers learning English in school as a second language\(^2\). The African-American and Caucasian children spoke only English. One child had special needs.

**Research Methods**

This study took place over a period of six months, and utilized a qualitative research methodology, which Horvat (2013) described “as an umbrella that provides the basic epistemological assumptions that guide the paradigm” (p.3). Three types of data collection were utilized to address the research questions. Each of the following strategies, aligned with the conceptual framework, generated data on the teacher’s beliefs and her practices in the context of the classroom and the larger school.

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1. In this school, children identified as “English Language Learners” received ESL supports once a week outside the classroom.
• **Semi-structured interviews.** The researcher interviewed the kindergarten teacher five times over the course of the study for approximately 30-minutes each, applying a semi-structured interview format\(^2\). The interviews focused on three broad topics: (1) her personal philosophy of teaching, including the role of using symbolic languages as a teaching method, (2) her interpretation of the challenges of incorporating symbolic languages in the classroom, and (3) her perspectives on the role of symbolic language in children’s early learning and their educational experience. The first and second interviews were conducted at the beginning of the project (described in) in order to understand her purposes for implementing symbolic language in her teaching and to ask for her interpretation of the children’s reaction to it. The third one occurred mid-project and included questions about the teacher’s interactions with students to-date, as well as solicited the teacher’s input on any perceived challenges or successes. The fourth and the last interview took place after the project was completed to again assess how the teacher perceived children’s symbolic language and documented the teacher’s thoughts and feelings about the implementation of symbolic languages.

• **Informal classroom conversations.** These took place after observations and were specific to the challenges of implementing a project-based curriculum and the use of symbolic language within this particular classroom or school context. These conversations were sometimes initiated by the researcher, for example, if the teacher was observed staying longer with one group of children. At other times, the conversations were initiated by the teacher, such as when she was exhausted or frustrated by the challenges of teaching a child with special needs who needed a lot of

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2. The teacher gave permission for all interviews to be audio-recorded. The teacher had a right to waive any questions that she did not want to address, and signed the informed consent form for the approval of the interview.
instructional support. Occasional telephone conversations were sometimes used to clarify the teacher’s thoughts of Reggio Emilia ideas.

- **Participant-observations.** There were a total of twelve observations, and each time the researcher stayed in the classroom for 2-3 hours, either in the morning or in the afternoon. Field notes were taken during this time to document teacher activities, with special attention to her strategies for eliciting children’s interpretation of their experience related to the Eno River project. The researcher sat near students and sometimes near the teacher and students while they interacted, without any interruption. Sometimes the researcher sat at a distance from students and the teacher to better observe children’s activities and, when possible, jotted down verbatim teacher-student conversations.

- **Documentation and collection of artifacts.** To supplement field notes, the researcher photographed children’s various products associated with this project, teacher’s handwritten posters, and other artifacts for the project. The artifacts collected include children’s products associated with a Writing Workshop Activity, an introduction to Abstract Painting, the creation of a “Seasons” Book, and an activity labeled “Black Dots” Activity. Parental permission was granted for all photos of artifacts.

**Data Collection Schedule and Analysis**

The data collection for this study took place during the time when the teacher was guiding students through an Eno River project, which occurred over the course of six months, during which time the teacher implemented and guided children through a long term project on a local river. The project itself took place over a two- and-a-half month period. The full data set of interviews, observations and field notes were reviewed and then aggregated according to several categories; a second review was conducted to identify specific themes (Creswell, 2007) based on their relevance to the research questions. The primary foci
emerging from those analyses were the teacher’s ideologies (values, beliefs, goals) about art, symbolic languages and children’s learning; the translation of those ideologies into her classroom plans; and the challenges associated with those curriculum implementation efforts. These insights will be described in the findings.
CHAPTER 5: RESULTS

Study findings described below focus on the three research questions, beginning with what this teacher believes about “art,” followed by a description of how she interpreted and implemented symbolic languages in support of children’s learning, including strategies she employed and simultaneously what challenged her. Through interviews and classroom observations, the researcher identified four themes from the data analysis:

1. Art has a significant role in children’s learning.

2. “Art” corresponds to some Reggio Emilia ideas about symbolic languages -- as a way of encouraging children to express themselves.

3. Teacher creativity in using art to pursue a long-term project.

4. Challenges faced by this public school kindergarten teacher.

Art’s Significant Role in Children’s Learning

Ms. M. believed that art aided children in two major ways: the interpretation and display of their experience, and as a helpful way of working with children with different strengths. Rogoff (2003) asserted that social and cultural history could influence people’s beliefs, and this was evident in the study of Ms. M’s teaching beliefs. She explained that her teaching changed when her son was studying in a Reggio-inspired day care center, and she found that art could be a basic tool in early childhood. Her insights into her son’s early learning were similar to those that Vygotsky (1978) described, such as drawing being the first of written languages, and “drawing is graphic speech that arises on the basis of verbal speech” (Vygotsky, 1978, p. 112). Ms. M. echoed this sentiment, explaining that since children
literacy was limited and their fine motor skills were still developing, art allowed children to better express their emotions and thoughts and explain what they want to say. Ms. M. also became convinced, through her son’s experiences, that art also provided classrooms with various media for different children to elaborate their ideas. Ms. M. said, “Art is really important to the specialty of teaching children. Art is their form of expression. They might struggle with another area, but art is a very free-forming way of expressing themselves.” (Ms. M., personal communication, April 30, 2015). She further articulates, “Art is a very important part of our classroom because it is another intelligence that I am trying to tap into and children can explain, and the abstract painting means an idea. Children can draw their ideas.” (Ms. M., personal communication, April 30, 2015) Those ideas contributed to Ms. M’s emerging conviction that teaching children should not be attempted without art.

“Art” of Reggio Emilia Ideas as a Way of Expressing Themselves

In public schools, art is the name of a subject. Yet, the term “art” has also been used by many in the U.S. in reference to symbolic languages as interpreted among Reggio Emilia educators. Ms. M used the term “art” to refer to symbolic languages because, as she explained, “art” is more easily understood by others. In an early conversation, she further interpreted and explained the functions of art (i.e. symbolic languages) and described what Malaguzzi said about it in One Hundred Languages of Children. She said, “The symbolic language of a child would be - look what this child did with the piece of clay. Whether it be that child did nothing with that clay except just squeeze it and get their emotions, or strengthen their fine motor skills, or the child with the clay made a sculpture out of it. That piece of clay is going to be symbolic to that in so many different ways. But, if that child never has the clay or listens to music or experiences drama, then how are we to figure out the full language of that
child? So, my philosophy in a Reggio-inspired style classroom is to watch or give the children lots of different ways of expressing themselves, or giving them provocations to see where they go with it.” (Ms. M, personal communication, Jan 25, 2016)

Within the public school environment, the role of the teacher is to serve as a “social influence” (Rogoff, 2003) and help children to acquire knowledge. In this study, Ms. M. played this influential role and utilized “art” as well as “symbolic languages,” explaining that art is an important way for children to express themselves and make their meaning visible.

**The Implementation of two big ideas from Reggio Emilia**

During the period in which this study took place, the teacher not only shared her beliefs about the role of art in children’s learning. She also explained and demonstrated her belief in the importance of using a project approach for children to acquire knowledge and literacy.

**The introduction to the Eno River project**

The Eno River is a significant waterway in the state and, therefore, meaningful for children to explore. Children innately love water, and this river is proximal to where these children live. So, this teacher relied on children’s interest and adopted this river as the initial topic, expanding the concept of the Eno River from the river to water, from water to animals, and from animals to people. Ms. M believed that, through this process, the children’s knowledge would increase.

In order to help children develop a holistic understanding of the river, Ms. M. designed several activities to expand the project by providing various types of materials for use in symbolic activities (Figure 1-3). Those activities included the following: a Seasons Book, a collective Big Painting, an Abstract Painting, the making of miniature clay objects, a
Questions Book, the Under a Rock activity, River Words Poetry, Play, Drop Books, a Hiker Guide, a Questions Book, an Association Box. Ms. M. believed that, echoing Vygotsky (1978), through such hands-on activities and the process of problem solving, children could acquire language skills and be encouraged to use new vocabulary about the topic. Moreover, in order to carry out those activities, Ms. M. designed learning centers, which could provide more opportunities for children to negotiate and communicate with each other. New (2007a) articulated this idea about how children could be encouraged to talk and understand through the manipulation of tasks. In Ms. M’s class, the curriculum was designed to include six-to-seven learning centers and two or more rotations in a week. Learning centers were all differentiated, but Math and Literacy were always present in the centers. In each activity, Ms. M. prepared various materials for children to make their ideas visible. She believed that using various materials in teaching was a helpful way of working with the different strengths of children. Since the children’s literacy was limited, and their fine motor skills were still developing, her approach enabled children to explain what they want to say.

However, Ms. M. expressed her feelings about the difficulties of teaching young children, specifically of keeping them focused at that age. That is why she designed small groups, as these facilitate their learning from peers, not merely directly from the teacher. And, children in a small group are better able to learn at their own pace. She explained, “I try to keep children busy in class everyday!” (Ms. M, personal communication, Feb 3, 2015). This sort of design of multiple centers and small groups was intended to address the difficulties of keeping the children focused and engaged.

**The beginning of the Eno River project**

In order to allow all children access to the same experience, Ms. M took the entire class to experience the Eno River. She said, “Kids have so many experiences to draw from, but some kids have nothing to draw from. Some kids even never go to the Eno River. So, the
fact is, that we all went to the Eno River; we all had that experience that we can draw from.” (Ms. M, personal communication, April 30, 2015). On the field trip, all of the children were very excited. They saw turtles, fish, birds, rocks, plants, grass and so on. What they learned from what they saw at the Eno River would contribute to their project learning. According to sociocultural theory, “learning and developing is dialectical in nature, working together as a dynamic process in a socio-cultural context. The learner brings prior knowledge and combines it with new knowledge through his or her interaction with others” (Vygotsky, 1978, p.10). This field trip helped children to engage with the same experience and learn in confidence.

After the field trip, I observed a painted indoor river in the classroom, giving children an opportunity to continue their river exploration at the school. The indoor river was located in the middle of classroom, and children’s desks and chairs were placed along the “banks” of the indoor river. This idea reminded this researcher of Dewey’s theory that encouraged a rich learning environment for children to explore and develop (1934). The learning environment in Ms. M.'s classroom was a pretend play environment. Children could imagine their seat as “their house” along a “real river.” She explained that the indoor river would help reinforce the concept of the space of the river. One day, I observed that children freely placed wooden blocks to build structures in, above, and along the river, a medium which helped them not only transfer their learning into physical visuals, but also to develop their creativity. Children constructed houses near the river and a bridge on the river by stacking wooden blocks (Figure 4); later on, they also made river creatures out of newspapers and placed them under rocks (Figure 5). I observed that children confidently learned how to make their own river world. This constructed indoor river environment appeared to enhance children’s spatial ability and stimulate their thinking by doing.
In order to give children a sense of walking along the riverbank and exploring the area, as if they were back at the Eno River again, Ms. M would also design an outdoor river, incorporating a bridge, bamboo, flowers, a tree, and some plants in a yard next to the classroom.

**Supporting activities during the Eno River project learning**

Based on theories about the use of the tools and of symbols in child development (Vygotsky, 1978), Ms. M also believed that children could learn and develop their cognition, and acquire languages through social interaction with others and problem solving activities. The purpose of a select group of her activities is described below.

**River words poetry**

The purpose of this activity was to cultivate children’s sense of appreciation for a ‘river’ vocabulary and development their ability to make sentences. A design table covered with stones upon which river words are written near the door (Figure 6). River and some backgrounds drew with chalks by Ms. M. A book related to a river usually placed in one place on the table. She thought that maybe parents came in and read. Children and parents would make their poetry together on the table as well. So, people entering the classroom would see this first. Ms. M designed this activity called “River Words Poetry,” which provided children the opportunity to appreciate poetry and allows them to use those stones to make their own poem anytime when children are free, so that no learning center was designed for this activity. Here is an observation of her implementation of symbolic languages with “River Words Poetry.”

Before having children do their poetry, Ms. M adopted one book for children to express their feelings about river words. She said,

“Listen to a poem and tell the differences from other writing. Writing a poem will omit some small vocabulary. Listen carefully and feel how a poet
interprets his feelings. Like in a painting, show your feelings. You can show your abstract thinking. You can write your poem on a designed table with the stones upon which river words are written. They don’t write. They have lovely, melodic sounds when you read them.” (Ms. M, Observation, April 30, 2015)

Then she read a poem from *River of Words* by Jen Bryant:

“The Great Figure
Among the rain and lights
I saw the figure S
  in gold
  on a red
  fire truck
  moving
tense
unheaded
to going clangs
strange howls
and wheels rumbling
through the dark city”

She continued by saying, “Close your eyes and imagine the picture. You can feel them although you don’t know meaning of the words.” (Observation, April 30, 2015). I later noticed one child’s poem on the table when my observation to children’s learning centers was done.

A child wrote her poem with these words stones.

*The Eno River is free*

*See water are love life*

*Lovely waves wet and sweet*

*On some algae*

Children not only learned to read the words by placing each stone, but they also seemed to get a sense of the feelings that the words evoked.
Dots books

One of the learning centers in the Eno River Project was dedicated to Math. Ms. M adopted a book called the Dots Books to teach children numbers and also reinforce children’s sense of numbers in math. She gave children one to ten sticky dots for creating something in their Black Dots activity, in order to illustrate their creative instincts. She said, “I am trying to get them to draw pictures of it and think about it as a real life that they can talk. Mostly we just talk about it. Not all of the children spell well. Some kids are not getting it, but they draw.” (Ms. M, personal communication, April 30, 2015). In the observation of the Black Dots activity, children used the black dots to represent something related to the Eno River Project without asking any questions to Ms. M. I also found that Ms. M did not interfere in the children’s activity in order to provide more thinking space for them. So, I asked children to explain their stories.

I : What are you drawing by using six black dots?

Children 1: I am making a paw print.

Children 2: It is supposed to be for the Eno River. Right?

I: Yeah!

Children 2: It can be a paw at the Eno River.

(Pause)

Children 1: I am making a trail. And, the rocks are on the trail.

Children 4: I am making a …. Do you remember that little house?

Children 3: Do you mean “cabin”? It is called a cabin. It’s woods….

Children 4: Yes! I am making a cabin.

After a few minutes of negotiation with each other, one child continued coming up with some ideas.
Children 3: Oh yeah! I got a really good idea; if there’s smoke coming out, you should put fire, because there’s fire.

Children 4: Oh yeah. There!

Children 1: River, river, river…

Children 2: I’m gonna make a tiny, tiny star….

Children 3: Fire…fire…fire…

I: Who and what lives along the river?

Children 1: It’s unknown.

Children 2: The star’s hiding in the river.

Children 4: I am going to make a beautiful rainbow (Figure 7).

Children 3: Do you think there is supposed to have a rainbow?

Children 2: You can make it beautiful.

Children 1: A beautiful rainbow.

Based on the Vygotsky’s Zone of Proximal Development (1978), children reach their goals by negotiating or learning from peers with higher skills or literacy. In this example, children learned new vocabulary from classmates and created a story through their conversations with each other.

In another example from this activity, a girl used six black dots to represent a bridge on the river (Figure 8-9). She told an interesting story about her image. According to her observations, she sketched some shadows first and then covered them by coloring brown, and said, “My friends are camping. Fish are in the river. There are people’s reflections under a bridge.” When this girl told her story to Ms. M, she was surprised and laughed about how she had made such a great story by using her black dots. That is, Black Dots not merely brought children’s creativity into image but also their stories, which meet Malaguzzi’s ideas (1993) that children are capable to do something with full curiosity. Learning math by using
symbolic languages allowed children to learn not only math, but also developed children’s ability to organize a story and then enhance their cognition.

**Under a rock**

The activity “Under a Rock” was designed for children to learn about animals by drawing and describing them, and also advance children’s observational skill. That is also an idea of George Forman’s thought- *Draw to learn* (1996). Children chose ten creatures to create and wrote an introduction to each creature on a card, after looking at several books. So, the process was that children identified, sketched, cut, and colored their creatures, and then wrote about them. Children were able to learn about these animals independently through their production of them, and their final products revealed the various depths of their understanding. For example, one child provided various complexities and detail in his creatures (Figure 10).

However, Ms. M identified a couple of problems with this process. First, at each table of four children, there were ten creatures per child, none of which had names on the back. Children easily mixed them up, and couldn’t find their creatures. Second, each creature had no clear connection to the card with a written description. When some children finished writing their information card, they couldn’t remember to which creature it belonged. She said, “This is the most challenging part of all project centers, because there are too many steps in the process for children to do. And the kids' literacy is limited.” (Ms. M, personal communication, May 12, 2015). According to Vygotsky’s ZPD (1978), she adjusted the process to accommodate these issues, having children write their names on their creatures first, and then write down a corresponding number on both the cards and creatures. Therefore, children could pick up one number from the cards and match it to the creatures. Ms. M. also read information aloud for each child, and children wrote what they wanted. She hoped that children could catch some words that they found impressive.
Drawing to learn helped children detect the whole body of knowledge of what they had learned. This idea met with Forman’s, drawing to learn. Children chose what they were enthusiastic about and tended to focus on learning. In this activity, although the steps were complicated for children to complete, Ms. M changed some process instead of giving up this activity. From this activity, children’s spontaneous concept gradually transferred to a scientific concept. Children closed detected their creatures by books, pictures or specimens with a magnifier so that the creatures displayed in many details. Children learned through drawing.

*Writer’s workshop*

The writing center included sections of the activities for children to write about what they drew and also to acquire literacy and enhance children’s reading ability, as this is a state education standard. That method also followed by Vygotsky’s theory of language development (1978). In order to increase children’s literacy, Ms. M read books related to the Eno River for expanding children’s literacy and asked some questions for them to answer in their own Seasons Book. The seasons Book was designed to interpret children’s feelings about the dramatic change among the four seasons at the Eno River and offered children an opportunity to imaginatively display, explore these feelings, and learn new literacy. Children drew their feelings about anticipated sensorial changes from winter to spring, from spring to summer, etc. While they were given the opportunity to write down what they expected, they could also demonstrate their ideas (regardless of linguistic ability) through drawing and painting. Colors could be mixed into various layers of the hues. Based on the hue, saturation, and value of the children’s drawings, they could display feelings about the transition of the four seasons.

In the observation in this activity, she discussed with the children what dramatic changes occurred between each of the four seasons before the children started on their
Seasons Book, which could increase children’s literacy. During the discussion, she invited the children to imagine what they would find in the river.

Ms. M: “I will give you a lot of information. I think you will find greens in the river. We will look at the colors over there. Give you inspiration! What do you see in the wintertime at the Eno River? How do you feel? What do you hear? What can you imagine?”

Children 1: “In the woods, you might hear bugs.”

Children 2: “We might hear girls running over the leaves.”

(The teacher asked back to the second child) “What about you running over the leaves? What sounds will we make?”


Ms. M: “Crunching!” (Figure 11).

Ms. M persisted her belief under the policy of the Common Core State Standard and asked open-ended questions as a way of enhancing children’s cognition. I found that children could draw more about the changes of the four seasons and some children even learned new words. Their literacy was literally improving.

**Abstract paintings**

Another theme emerged through analysis of what Ms. M. referred to as the children’s “abstract paintings”, an idea similar to Arnheim’s art thoughts (1990). Inspired by looking through a calendar of Eno River pictures, children used paintbrushes and multiple paints to express their feelings on paper about these pictures so that the paintings were supposed to reveal children’s emotion and their fine motor skill. This was a very quiet and thoughtful activity, and children worked on their paintings without disturbing anyone. Typically, children at this age have developed fine motor skills that enable them to portray their thoughts and feelings in specific detail (Golom 1992; Lowenfeld, & Brittain, 1964;
Machon, 2007). Ms. M. explained that she wanted them to understand that “The abstract painting means an idea,” and “When we were studying the river… they couldn’t hear the river; well, they went to the river, but they were still able to make that connection to the river, having just seen it once into a painting that looks like an image of what they just saw” (Ms. M., Personal communication, June 4, 2015). When asked about whether she can identify emotion in their paintings, she replied “Some, definitely, more than others, like this one that you’ve pulled up, just how it’s not sharp; it’s very curvy and soft edges; the colors kind of blend. Yes, she’s an amazing painter… and emotional as well…just the fact that she chose to paint this particular image makes it an emotional piece, right?” (Ms. M., Personal communication, June 4, 2015).

**Museum at the end of the project**

At the end of the project, after going through several difficulties, Ms. M hosted a classroom “museum” where all the children’s symbolic languages could be displayed (Figure 12 & 14-18) Before the museum opened, children made an invitation card for welcoming their friends and parents to come (Figure 13). On the day of the museum opening, children were very excited about sharing their learning with their friends and parents. Parents also asked a few questions while looking at their children’s artifacts of symbolic language. In observing the children’s performance, all of them could briefly but confidently introduce what they did to their parents and friends. Children also performed a play about the Eno River. Each child took a stick with a creature picture that they had drawn, and pretended that they were as that creature along or in the river. During the performance, the teacher played a recording of the children’s voices. All transcripts in the play were completed through a negotiation between the teacher and children. After the play, children smiled and sang a song about the river to their audience.
Even following such a successful conclusion to their project, in which the children showed competence and strong performances in the context of discussing year-end assessments and time demands during the final interview, Ms. M. said, “Projects are not easy” (Personal communication, June 4, 2015). In the end of the interview, she further explained that she did not have much time to do documentation. At school, she needed to focus on each child’s learning by providing so many activities. Being a mother and a wife, she had no time even if she hoped to complete some documentation at home.

**Challenges that the Teacher Faced**

Throughout this project, Ms. M. encountered some challenges when she incorporated symbolic language into her curriculum. In spite of those challenges, Ms. M. repeatedly tried to teach against the grain, as advocated by Wirth (1989) and Cochran-Smith (1991). Key themes of these challenges are described below:

**Children’s varying academic needs**

During two interviews, Ms. M. expressed the difficulty in teaching children with various and significantly disparate academic needs. One of the most significant challenges for Ms. M. was the children’s different literacy levels, particularly those for whom English is a second or other language (ESL). Because these groups have different instructional demands, she described her feeling that she must continually try to balance her time and energy in order to serve all the groups equitably. “The most difficult part of project work is just the organizing.” (Ms. M., personal communication, April 30, 2015) She said, “The really smart kids deserve just as much attention as low kids, but teachers need to pull low kids up. I will lose my mind if I focus every day on the low children. I will lose my mind.” (Ms. M., personal communication, April 30, 2015). She also said, “The most challenging part is doing centers and project work and differentiating for the children, because you have functional kids who can do so much, and very low level functioning kids who can not progress.” (Ms. M.,
personal communication, June 4, 2015). Ms. M. wanted to academically engage all of the children, regardless of their level, but seemed to struggle with this goal, saying, “I have to believe that you need to have an exhilarating class. Focusing on your lower children is not going to make it an exhilarating classroom. If I make an exciting kind of high functioning class, I am happy; and, you can only hope those lower are moving along.” (Ms. M., personal communication, June 4, 2015).

Children’s energy and focus

Ms. M. also repeatedly expressed the difficulty of keeping the children focused. In our second interview, she said, “So it is hard to stay focused and get the most out of them that can possibly be found in your project work. This time of year, kids are very different. They need a break from each other. They are becoming outgoing in the classroom. Some of them are growing, and some are regressing. It happens every year. Their behaviors are out of control. They are doing thing that they would never have done, like twirling around. You have to laugh otherwise you will go crazy. Those high-functioning capable kids can lose structure and their focus and control just as quickly. And they do! So it is such a mess” (Ms. M., personal communication, May 12, 2015).

During the various activities, the researcher observed that the majority of the groups of children were working alone while the teacher assisted one group; and so, the management of this group work also a challenge. Ms. M. frequently had to redirect groups who were off-task and occasionally stop the class work and ask children to quiet down, as a means of re-focusing their attention (Ms. M., observation, May 19, 2015). She mentioned outside of an interview one day that she was exhausted at the end of each day due to the non-stop demand on her classroom behavior management.
District educational policy

Over three interviews, Ms. M repeatedly mentioned district educational policies’ focus on children’s reading, writing, and mathematics, which constrained her flexibility of teaching methodology and curricular planning. According to Ms. M., some of the most significant restrictions on project work are the demands of standardized testing and preparation for those tests. And, because this testing is administered on a one-on-one basis, it takes considerable time for 19 students to take the test, let alone the time spent preparing for this testing. So, Ms. M. sometimes postponed her project activities due to the demands of these standard assessments.

Along with demands on time, testing requirements impact the overall design of the project. For example, in the Seasons Book, Questions Book, Drop Book, and Black Dots, it was necessary to include sections for children to write about what they drew, as this is a state education standard requirement. Ms. M. said that she would have preferred not to have these writing elements in each of her activities. Her project also included a Writer’s Workshop, through which she felt the children received adequate exposure and practice with writing. She felt that children of this age are generally not ready to do so much writing (Ms. M, personal communication, May 12, 2015).

In addition to the time and curricular design demands of standardized assessment, there were further restrictions on her project time for those students requiring special services (ESL, and Special Needs). During the course of a typical school day, those children who receive special instruction might be pulled from the classroom and were then unable to participate in the project. She especially mentioned three English as a Second Language (ESL) children. She said,

“Mostly we just talk about ESL kids. All of their spelling is not so good.

Some kids are not getting it, but they draw! Like one of the ESL children, I
say, “I,” but he could not know “I.” When I say, “like,” he could not tell, “like.” Or not making the sounds. Every letter sound. He does not have any ideas of sounds. The same situation happens with another ESL child. I taught her, “I like ice cream.” She repeated after me and said, “I like an ice cream.” I said no an. Try again. She still said, “an ice cream.” She connected them together.

Ms. M was frustrated that the system was caught up and moved them to a higher level, but some children’s brains were not ready to figure out the activity. However, she still provided positive relationships with ESL children. In an observation of the teacher with one ESL child, she said, “I make a challenge to you. You can write something and draw what you want to say. I am expecting so much of you. You are doing powerful things, even if I am not around to watch you. It is just powerfulness” (Ms. M, observation, May 21, 2015). Although the child did not have any idea about what to write, she happily drew something in her work. In spite of these ongoing challenges, Ms. M. remained enthusiastic about the learning potentials of including projects and symbolic languages in her curriculum.
CHAPTER 7: DISCUSSION

This study revealed important insights into how one public kindergarten teacher both interpreted and implemented symbolic languages in her classroom in spite of numerous challenges she faced. This study also illustrated ways in which this one teacher’s beliefs and practices were aligned with other theories, including those from Reggio Emilia.

First, Ms. M. believed that art is an essential element in children’s learning, leading her to design a curriculum project with several art activities; and she provided various helpful and interesting materials to use following a meaningful field trip. Children within this rich learning environment, full of art, exhibited their understanding in various ways.

Second, art as interpreted by Ms. M. was similar to the interpretations of many described in the Literature Review. She shared John Dewey’s beliefs (Dewey, 1934) of art as both as a means of children’s expression and as an element for a learning environment. Ms. M. also shared some of Reggio Emilia educators’ beliefs, e.g., that she could understand children’s thinking through her observation of their working process and communication with them (Edwards, 1998). Along with these benefits of implementing symbolic languages, Ms. M demonstrated an understanding that children from various backgrounds carried different knowledge and could make their meaning clear by using various materials; that using symbolic languages helped children feel more comfortable and confident while learning; and that children had multiple (one hundred!) ways of expressing themselves and communicating (Edwards et al., 1993; Edwards, 1998; Edwards, 2012). Moreover, some of Ms. M.’s ideas could be traced back to Lowenfeld (1970) belief that children learned from their sensory experience; as well as Vygotsky’s theory (1978) that the teacher’s use of symbolic languages
didn’t merely reinforce motor skill abilities, but expanded and enhanced children’s cognition through scaffolding, sometimes with high-skilled peers.

This study also demonstrated the power of teacher’s beliefs and philosophy of education. Despite constraining state curriculum policies, Ms. M. followed her heart, doing what she believed helpful and practical for children’s learning. As described by Wirth (1989) and Cochran-Smith (1991), teachers should fight against the grain and teach what indeed they believe helps children. Ms. M is a good example of such a teacher, even though she was teaching in a silo without enough support to easily translate her beliefs into action.

**My Position**

As a former part-time public kindergarten teacher in Taiwan, I also thought that the implementation of symbolic languages was a challenge due to curricular constraints. How to bring symbolic languages into a public kindergarten has long been a question for me. In my opinion, children are born with artistic talent, and they are capable of expressing themselves in wide variety of ways, if they are in a resource-rich environment. Because verbal language limits children’s performance, I could understand children’s learning through another means. So, the ways that Ms. M. implemented symbolic languages shed some light for me.

Rotating among learning centers was one way Ms. M demonstrated in response to this challenge. In those centers, Ms. M. provided rich materials for the children, and this strategy addressed some of my earlier concerns. I had assumed there would be one activity at a time, and that each activity would last a few weeks, and all the children would do the same activity. I also thought this might lead to the conclusion that most of the children’s works would be similar because they may have been influenced by their peers. Actually, I also came to this conclusion in other U. S. schools. However, in Ms. M.’s class, on many occasions I observed small groups within each rotation do different activities and this strategy tended to avoid this problem. During group work, children also appeared to have more opportunity to reflect
again about their work. That is likely why children’s works in Ms. M.’s class show so many different perspectives.

Since the thesis began, I have now had several experiences to learn more about symbolic languages in other private infant-toddler schools and preschools, including two – the Boulder Journey School in Colorado, and the Seasons Art kindergarten in Taiwan-- that were also influenced by RE ideas or REA. I recognized that different teachers with different experience and cultures interpreted these ideas differently. Those experiences strengthened my understanding that children have many languages (Malaguzzi, 1998) and informed my insights into Ms. M.’s efforts in a public kindergarten, allowing me to compare her interpretation of symbolic languages in a multi-cultural, multi-lingual, and multi-skilled setting. In her class, I found that using a project approach helps children expand on one simple idea and this extended time enhances children’s cognition. I had many opportunities to see how children’s symbolic languages helped them reveal their thoughts, and I also learned about involving families as a way of improving children’s motivation for learning and even possibly connect them to their family’s knowledge.

Ms. M’s way of displaying symbolic language is different from what I observed in Taiwan. Most obvious is that her classroom was decorated with many children’s symbolic languages, especially paintings hanging on the walls, and that learning materials were strategically placed throughout the room. Ms. M’s classroom was like an art gallery; imagine children’s creative symbolic representations covering nearly every surface. This is quite different from the other Reggio-inspired places I visited, especially the school in Taiwan, where very little was displayed on the walls and materials were stored in only one location. Both classrooms were inspired by and delivered an REA curriculum, but appeared distinct in different cultural contexts.
Limitations

Despite the importance of this research for educators striving to implement symbolic languages in the classroom, this study has several limitations. Because public kindergarten teachers who are teaching through the infusion of symbolic languages are few, so recruitment options were limited. Moreover, the data collection took place over a relatively short time, and observations were limited due to travel and time constraints. The study findings may not apply well to other contexts, given the intense and persistent nature of Ms. M’s commitment to symbolic languages. Future studies should be conducted with other teachers whose beliefs are similar to this teacher’s but who are working in other contexts in order to explore more and deeper about the role of the school culture in how teachers interpret Reggio Emilia ideas. In spite of these limitations, this study still provides important insights into how teachers might implement symbolic languages in their classroom.
CHAPTER 8: CONCLUSION

This study supports Malaguzzi’s idea that employing symbolic languages successfully encourages and facilitates children’s engagement with valuable learning activities. Also, it reveals children’s learning performance. Children can learn about water ecosystems, acquire literacy related to the Eno River through using their symbolic languages with the teacher’s material support. Children with a wide range of knowledge and from different cultural backgrounds can adopt symbolic languages confidently to represent their performance visibly. Although within many U.S. kindergartens there is an increased focus on core subjects and limited support and structure for a curriculum that integrates art, the teacher described in this study encountered and finally overcame many challenges when implementing symbolic languages in a curriculum. Ms. M. did not give up her beliefs despite the state's policy restrictions. Instead, she followed her beliefs of using art by applying symbolic languages with various strategies to complete her project work in her kindergarten classroom. She tried to do what is the best for her students. For these reasons, this study will contribute to other researchers who are looking into these challenges and inspire those who are interested in teaching through the use of symbolic languages.

Implications

There are several implications of this study, including new interpretations of what children and teachers are capable of, possibilities for reforming teacher education, and a better understanding of how teachers interpret and apply RE ideas, especially in settings without support and often in the face of policy and administrative obstacles.
One of the primary benefits of employing symbolic languages is that all children seem to be capable of expressing themselves successfully. Moreover, symbolic languages can serve as a powerful assessment in children’s learning. At the end-of-year museum in Ms. M’s classroom, there were so many examples of children’s works, evidence of all of the children’s efforts. Although, in fact, some children did not complete every task, parents and other visitors did not discover this or seem to care about this issue. Instead, they learned that all the children in the class, even a child with special needs, were capable of showing his/her works confidently and describing what he/she did orally. Since symbolic languages contributed to bringing these positive benefits into children’s learning, it is worth considering what might happen if an English as Second Language (ESL) teacher were to implement symbolic languages into her/his ESL curriculum. If ESL teachers were to use symbolic languages as part of their instructional practices, the students who need ESL instruction may be more successful and more motivated for learning English.

Other implications of this study are based on what I learned in Ms. M.’s class about the role of symbolic languages in helping children gain more confidence, and the importance of teacher creativity. In this class, some of children were good at painting, and others were good at manipulating objects. Ms. M designed these activities to meet each child’s needs. These findings have important implications for improving teaching in order to improve learning. Learning should be based on confidence. Once children are confident about something, they will be enthusiastic about it. Learning will become easy and fun. So, teachers should also be creative role models in the classroom.

These findings have implications for teacher education, and the importance of all future teachers to have some pre-service professional development about “creativity.” Children are creative (Dewey, 1934; Gardner, 1990), curious (Edwards, et al., 1993, 1998 & 2012), and imaginative (Malaguzzi, 1998). So, teachers should also be creative role models in
the classroom. A course about creativity may contribute to teachers’ abilities - even those who believe they are not creative at all- to adopt creative teaching methods or cultivate their creative and critical thinking. This emphasis on creativity could also be a focus of in-service professional development. For example, the school might design a day for teachers to gather together, reflect on their teaching and gain more successful ideas from other teachers, which will lead to a more powerful and sufficient curriculum.

The last, but the most major implication of the study is its contribution to further case studies for understanding more about how teachers transform their practices based on ideas and inspirations such as those from Reggio Emilia; and how they do so on their own, with little or no help; and why some teachers persist in implementing their ideas if (when) they encounter so many barriers.
Figure 1. Children could use this rice box to develop their motor skills and cultivate their creativity.
Figure 2. Children could utilize clay for making their meaning visible.

Figure 3. The teacher provided those materials for children to make creatures or insects.
Figure 4. Children constructed houses nearby the river and a bridge on the river by stacking wooded blocks.

Figure 5. Children constructed houses nearby the river and a bridge on the river by stacking wooded blocks.
Figure 6. A designed table with the stones upon which river words are written.

Figure 7. One child was done with her work by the negotiation with peers.
Figure 8 A girl drew a reflection on the river.
Figure 9. A girl wrote her thoughts on the back of her Black Dots picture.

Figure 10. A boy found his creatures by showing a lot of details.
Figure 11. A poster showed all key points from dialogues between the teacher and children.
Figure 12. Children looked at a picture of the calendar, and drew.

Figure 13. A museum displayed all children’s works at the Eno River Project.
Figure 14. The museum displayed all children’s writings

Figure 15. Children’s abstract paintings
Figure 16. Children’s abstract paintings
Figure 17. A big picture that children and the teacher co-paint and draw. Children also wrote one sentence about the river along the frame of the picture.

Figure 18. Children made creature living along or in the river.
APPENDICE B: SAMPLE OF THE FIELD NOTES

Date: May 19, 2015
Time: 9:30-12:30 (Break 10:30-11:20)

a) What has happened since the project began?

b) What is happening Now in the class?

1. Why do you do a project about the Eno river?
2. What challenges you while doing the project centers?
3. What doesn’t work well in these project centers? Why? (Drop book/black dots/seasons/invitation letter/under a rock…)
4. Why do you have children write before drawing (all books)?
5. How did children feel while doing these activities?
6. Regarding symbolic language, art can present everything. I do not see children’s emotion reveal in their drawing. Does it mean that the goal of the project about the Eno river is only for children to understand/obtain information of the Eno river.

Questions:
Discuss children’s academic levels.
- Children could talk about their experience according to what they drew. But they couldn’t write down that they exactly think next to their drawings.
- Some Latino children wrote poorly, but they could draw what they would like to say.

Take notes:
read Animal Poetry - invite you / experience you to write your own poetry.
Reading: a piece of poem-showing a picture next to the poem. This book is not for a kindergarten’s level. Middleton loves these pictures in this book. Show challenges to children. Try to have children appreciate the poetry.
Read second one-What do you think they live? She does a lot of silly things.

Read third one-a lot of words begins with S…

Read forth one-snake-so many words you don’t know. They are so challenge! Can you image when you listen to these words? Sometime you need to read them because you can feel them although you don’t know meanings of the words.

The last one-kangaroo: image a kangaroo. You can close your eye! Mom kangaroo and baby kangaroo.

**Seasons:**

(Look at these abstract art which shows four seasons)

What changes in four seasons? Draw and write the dramatic change in fours seasons.

Question: What else change from winter to spring? What else change differently? Since you don’t experience there in summer, so you can image what changes. Please think and image!

Image yourself in the summer time in the Eno river. Pleas don’t write and draw “like,” or “don’t like.” Focus on the change in fours season in the Eno river.

-No correct all their spellings. Just choose main vocabulary.

- asked a lot of questions before children did their books.

You are walking in/along the Eno river. How do you feel or what do you see? What can you play?

-If children did not know how to spell, Middleton had them try to spell by themselves, or gave them a book they have read. And children were able to find the word they wanted.

-Some children were level low. Middleton still had them do an activity on their own. Let them solve problems by themselves first.
APPENDICE C: SAMPLE OF SEMI-STRUCTURED INTERVIEW

Interviewer: 1. How long is your project?

M: The project will end in the May. Maybe! We are having a test and window test next week.
I and Ms. A. keep the kids extremely busy. It’s spring fever. You know…kids just lose their
minds. So we have centers. We have learning centers. Math and Literacy, but there is always
two or three project centers into the learning centers. So for example, we have seven centers
this week. We have two more rotations. They are all differentiated. This is a shape of
rhyming words, these two girls from ESL. So, writing (rhyming) words is very difficult for
them. But this one is best friend with this one. She is English speaking. She can pull them and
she can do more works with these girls than I can in this point. They have been acceptable.
Any English they learn this year, this girl has told them. It is amazing! But this rhyming
words centers for this group, this group, and this group was very different. So you have to
differentiate. This one is nonsense words and who is my neighbor..ah… this.. so each one of
these centers changes depends on the group. This is under a rock, and this is a center that they
are doing their black dots. Each of them is making a dot book. So first, I gave them one dot
and then I gave them two dots. They figure out what to do with those.

Interviewer: Does each dot represent a rock?

M: Not a rock. This is a dot.

Interviewer: Does it stand for anything?

M: It's tapping into the creative. These four dots

Interviewer: Why do you use black dots, not other colors?

M: Let me show you. I have done that very year. (Dots books) And they love this book. It
just gets them thinking in a different way. But they do know that, one dot can be a sun. One is
this, and one is that. Dots have to make something. So they have to figure out what are my
dots. And some of them are incredibly creative with this; however, some are struggling with
being creative. Flowers are very popular, but they are allowed to do once. So, next week, when they get fours black dots, they can’t do flowers. (Display children’s black dots.) This is a paw print. So, I love to see some of them do with this. It is very creative I think. These are bombs in a city. Lovely! This is food print. He is sad. I just find that it is interesting that they come up with. We will go over to ten. And we will bum them.

Interviewer: 2. How about the Eno River creatures? So they do what they are interested or what they saw?

M: We made a long list of animals that you will find living along the Eno river. In the river. Out of the river. In a wood. I have lots of books. So we made a long list, and children got to choose one they want, and they were researching it. So, they will research this particular animal in the Eno river. Next week, they will do a different book. Animal life in the Eno river. They will take their animal they made, and they will write about it. They will describe them. They will talk about what they eat. All things are they learn about the animals. And this will be a river guide. I am not sure what they will include here yet, because we ran to the river. They might start with a river with a ‘cabin, swimming bridge. You know that kind of thing.

Interviewer:
APPENDICE D: TEACHER CONSENT FORM

Teacher Informed Consent Agreement

**Purpose of the research study:** The purpose of the study is to: 1) explore how you as a public kindergarten teacher use symbolic language in your curriculum and 2) to understand what challenges you encounter while implementing a curriculum that utilizes the children learning through symbolic language.

**What you will do in the study:** The researcher will interview you after three observations in your classroom. Each interview will last approximately 30 minutes. The interview will be audio-recorded so the researcher can transcribe the responses which will be used for analyses.

**Benefits:** There are no direct benefits to you for participating in this research. However, the study may help us understand how important symbolic language is in the early childhood education field and contribute for future researchers exploring and expanding the research.

**Confidentiality:** The researcher will not identify you by name in any writing without your written permission. Each interview will be transcribed. You can refuse to answer questions that you do not want to answer.

If you have questions about the study, contact:

Shin-yu Tzeng

Early Childhood, Special Education, and Literacy

School of Education

University of North Carolina at Chapel Hill

Tzeng@live.unc.edu
Agreement:

I agree to participate in the research study described above. I understand that I will be interviewed three times about my use of symbolic language in my kindergarten curriculum and that the interviews will be audio-recorded.

Signature: _______________________  Date:___________________

You will receive a copy of this form for you records. I appreciate your time.
APPENDICE E: PARENT CONSENT FORM

Dear Parents/Guardians,

My name is Shin-yu Tzeng, and I am a graduate student studying in the Early Childhood, Special Education, and Literacy Master’s program at UNC-CH. For my Master’s thesis, I am doing research about how children use symbolic language (art) for interpreting their ideas and learning. The focus of my research will be on the way teachers implement the use of symbolic language in their curriculum. However, as part of my study, I will also need to observe the teacher’s class and take notes on children’s use of symbolic language as a process of learning. Your child will not be identified or interviewed, and no video or audio recordings will take place. I will be looking at the children’s artwork and writing to see how they use symbolic language in their learning. Any findings will be completely anonymous, and therefore, no students will be identified.

Participation in this study is completely voluntary. Again, student identities will not be recorded or exposed in the research process. When describing children’s work in my thesis I will use pseudonyms. The time I spend in the classroom will not interrupt instruction, as I will be observing the teacher and student engagement.

If you have any questions, please feel free to contact me at (919)360-2526 or by email at tzeng@live.unc.edu

Thank you for your time.

Best,

Shin-yu Tzeng

Please detach the lower part of this sheet and return to the teacher as soon as possible.
___ I understand the research study and agree to allow my student ________________ (name of child) to participate in classroom activities that will be observed. Also, I agree to allow my child’s artwork and writing to be photographed and analyzed by Shin-yu Tzeng. I understand that my child’s name will never be used in any writing on the topic.

___ I do not wish my child __________________________ (name) to be observed in class, and do not want my child’s artworks to be photographed and analyzed.

Signature indicating consent

Name ___________________________________________ Date ___________________
APPENDICE F: PARENT CONSENT FORM IN SPANISH

Estimados Padres / Tutores,

Mi nombre es Shin -yu Tzeng, y soy estudiante de postgrado que estudia en la Primera Infancia, Educación Especial, y Literatura en el programa de Maestria en la UNC -CH. Para mi tesis de Maestría, estoy haciendo la investigación sobre cómo los niños usan el lenguaje simbólico (el arte) para la interpretación de sus ideas y el aprendizaje. El enfoque de mi investigación será en la forma que los maestros implementan el uso del lenguaje simbólico en su plan de estudios. Sin embargo, como parte de mi estudio, también es necesario observar la clase y tomar notas sobre como los niños usan el lenguaje simbólico como parte de su aprendizaje.

Su hijo/hija no será identificado o entrevistado, y ningún video o audio grabacion se llevará a cabo. Solo estaré observando sus ilustraciones para ver cómo ellos usan el lenguaje simbólico en su aprendizaje. Cualquier resultado será totalmente anónimo, por lo tanto, no se identificara a ningún estudiante.

La participación en este estudio es completamente voluntaria. Una vez más, en el proceso de esta investigación la identidad de los estudiantes NO será grabada ni expuesta. Al describir el trabajo de los niños en mi tesis, utilizaré seudónimos. El tiempo que pasaré en la clase no interrumpirá la instrucción, solo estaré observando la interacion entre maestro y estudiante.

Si usted tiene alguna pregunta, por favor no dude en comunicarse conmigo por telefono (919)360-2526 o por correo electrónico a tzeng@live.unc.edu

Gracias por tu tiempo.

Por favor, sepere la parte inferior de esta hoja y entregse al maestro lo mas pronto posible.
Entiendo el estudio de investigación y estoy de acuerdo en permitir que mi hijo/hija _______________________ (nombre del estudiante) participe en las actividades de la clase que se observará. Estoy de acuerdo en permitir que sus ilustraciones y escritura sean fotografiados y analizados por Shin -yu Tzeng. Entiendo que el nombre de mi hijo/hija nunca se utilizarán en cualquier escrito sobre el tema.

(Translates to: I understand but still do not wish for my child to participate) Entiendo el estudio de investigación pero no deseo que mi hijo _______________________ (nombre) sea observado/a en la clase, y no quiero obras de arte de mi hijo que sean fotografiados y analizados.

(Translates to: I do not wish for my child to participate) No deseo que mi hijo _______________________ (nombre) sea observado/a en la clase, y no quiero obras de arte de mi hijo que sean fotografiados y analizados.

Firma

Nombre ______________
Fecha ______________

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