University of Kentucky

UKnowledge

Theses and Dissertations--Art and Visual Studies

Art and Visual Studies

2014

LEARNING TO RETELL STORIES THROUGH COMPARATIVE TEACHING: WRITING AND DRAWING

Rachel L. Lindle University of Kentucky, rllind2@uky.edu

Right click to open a feedback form in a new tab to let us know how this document benefits you.

Recommended Citation

Lindle, Rachel L., "LEARNING TO RETELL STORIES THROUGH COMPARATIVE TEACHING: WRITING AND DRAWING" (2014). *Theses and Dissertations--Art and Visual Studies*. 7. https://uknowledge.uky.edu/art_etds/7

This Master's Thesis is brought to you for free and open access by the Art and Visual Studies at UKnowledge. It has been accepted for inclusion in Theses and Dissertations--Art and Visual Studies by an authorized administrator of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.

STUDENT AGREEMENT:

I represent that my thesis or dissertation and abstract are my original work. Proper attribution has been given to all outside sources. I understand that I am solely responsible for obtaining any needed copyright permissions. I have obtained needed written permission statement(s) from the owner(s) of each third-party copyrighted matter to be included in my work, allowing electronic distribution (if such use is not permitted by the fair use doctrine) which will be submitted to UKnowledge as Additional File.

I hereby grant to The University of Kentucky and its agents the irrevocable, non-exclusive, and royalty-free license to archive and make accessible my work in whole or in part in all forms of media, now or hereafter known. I agree that the document mentioned above may be made available immediately for worldwide access unless an embargo applies.

I retain all other ownership rights to the copyright of my work. I also retain the right to use in future works (such as articles or books) all or part of my work. I understand that I am free to register the copyright to my work.

REVIEW, APPROVAL AND ACCEPTANCE

The document mentioned above has been reviewed and accepted by the student's advisor, on behalf of the advisory committee, and by the Director of Graduate Studies (DGS), on behalf of the program; we verify that this is the final, approved version of the student's thesis including all changes required by the advisory committee. The undersigned agree to abide by the statements above.

Rachel L. Lindle, Student Dr. Allan G. Richards, Major Professor Professor Doreen Maloney, Director of Graduate Studies

LEARNING TO RETELL STORIES THROUGH COMPARATIVE TEACHING: WRITING AND DRAWING

THESIS

A thesis submitted in partial fulfillment of the

requirements for the degree of Master of Arts in the

College of Fine Arts, Department of Art

at the University of Kentucky

By

Rachel Lindle

Lexington, Kentucky

Allan G. Richards, Ed. D. Director of Thesis, Professor of Art Education Lexington, Kentucky

Copyright © Rachel Lindle December 4, 2014

LEARNING TO RETELL STORIES THROUGH COMPARATIVE TEACHING: WRITING AND DRAWING

By

Rachel Lindle

Allan G. Richards, Ed.D. Director of Thesis

Doreen Maloney, M.F.A.

Director of Graduate Studies

December 4, 2014

ABSTRACT OF THESIS

LEARNING TO RETELL STORIES THROUGH COMPARATIVE TEACHING: WRITING AND DRAWING

Students who are emergent readers and writers are often difficult to assess, as they are unable to communicate understanding in writing. From my observations, these students communicate ideas best through concrete forms of expression, rather than the abstract formation of letters and writing that is unfamiliar to them. Drawing provides an alternate form of expression from writing. Based on information found in literature review and personal experiences from working with students who are emergent readers and writers, pictures and drawings are a bridge to communicate ideas with these students. This form of expression and communication may be a useful assessment tool for students at this developmental stage. The purpose of this research study is to test the hypothesis that retelling using visual art representations of the story will yield positive results.

Keywords: assessment, comprehension, communication, emergent writers, retelling, visual arts, writing, written communication

Rachel Lindle

December 4, 2014

Acknowledgements

This thesis would not have been possible without the guidance and support from my students, colleagues and professors.

My former and current kindergarten students, who are emergent readers and writers inspired this research. Their unbridled enthusiasm to communicate using paper and writing devices drove my desire to learn a better way to teach and assess students utilizing their art to communicate understanding rather than writing, since they are in the process of learning how to use abstract alphabet to create symbols of communication.

A fellow colleague, to remain unnamed, had a huge impact on this research; not only did she serve as an implementer of the research with her classroom of students, but she acted as a mentor to me throughout this study. Without her help and guidance, I would not have been able to complete this research.

I would like to thank Dr. Patricia Browne-Ferrigno for her advice and support during this process. Dr. George Szekely has my profoundest gratitude for his consistent enthusiasm and encouragement for all of my projects and ideas throughout my time in the Art Education master's program. Dr. Allan Richards, my committee chair, has guided me along from start to finish, offering ample advice, resources and assisting nearly every feasible way possible, I am sincerely appreciative of his hard work and willingness to always lend a hand. I am also grateful for Dr. Gary Lindle, who helped me design the study's procedures and format the collected data so that this research could be analyzed and "numbers crunched". Beyond all else, I would like to thank my mother, Dr. Jane Clark Lindle first and foremost. She is my inspiration for becoming a teacher and I admire her strong desire to make a difference in the world of education. I hope to one day become a strong leader in this field as she has been for many years. She is always there for guidance and support and especially her word processing assistance and assisting me in my research.

I would like to thank my family and friends for their kind support and enthusiasm during this project, especially my brother, Trey Lindle who is always there for guidance with computer and technology knowledge galore. I would like to thank Nate Ratcliff, my boyfriend of twelve years who has always been a source of encouragement and validation.

Finally, I would like to thank both Jessamine Early Learning Village and the Jessamine County Board of Education for allowing me the opportunity to work with the students and teacher for my thesis research.

Table of Contents

ACKNOWLEDGEMENTS	iii
LIST OF TABLES	vii
LIST OF FIGURES	vii
Chapter One: Introduction	1
Background of the Problem	1
Statement of the Problem	1
Purpose of the Study	2
Definition of Terms	2
Limitations of the Study	4
Chapter Two: Review of Related Literature	5
Chapter Three: Design of the Study	15
Sample	15
Objectives	17
Test Instrument	17
Hypothesis	19
Procedures	20
Chapter 4: Results	28
Research Hypothesis	30
Alternative Hypothesis	35
Chapter Five: Discussion	54

Chapter Six: Conclusion	57
Chapter Seven: Further Study Suggested	60
Appendix A: Jessamine County School Board Approval	61
Appendix B: University of Kentucky Institutional Research Board Approval	63
Appendix C: University of Kentucky Institutional Research Board Approved	64
Parental Consent Form	
Appendix D: Lesson Script and Assessment Script	65
Appendix E: Drawing Retelling Assessment and Written Retelling Assessment	70
Appendix F: Verbal Retelling Assessment	72
Appendix G: There Was An Old Lady Who Swallowed Some Leaves on the iBoard	73
Appendix H: "I can" Statement	75
Appendix I: Retelling Picture Cards and Pocket Chart	77
Appendix J: Craft Sticks and Cup	82
Appendix K: Students Working on Drawing and Written Retelling Assessments	85
References	87
Vita	94

List of Tables

Table A: Assessment Type.	38
Table B: Scale Points for Retelling Story (1 to 9)	38
Table C: Table of Rubric Score by Assessment Type	39
Table D: Analysis Variable: Rubric Score Scale points for Retelling Story (1 to	43
9)	
Table E: The <i>t</i> -Test Procedure	43
Table F: Measures of Academic Progress (MAP) Scores	44
Table G: Measures of Academic Progress (MAP) Above or Below Benchmark	45

List of Figures

Figure 1: Distribution of Rubric Score	41
Figure 2: Q-Q Plots of Rubric Score	42
Figure 3: Student 205 Written Retelling Assessment	46
Figure 4: Student 205 Verbal Retelling Assessment	46
Figure 5: Student 105 Drawing Retelling Assessment	47
Figure 6: Student 105 Verbal Retelling Assessment	47
Figure 7: Student 103 Drawing Retelling Assessment	48
Figure 8: Student 103 Verbal Retelling Assessment	48
Figure 9: Student 119 Written Retelling Assessment	49
Figure 10: Student 119 Verbal Retelling Assessment	49
Figure 11: Student 207 Drawing Retelling Assessment	50
Figure 12: Student 207 Verbal Retelling Assessment	50
Figure 13: Student 219 Written Retelling Assessment	51
Figure 14: Student 219 Verbal Retelling Assessment	51
Figure 15: Student 101 Written Retelling Assessment	52
Figure 16: Student 101 Verbal Retelling Assessment	52
Figure 17: Student 215 Drawing Retelling Assessment	53
Figure 18: Student 215 Verbal Retelling Assessment	53

Chapter One: Introduction

Background of the Problem

Emergent readers and writers often struggle to find how to use abstract symbolic alphabetic code in communicating their ideas by writing. This problem persists for emergent readers and writers. Around 10% to 15% of children and adults have severe difficulty in learning to read and write (Chall, 1983). Only 2% of those emergent readers who initially struggle with writing include students who have a learning disability in literacy (Chall, 1983). Therefore, asking any emergent reader to write to retell a story may not be the best means to assess the student's ability to retell a story. Using the visual arts to assess a student's understanding of a story and verbal retelling may provide a better alternative assessment for students at this developmental stage.

Statement of the Problem

Often, students are not provided the opportunity to draw to communicate their ideas and understanding of concepts in kindergarten, as today's curriculum is focused on literacy and math. The majority of students at this point in the kindergarten curriculum are not capable to communicating their ideas through writing, but verbally and through drawing their understanding. Using art as a means to elicit a student's ability to retell a story would assist students in remembering the beginning, middle, and end of the story.

Significance of the Study

Even knowing that developmentally students are unable to write to communicate their understanding of parts of the story, students are often asked to write their responses. If drawing is better able to facilitate the student's retelling of the story, schools may be able to align curriculum to expose students to the arts, which in turn, may assist students in communicating understanding. Overall, this broadened alignment may assist teachers in creating assessments and activities to help students grasp the concept of retelling a story through communicating their understanding in drawings and verbal retellings of the story.

Purpose of the Study

The purpose of this study is to determine whether writing or art is a better platform for students in retelling stories accurately in kindergarten. The participating emerging readers included kindergarten students in my classroom and another kindergarten class at Jessamine Early Learning Village in Jessamine County, Kentucky. **Definition of Terms**

Abstract: something that exists as a theory, thought or idea but does not have a physical or concrete presence.

Cognition: the mental process of acquiring knowledge and understanding through thought, experiences, and the senses.

Concrete: something that exists in material or physical form; real or solid; not abstract.

Emergent Readers: are beginning readers. Emergent readers grasp the basic concepts of books and written words. Emergent readers have the concepts of print (reading from left-to-right and top-to-bottom progression), utilize beginning and ending sounds in words, and utilize picture clues to read words with the same beginning letter sounds.

Emergent Writers: are beginning writers. Emergent writers have learned the phonetic code and associate the sounds with the letters of the alphabet. Emergent writers are beginning to form words and sentences to communicate ideas and thoughts on paper.

Higher Order Thinking Skills: require more cognitive thought processes to explain, define, and analyze answers to questions. Such skills include critical, logical, reflective, metacognitive, and creative thinking.

Individual Education Plan- (IEP): a legally binding document mandated by the Individuals with Disabilities Education Act (IDEA). An IEP is designed to explicitly state the special education services a student will receive. The IEP is individualized for each special education student, outlining the disability diagnosis, levels of performance, educational goals, objectives, and the amount of related services required and the amount of time allotted for progress.

Limitations of this Study

The limitations of the study include a small sample size, as a larger sample would have yielded more precise results.

Another limitation of this study is that all of the kindergarten students are from the same school in the same school district. If able, a sample of kindergarten students from rural, urban, and a variety of schools and districts across the state or country would provide further data for the entire kindergarten population of our state or nation.

The application of the lesson script may not have been entirely consistent. Although, the primary investigator went to great lengths to make sure the lesson script would be outlined clearly for the second classroom. The lesson script is written as if giving a standardized exam. This ensures that the lessons in both classrooms remained consistent in the lesson and providing the assessment.

With these limitations, the research will show the great impact the visual arts are in early childhood assessment. To validate this study, further research should be executed on this topic.

Chapter Two: Review of Related Literature

Emergent readers face the beginning stages of literacy development, and one initial step is retelling of stories. Before getting into the components of retelling, one must understand the progression of literacy from verbal, visual, written and textual literacy to understand retelling and comprehension.

Literacy begins at infancy. Infants who are exposed to language and print develop emergent literacy skills that assist the learning process of reading and writing later on in life (Hetzroni, 2004). Even toddlers understand the concept of stories through their exposure to books, listening to stories and the often tactile elements of a toddler's board book. Toddlers are the audience for the story. Toddlers learn by observing adult literacy behaviors, such as the way an adult holds a book, follows the text with a finger, views the illustrations and relates them to the spoken words. Toddlers create links between the printed materials and the concepts developing around them.

For a student to learn to read and write, the student must develop an understanding between the words and the concepts the words represent (Hetzroni, 2004). For very young children, some studies suggest there is a connection between children's pre-reading television viewing and their later reading skills (Lin, 2003). The results reveal that children who were good at comprehending materials presented through a visual and aural mode, television, were also good at comprehending materials presented aurally (Lin, 2003).

Evolving technology has greatly transformed our visual environment. The centuries-long domination of texts and words in culture, particularly Western culture, has

come to an end (Felton, 2008). The new pictorial turn means that images no longer exist primarily to entertain and illustrate, rather the visuals are becoming central to communication and meaning-making. Many could argue that the change in our visual environment is producing more visual learners. However, "Living in an image-rich world, however, does not mean students (or faculty and administrators) naturally possess sophisticated visual literacy skills, just as continually listening to an iPod does not teach a person to critically analyze or create music" (Felten, 2008, p. 60). Becoming visually literate is one's ability to understand, produce and use culturally significant images, objects and visual performances. Visual literacy can be obtained parallel to textual literacy. The Association of American Colleges and Universities' *Greater Expectations* report (2002) asserted that one of the core characteristics of an "empowered learner" would be the capacity to "effectively communicate orally, visually, in writing, and in a second language" (as cited in Felten, 2008, p. 60).

At an emergent level, students utilize their visual literacy. That is, often, students draw as a preparation before they write (Manning & Manning, 1996). Humans have created images to convey meaning for thousands of years (Felton, 2008); students begin to write by using visual images to communicate their ideas. Research demonstrates that seeing is not simply a process of passive reception of stimuli, but also involves active construction of meaning (Felton, 2008). Often, a student's visual learning is overlooked as a form of literacy development. Art offers a way for students to express meaning. The students make connections between language and expressing their ideas through creating pictures (Soundy, Guha, & Qiu, 2007). Drawing helps students become good observers,

which assists students in thinking and writing (Ernst, 1997). Students, yet to learn to write, instead, share pictures and tell their stories using oral language. Art provides a natural and powerful means of observation and expression.

Just as images and written words are connected in writing ideas, images and written text in reading are connected. Illustrations in picture books are just as significant as the written text to understanding and comprehending the meaning behind the story. In a picture book, the pictures or images in the story reinforce the text. This connection is useful to emergent readers because the illustrations in these books are prompts for recalling new vocabulary or decoding skills, as well as strengthening the verbal description of character and setting of the story (O'Neil, 2011).

Oral language and written language are fundamentally different. Although, most young children without disabilities learn to speak or listen, not all become fluent reader and writers (Frey & Fisher, 2010). Unlike speech, which develops uniformly across languages and cultures, reading is not innate, meaning that every person or brain must be taught to read. Speech is directly associated with specific brain and motor structures, reading occurs only through intentional appropriation of existing structures within the brain. Reading is a complex, rule-based system. The brain has evolved for hundreds of thousands of years as a speaking and listening brain, while written language has only existed for six thousand years. The linking between the occipital lobe (object recognition), the left frontal lobe (language processing) and the left temporal lobe (language comprehension) must be trained to coordinate efficiently. The disruption of this loop can potentially interfere with reading comprehension (Frey & Fisher, 2010). Once one develops oral language, concepts of print are developed. Before a student learns to read and develop an understanding of letter and sound relationships, they must learn how to hold a book, the directionality of the words from left-to-right, top-to-bottom, and page-to-page. Adults, who read aloud to a child, assist the listener in building spoken language, the basis for written language. Studies have shown that listening comprehension is shown to exceed reading comprehension until students exceed about a sixth-grade level. This discovery implies that spoken language typically precedes reading competence during the emergent reading stages (Robertson, Dow, & Hainzinger, 2006).

The next step in the literacy process is to learn to express ideas with writing (Soundy et al., 2007), once students are comfortable with communicating ideas through pictures, they will begin to add the symbolic letters that match the beginning sounds of the images into their pieces of writing. Studies of teaching models, show that teaching about orthographic, or writing, function before students begin to write assists in students in skill acquisition (Lehtonen, 2005). Learning to spell a word in alphabetic language involves acquiring knowledge about the phonological properties and how to relate these to orthographic representation (Hilte, 2011).

Developmentally, writing using a symbol system of alphabetic letters is abstract for young children, because four and five year olds have an affinity for the concrete. Using visual images to represent ideas is concrete for students at this stage. Visual information is significant in learning to read in early childhood education as vision undermines all other senses and is the best single tool we have for learning (Frey & Fisher, 2010). Literacy is most commonly thought of as the written word, but can include other systems of representation (Edwards & Willis, 2000). Reading is a process in which one creates meaning from written language; writing, on the other hand, is an encoding process in which one puts meaning into written text (Hetzroni, 2004).

Eisner (1998) once stated that "Our linguistic capacities do not define the limit of our cognition" (p. 33). Often students mix many forms of communication systems. One study shows that children sometimes refer to drawing as writing since the child is communicating ideas with a writing tool and using paper (Berghoff, Cousins & Martens, 1998). Young children find it natural to combine many communication forms, such as writing and drawing (Edwards & Willis, 2000). Young children, however, do not perceive the writing process in the same manner as older adults; instead of words alone, young children treat talk, pictures, and words as equals, although, at any given time, one mode of meaning making might take precedence. This form of communication is called "symbol weaving" (Miller, 1998, p. 109). At four years of age, the majority of children are unable to differentiate between drawing and writing (Love & Buell, 2007). This inability is due to the developmental stage of children; their perspective of the world is holistic, which translates into their communication being holistic (Edwards & Willis, 2000). The connection between images and words is similar to an equation: For every person it is different, but finding the connection between the two is the most significant part (Ernst, 1998).

Once students learn to associate images with symbolic letters, students are able to make connections in the brain that allow for learning to take place. Yet, that level of sophistication follows long after emergent reading. Therefore, expecting a student in kindergarten to write to retell the parts of a story is not a valid evaluation of their understanding of the story, since the written form of communication is still new and abstract. This expectation often leads to the conclusion to allow young students to draw and use the visual arts to communicate their understanding of the parts of a story when retelling. Often, the development of literacy, reading and writing skills begins in kindergarten.

The purpose of kindergarten is for students to obtain reading and writing skills because most students entering kindergarten are unable to read and write. Whereas speaking is an innate, natural ability, learning to read and write is not (D'Arcangelo, 1999). Children learn to speak without being taught through being immersed in a spoken language. Language is instinctive. Whereas speaking has been developed over tens of thousands of years of evolution, reading and writing are a recent human development. Children do not automatically learn how to read and write, children have to be taught to read and write with specific literacy skills (D'Arcangelo, 1999).

Among the specific literacy skills, retelling a story forms an initial step to understanding. Retelling a story is a link to comprehension; the student is not only reading the words in the story, but understanding their meaning in the context of the story. Retelling builds reading comprehension (Gallager, 2005). Additionally, retelling a story is an assessment tool for reading comprehension, story comprehension, and oral language (Morrow, 1985). Retelling provides on-task practice of a range of literacy skills including, reading, writing, listening, talking, thinking, interacting, comparing, matching, selecting and organizing information, remembering and comprehending (Robertson, Dow, & Hainzinger, 2006). In this study, I explored two methods for assessing a kindergarten student's retelling of a story. Assessing emergent readers is important to ensure they progress as both readers and writers. Nevertheless, emergent readers are not accomplished writers; thus, a written assessment may not be valid. Verbal assessments of retelling, also may have limitations with emergent readers.

Studies of verbal retelling of stories show spontaneous jumps from place-to-place within the story; the student may start at the middle, jump to the beginning of the story and head to the end of a story (Norrick, 1998). Therefore, in learning to retell stories, students should not be expected to verbally retell each part of the story, but a combination of drawings and verbal retellings may assist new readers in sequencing and describing the parts of the story.

Ganon and Dixon (2008) found that as people age, they learn to depend on others to assist them in cognitive tasks. These researchers found that retelling stories as an adult is a much more complex task than for subjects who have not yet joined the workforce. Their study showed that the retelling skill applies through adulthood, and that lack of use causes the adult to lose such a skill. Gabig (2008) conducted another study to see if autism affects the verbal working memory of students. Gabig used verbal retelling of stories to answer this research question. Autistic students were able to retell only sections of the stories verbally. This limited retelling linked to a smaller capacity in verbal working memory among students with autism as opposed to students without autism. The results of this study also showed that as children gain more experience with language they become more descriptive and sophisticated in cognitive-linguistic processing demands (Gabig, 2008). Given these results, basing retelling on solely verbal assessments is not a valid assessment for all students.

Robertson, Dow and Hainsinger (2006) examined students with hearing loss's reading comprehension over the course of six weeks. Among students with hearing loss, spoken language develops slowly and may never progress beyond a minimal level. This fact implies that for students with hearing loss, verbal retelling and learning language is hindered. Using the visual arts to aid students in explaining is imperative for students with hearing loss and their reading comprehension.

In Stadler and Ward's (2010) study of kindergarten and first-grade students, the researchers found that using props to assist in retelling stories aided in students using correct pronouns and names to describe the characters in the stories.

Yet another study was conducted with students age ten to twelve (Beentjes & Van Der Voot, 1991). The students were split into two groups; one group read a story, while the other group watched the same story on television. The results of the study conclude that the visuals on the television version lead to a more complete retelling of the story,

with more descriptive details and story elements than the group who read the story (Beentjes & Van Der Voot, 1991).

Facilitating learning through the arts enhances student engagement, cognitive function, and higher order thinking skills. Art activities provide concrete experiences that enrich and grant meaning for reading and writing activities (Smout, 1990). This enhancement stems from how young children learn. They respond to what they see, feel and touch (Smout, 1990). Providing concrete experiences leads to conceptual understanding for emergent literacy learners (Smout, 1990).

If the arts are thought of as the carriers of meaning, and the concept of literacy is extended to mean the ability to encode or decode meaning within the forms in which meaning can appear, then an education in the arts is one way to become literate. (Eisner, 1998, p.34)

An education incorporating the arts facilitates students acquiring multiple forms of literacy (Eisner, 1998). Students learn at a higher cognitive level when art is incorporated into their learning experiences (Berghoff, Cousins & Martens, 1998). The arts are not simply expressive and affective; they are cognitive (Sousa, 2006). The arts develop essential thinking tools in pattern recognition and development as well as mental representations of what is observed, visualized, symbolic, allegorical and metaphorical representations. Art assists children in expressing and conveying meaning and developing subtle and complex forms of thinking. Other skills will develop through this type of open-ended art experience, such as problem solving, organizing and internalizing skills (Smout, 1990). These experiences with the visual arts improve the critical and reflective thinking of students, as well as facilitating formidable motivational and emotional processes. When these motivational and emotional processes are evoked, students are more engaged in the learning process (Berghoff, Cousins & Martens, 1998). This level of engagement gives students ownership of their work, making it more meaningful for the students and in turn, allowing the student to retain the information learned (Britsh & Meier, 1999).

These studies show how the visual arts enhance learning in numerous areas of the school curriculum, especially in reading comprehension. However, none of these studies addressed utilizing the visual arts to enhance learning in the content area of retelling stories. Therefore, my study addressed this missing component in the area of research. This study explored the idea that when students apply drawing to retelling, they are more apt to retain the information and retell it in more detail.

Chapter Three: Design of the Study

Sample

The sample of the study included 43 students in two kindergarten classrooms at the Jessamine Early Learning Village in Jessamine County, Kentucky. Jessamine Early Learning Village is located in Nicholasville, Kentucky and was established in 2001. It houses preschool and kindergarten classrooms for the entire school district of Jessamine County, Kentucky. Jessamine Early Learning Village's focus is on early learning for students in preschool and kindergarten. The school reflects this focus, not only in the educational requirements and management systems of the school for preschool and kindergarten, but in the physical design of the school. The entire school is designed to be child-sized and to appeal to children. Enrollment is currently around 1000 students, 645 students are kindergarten students. Eighty-two percent of students are Caucasian, 5% of students are African-American, 7% are Hispanic, and 2% are of Asian descent. Sixtyfour percent of students receive the federal free or reduced priced meal program. This federal program assists families in poverty through providing breakfast and/or lunch for free or in supplementing funding for the full-cost of meals. Five percent of students are English Language Learners. Six percent of students have special needs and require an Individualized Education Plan (IEP), requiring modifications and accommodations.

For permission to include students from two kindergarten classes, the school district's office and administration at Jessamine Early Learning Village reviewed protocols and provided access. See the attached approval documentation in Appendix A.

The University of Kentucky's Institutional Review Board required similar documentation. Written permission, Parental Consent, for student data to be included in the study was obtained for data analysis from the student's parent or guardian. See the attached approval documents in Appendix B and the parental consent form in Appendix C.

Each Kindergarten classroom contains 24 students, for a total of 48 students. However, with the required Parental Consent forms, five students did not receive consent, leaving 43 participating students. Eight students in this student sample of the population require an Individualized Education Plan (IEP) or 19% of this student sample of the population. There are seven students in this sample of the population that are in referral for an Individualized Education Plan (IEP) due to indicators of special needs, which is another 16% of the sample of the population. Students in kindergarten often are identified as a student with special needs during this time since many have not been enrolled in a school setting or environment. Given the eight students with IEPs and seven referred for evaluation for a disability, 35% of the participating students require modifications and accommodations to meet learning needs. Seventy-eight percent of students in the research student sample population are participating in the federal free or reduced priced lunch program. One student in this research sample of the population is an English Language Learner, with no background in English beyond the school setting. Twenty-three students are male and 20 students are female; males are 53% of the student sample.

Objectives

The objective of this study is to determine if visual arts aided retelling more effectively than retelling a story through writing.

Test Instrument

Teachers involved in this test instrument implemented a scripted lesson based on retelling chosen selected story. The script was used to aid in omitting any variables that could affect student results through a different presentation, explanation or other format. Teachers first discussed the Common Core State Standard, K.RI.2, "I can retell important details from a text."

Students in the two classrooms in the Jessamine Early Learning Village read the same story, *There Was an Old Lady Who Swallowed Some Leaves*. This story was selected due to the simple, repetitive nature of the story parts, a feature that supports students' retelling story parts in sequence. This story was also chosen due to its age-appropriate and engaging nature for four-to-five year old students.

After reading the story, each teacher used premade image cards and selected students to place each of the images in correct sequence in a pocket chart. This activity was modeled for a whole group for students, where all students participated in an activity together with the teacher to gain understanding of their expectations to retell or sequence the story on their own.

All of the students were read the story with nine parts of a story to retell. The story reading was identical to prevent any variables from changing between the classrooms, using the online video of the story for the read aloud (See Appendix G). Teachers implemented the treatment with the following lesson procedures in the script: (a) the script mirrored a standardized test to prevent any variables from being influenced (See Appendix D or Procedures); and (b) all of the words for the lesson were scripted, as well as prompts provided for consistency when students asked questions, and (c) he picture cards were identical for both classrooms. After the students had heard the story, and the whole group retold the story using the pocket chart and picture cards, the students were divided into their two groups. One group retold the story by drawing images and utilizing their drawings when verbally retelling the story. The other group wrote and used their writing as a reference for the verbal retellings. A student's membership in each group was determined by each student randomly selecting a craft stick from an opaque cup, each craft stick had a red dot or blue dot on the stick resting in the bottom of the cup. (See Appendix J).Students were unable to determine what color dot their craft stick had since the cup was opaque and all of the colored dots on the craft sticks were in the bottom of the cup. There were twelve craft sticks with a single red dot and twelve craft sticks with a single blue dot in each cup. The craft sticks and cups were identical for both classrooms. When a student randomly selected a craft stick with a red dot, the student received the written assessment. When the student selected a craft stick with a blue dot, the student received the drawing assessment.

After the students completed the drawing or writing aid for the verbal retelling assessment, students were assessed individually based on the verbal retelling assessment script. The verbal retelling assessment score included the number of parts of the story the individual and group as a whole retold. For example if students were able to retell nine out of nine parts correctly, the score-was a 100% retelling, eight out of nine parts yielded 89%, and so forth, with a zero out of nine parts yielding a 0%. Results of the retelling were analyzed on the individual and group as a whole basis.

Hypothesis

Students who do not have strength in language are better able to express themselves through art, music or movement. Students learn at a higher cognitive level when art and music are incorporated into their learning experiences (Berghoff, 1998). Existing literacy practices can be strengthened by giving students ownership of their literary experience. When a student is given ownership of their learning; they are more engaged in the learning process (Britsch & Meier, 1999).

Based on the related literature, the visual arts provide a means to reach students at higher order thinking levels that enhance learning in all curriculum areas. Therefore, retelling using the visual art representations of the story will yield positive results.

The research hypothesis will be determined by a *t*-Test of randomly selected groups of μ_1 , the drawing assessment and μ_2 , the written assessment. The null

hypothesis is that no assessment differences will be shown between the students using drawings with their retellings over students using writings with their story retelling.

In contrast, the alternate hypothesis is that students will have greater success retelling the story when referencing drawings than writings.

 $H_0: \mu_1 > \mu_2.$

Procedures

Materials Provided (per teacher):

o A manila envelope with clasp and eyelet (This is to keep Parental Consent Forms that are returned to the classroom teacher. The Parental Consent Form Checklist will be adhered to the outside for ease of access to check off)

o Pocket Chart Retelling Images

o Craft Sticks

o Cup

o Copies of:

• **Parental Consent Form Checklist** (1 copy for the teacher)

- **Parental Consent Form** (24 copies to send home with students and keep for records)
- Teacher Retelling Scripted Lesson (1 copy for each teacher)
- "I Can" Retelling Statement (1 copy for teacher to use in lesson)
- Written Assessment (12 copies, per teacher, for only half of the students in your classroom based on random selection based on craft stick grouping)
- **Drawing Assessment** (12 copies, per teacher, for only half of the students in your classroom based on random selection based on craft stick grouping)
- Verbal Assessment (24 copies, per teacher, 1 for each student in your classroom)

Materials Needed:

- **Computer hooked up to iBoard** (All classrooms at JELV have a computer hooked up to the interactive board)
- Pocket Chart

- Pencils
- Crayons

Before Implementing Lesson:

 One week before implementing lesson, on Monday, send home the Parental Consent Form in the student's Daily Take Home Folder.

2. Check Daily **Tuesday- Friday** for signed **Parental Consent Forms**.

3. Utilize the **Parental Consent Form Checklist** to check by each student's name whether or not the student's work is allowed to be used for the research. Place any returned **Parental Consent Forms** in the provided manila **envelope** and clasp shut to prevent loss of important paperwork.

4. On **Friday**, prepare personal **pocket chart**, **computer**, **iBoard**, **pencils**, and **crayons** to allow for use the upcoming week on **Monday**. The **Principal Investigator** will pick up the manila envelope, with the **Parental Consent Form Checklist** and **Parental Consent Forms**, to verify student participation in the study and to maintain records for the research.

Lesson:

- 1. Begin with all students on the rug in assigned spots.
- 2. Review "I Can" Retelling Statement whole group,

- A. Read and point to the words in the "I Can" Retelling Statement to students,"I can retell important details from a text."(K.RI.2)
 - Explain: "Retelling is telling a story again. We are going to practice retelling the details, the important parts of a story, or text"
- 3. After, introduce (Monday) or reread (Tuesday- Friday) the text.
 - A. "The story we will read is *There Was an Old Lady Who Swallowed Some* Leaves."
 - B. Use the link to have the story read aloud to students to allow for consistency and prevent any variables from changing.
 - o <u>https://www.youtube.com/watch?v=Po1J6InnoUk</u>
- 4. Once complete, explain that today we will retell a story, using the following script.
 - A. "Retelling is telling the story again, with all of the parts in order. When you retell a story, you want to start at the beginning, and then tell what happens next, what happens after that and what happens at the end of the story. You would not want to hear a story that started at the middle, and then the person told the end and then told about the beginning of the story. You would be confused about what happened in the story. So, today we will practice retelling stories in order."
- 5. Use the provided **Pocket Chart Retelling Images** to retell the story whole group using images from the story, calling on students to assist in placing

them in order/sequence on the **Pocket Chart** (modeling how to retell a story to students.)

- A. Start by asking students,
 - "What happened at the beginning of the story?"
- B. Call on students until you get the correct answer.
- C. Prompts allowed:
 - \circ "What happened 2nd /3rd /4th /5th /6th /7th /8th ?"
 - "What happened next/after (insert last item identified)?"
 - "What happened at the end of the story?"
 - "What was the last thing that happened in the story?
- 6. Repeat items 1-5 on Tuesday- Thursday.

7. FRIDAY ONLY

Prepare for this last day by using the I Can Statement, Craft Sticks,

Cup, Written Assessment, Pencils, Drawing Assessment, Crayons and Verbal Assessment

- A. (The Principal Investigator (PI) will make craft sticks for each classroom to be used to randomly select groups of 12 students from the 24 students in a single classroom.
 - The Principal Investigator will do this by placing a blue colored dot on one end of 12 sticks and then completing the same task of a red colored dot on 12 sticks.

B. Repeat steps 1-5

- C. One at a time, randomly select students and divide them into two equal groups by using the provided **Craft Sticks** and provided **Cup** as above in 7A.
 - Place Craft Sticks with the colored dot in the bottom of the provided Cup, so the color cannot be deciphered by students.
 - Have students select one **Craft Stick** from the **Cup** and return to their spot on the rug.
 - One group, blue, will draw images to retell the parts of the story independently, while the other group, red, will write the parts of the story independently.
 - Send students to the table with the designated assessment to work independently.
 - Use the provided Written Retelling
 Assessment, Drawing Retelling Assessment, and Verbal Retelling Assessment below for students in the designated groups.
 - Prompts allowed during Written Retelling
 Assessment and Drawing Retelling
 Assessment to answer student questions:
- "What happened 2nd /3rd /4th /5th /6th /7th /8th
 ?"
- "What happened next/after (insert last item identified)?"
- "What happened at the end of the story?"
- "What was the last thing that happened in the story?
- D. After both groups complete their independent retelling of drawing or writing, the teacher will call students one at a time and using their independent drawing or writing piece as a reference, students will verbally retell the story, while the teacher records the responses on the provided Verbal Retelling

Assessment

- Utilize the Verbal Retelling Assessment and use the provided script on the Verbal Retelling Assessment.
- The teachers will grade the responses using the rubric on the Verbal Retelling Assessment.
- Return graded Verbal Retelling Assessment, Written Retelling Assessment and Drawing Retelling Assessment to the Principal Investigator.
- A. If the teacher needs a record of the Written Retelling Assessment,Drawing Retelling Assessment, and/or Verbal Retelling Assessment to

send home or for assessment purposes, a copy will be made, the **Principal Investigator** will keep the original copies of all the assessments, forms and paperwork.

Chapter Four: Results

The intention of this research study was to find the effect of drawing for in supporting retelling versus writing for the retelling of a story. Due to the developmental level of students in kindergarten, the majority of students are unable to read or write. This is a problem for teachers when provided formal assessments other than individualized verbal appraisal or observation of student understanding. Thus, my hypothesis was that students would be able to decipher their concrete drawings better than their attempts in using abstract forms of written communication. The notion is based on my own experiences teaching emergent readers and writers in kindergarten. It was predicted that students would have high success rate with the following hypothesis:

The null research hypothesis is stated as follows: a *t*-Test of randomly selected groups of μ_1 , the drawing assessment and μ_2 , students' retelling will not differ when referencing drawings than written assessments

$$H_1: \mu_1 = \mu_2$$

The alternate hypothesis is stated as follows: a *t*-Test of randomly selected groups of μ_1 , the drawing assessment and μ_2 , the written assessment students will have greater success when referencing written assessments to retell the nine parts of the story. This is the alternative hypothesis, $H_0:\mu_1>\mu_2$.

To determine the results of these hypotheses, student assessment results were analyzed by the student's ability to verbally retell a story from drawn or written assessments, based on the amount of story parts correctly recited out of the total of nine items. The data collected indicated that drawn assessments provide a great insight into student understanding of retelling. In addition, it is possible to utilize student drawings to communicate understanding of a concept is a valid assessment for emergent readers and writers.

The entire population of both classrooms was 48 students. Forty-three of these students were granted parental consent, by either a parent or guardian to participate in this study, which means five students did not participate in this study. Assessment data was not included in this study for the five students without consent. This is significant since 10% of the classroom population's results were not contained in this study. However, 90% of the classroom population was provided parental consent to analyze student data from this study.

Out of the 43 total students, 21 students were given the drawing assessment and 22 students were administered the written assessment as presented in in Table A. The assignment of students to each group was randomized by allowing all students to draw a stick with a red or blue dot from a cup. Students were unable to determine what color dot would be on their stick based on all of the colored dots on the craft sticks were pointed towards the bottom of the cup, reference Appendix J for a visual image of the sticks, colored dots and the cup. The sticks in both classrooms were identical in size, color, and

shape for consistency both classrooms in the study. The cups were also identical in each classroom in the study for uniformity.

After students were provided the designated assessment, students with questions were only given scripted prompts by the teacher to allow for consistency in the written and drawn assessments. Once completed, assessments were gathered and a scripted verbal assessment was administered to all students. Students were utilizing their written or drawn assessments as a reference for retelling the parts of the story. Based on the rubric score out of nine items possible on the assessment, student data was analyzed in the form of a *t*-test. Referencing Table B, no students scored a two or three out of nine on the assessment rubric. Therefore, these scores are not included, as they are nonexistent.

Alternate Research Hypothesis: A *t*-Test of randomly selected groups of μ_1 , the drawing assessment and μ_2 , the written assessment will show that students will have greater success retelling the story when referencing drawings than written assessments.

$H_0:\!\mu_1\!>\!\!\mu_2$

The outcomes of the *t*-Test are significant supporting the alternative hypothesis. Referencing Table E, the 95% confidence levels mean explains that if another researcher were to implement this same study with another sample of the population as many times as possible, it would yield similar results. It shows the range of what one would expect for students to score if the study were to be completed again. That is, student scores likely would fall between 6.7757 and 8.0814 for the drawn assessment, while the range of scores expected for the written assessment likely would fall between 4.5545 and 6.4455. The variances are unequal, as 22 students were provided the written assessment and 21 students were provided the drawn. The Equality of Variances displays that there is no difference between the variances with a value of .0814. If this number were to be .05 or below, there would be a question of about sources of error ranging from any aspect of the procedures, including the instrument. The probability of occurrence for this result in the *t*-Test, often referred to as significance, was computed at 0.0013 using either the pooled or more accurate Satterthwaite values. Table E displays a significant difference ($p \le .01$) between the drawn and written assessments, showing a greater success rate for students utilizing the drawing assessment.

More significantly, Figure 1 and Table C shows that twice as many students who were given the drawing assessment scored a seven, eight or nine out of nine on the rubric than their counterparts who were assigned to write before retelling. Seventeen students who referenced their drawing assessments scored greater than seven on the rubric, while eight students who referenced their written assessments scored greater than seven on the rubric.

Only one student administered the written assessment scored a nine out of nine on the rubric. This student, coded as Student 205, is clearly not an emergent writer. (See Figure 3). The student was able to include beginning and ending sounds of words in the written assessment. This student included even the more difficult medial sounds. Thus, Student 205's writing ability supported reading the writing for the retelling of the story. Student 205 received no prompts of any kind, and the assessment displayed in Figure 4, shows another indicator of the student's fluency in reading. Student 205 quickly responded when asked to retell the story and utilize the written retelling assessment as a reference, as the teacher had no need to prompt the student for a response.

In contrast, five students administered the drawing assessment scored a nine out of nine on the verbal retelling rubric. Figure 5 shows Student 105's drawing for using in the retelling assessment. Figure 6 shows the assessment for which Student 105 received no teacher prompts. Student 105 referenced the drawing (Figure 5) and was able to retell the story without hesitation. This is a similar result for the remaining four students who received a nine out of nine on the visual retelling rubric and referenced their drawing for the retelling assessment.

Overall, students scored higher when utilizing drawing in their assessments assessment than did the students who used writing for the retelling assessment. When presented the total range for the drawing use in the retelling assessment and rubric score, the lowest score received was a four out of nine. Whereas, students in group that used writing for the retelling assessment had a scoring range that dropped to one out of nine. Table D displays the mean and score range for each assessment type. The mean for students given the drawing to use in the retelling assessment was about seven out of nine, nearly two points greater than the students given the written assessment, as referenced in Table D. The standard deviation shows less variation with students who used drawing for their assessment as displayed in Figure 1. The range for students who were given the drawing for retelling assessment was narrower, between four and nine, than students who were given the writing for retelling assessment, whose range was one to nine out of nine possible points on the rubric.

Kindergarten is often a student's first experience with the school environment. Often students who have special needs are not identified and placed under an Individualized Education Plan (IEP) until the end of kindergarten and beginning of first grade. Issues about students with special needs were germane to this study due to the number of participating students who had an IEP. Eight students already possess IEPs based on their specific learning needs; another seven students are in the referral process for determining special needs.

Four of the students receiving an IEP are students who require speech. The specific deficit is in speech and sound production. Sound production creates a problem when using sounds to write and read print. In Figure 7, Student 103 was given the drawing retelling assessment. This student receives speech services. Student 103 scored an eight out of nine on the verbal retelling assessment as displayed in Figure 8. For the purposes of this study, Student 103 was compared another student, Student 119 (Figure 9), who also is receiving speech services for similar speech sound production errors, yet given the written retelling assessment As shown in Figure 9, Student 119 had difficulty producing sounds and identifying a letter to write down for each part of the story. From Figure 9, the student erased several times in the first item to write. After identifying the beginning sound for several items of the first portion of the story, the student was unable

to identify the remainder of the story on the written assessment and left it blank. In Figure 10, Student 119 scored a five out of nine on the verbal retelling assessment. The student required two prompts from the verbal retelling script from the teacher to retell parts of the story. These two students had different levels of success with similar learning issues, but assigned different methods to support their story retelling processes.

One student of the 43 students in the research study is diagnosed with autism spectrum disorder. Student 207 receives special modifications and accommodations in the classroom; a personalized IEP to meet the student's learning needs. In Figure 11, the student chose a blue craft stick which placed Student 207 in the drawing for retelling assessment. Student 207 scored a nine out of nine on the verbal retelling assessment rubric, omitting no parts of the story when retelling and receiving no prompts by the teacher, indicating no hesitation in retelling the story.

Another interesting result was Student 219, who is an English Language Learner, speaking no English. Student 219's only exposure to the English language has been only for a month and a half in the school setting. The student receives special services for 20 minutes from an English as a Second Language teacher four days of the week. The student picked a craft stick with a red dot, resulting in a written retelling assessment. As you can see in Figure 13, the student had difficulty understanding expectations and worked very hard in copying the numbers heading each box. In Figure 14, the student's verbal retelling assessment shows that the student only recalled the leaves. The student did not retell any other portion of the story, after seven scripted prompts by the teacher.

This study showed that students randomly assigned to the group who used drawing for retelling assessment scored higher than students who were randomly assigned to writing for retelling assessment. Students, who scored higher than the benchmark on the standardized literacy assessment, Measures of Academic Progress, provided during the first two weeks of the kindergarten school year, also displayed greater success in the written assessments than students who did not reach the benchmark goal on the standardized literacy Measures of Academic Progress (NWEA, 2014) assessment, as demonstrated in Table F and Table G.

The Measures of Academic Progress assessment is administered to all Kindergarten students in the school and school district in the first two weeks of the school year. The fall window for testing is closed then, and students who are enrolled in the school and classes later than this window are not included. Therefore, some scores are missing for students that enrolled later than the fall testing window. The literacy assessment on the MAP test resulted in a universal fall literacy benchmark score of 142.5 for students. Thus, students scoring 142 or below on the MAP literacy assessment are below grade level in this area, while students scoring 143 or above are on or above grade level. Table G shows the number of students below grade level in literacy, 22 students, while there are fewer students on or above grade level, 16 students.

Student 101 scored below benchmark on the MAP literacy assessment, receiving a 133, with a benchmark of 142.5. The student is nearly ten points below the benchmark score. This literacy gap is reflected in the student's written retelling assessment in Figure 15. Similar to the written retelling assessment of Student 219, Student 101 started out writing "L" for the beginning sound in leaves, yet the remainder of his assessment contained numerals. Student 219, the English Language Learner, not surprisingly, was below benchmark scoring a 118 on the MAP Literacy Assessment, most likely due to the language barrier. Figure 16 displays Student 101's verbal retelling assessment, the student scored five correctly out of nine. The retelling was most likely from memory as the student did not reference the written retelling assessment for any item other than the "L" for the first item recalled, leaves.

In stark contrast, Student 205's written retelling assessment contains words phonetically spelled in Figure 3. This student's MAP score was a 157, well above the benchmark at 142.5 by nearly fifteen points. The student is able to read and write and this shows not only in Figure 3's written retelling assessment, but in Figure 4, the verbal retelling assessment. However, students who scored well above benchmark exceeded in both the drawn and written retelling assessments when comparing MAP scores and the study assessments.

The drawing retelling assessment seemed to aid the students who fell below benchmark. As you can see in Figure 17, Student 215 drew all pictures that are in order of the sequence of the story. Figure 18, Student 215 scored a nine out of nine on the verbal retelling rubric. However, the student scored a 136 on the MAP literacy assessment. The student was well below the benchmark score of 142.5. Another student that benefited from the drawing retelling assessment was Student 103 in Figure 7. Student 103 scored a 133 on the MAP literacy assessment; again well below the benchmark for kindergarten. The student's score on the verbal retelling rubric was an eight out of nine, reference Figure 8.

Ta	abl	le	A
----	-----	----	---

Assessment Type						
Assessment	Number of	Percent	Cumulative	Cumulative		
Туре	Students		Frequency	Percent		
Drawn	21	48.84	21	48.84		
Written	22	51.16	43	100.00		

Table B

Scale Points for Retelling Story (1 to 9)							
Rubric Score	Number of Students	Percent	Cumulative Frequency	Cumulative Percent			
1 out of 9	2	4.65	2	4.65			
4 out of 9	5	11.63	7	16.28			
5 out of 9	9	20.93	16	37.21			
6 out of 9	2	4.65	18	41.86			
7 out of 9	8	18.60	26	60.47			
8 out of 9	11	25.58	37	86.05			
9 out of 9	6	13.95	43	100.00			

Table	С
-------	---

Table of Rubric Score by Assessment Type							
Frequency	Rubric	As	sessment T	уре			
	Scale Points for	Drawn	Written	Total			
Percent	Retelling Story (1 to 9)						
Row Percent							
Column Percent							
	1 out of 9	0	2	2			
		0.00	4.65	4.65			
		0.00	100.00				
		0.00	9.09				
	4 out of 9	1	4	5			
		2.33	9.30	11.63			
		20.00	80.00				
		4.76	18.18				
	5 out of 9	2	7	9			
		4.65	16.28	20.93			
		22.22	77.78				
		9.52	31.82				
	6 out of 9	1	1	2			
		2.33	2.33	4.65			
		50.00	50.00				
		4.76	4.55				

 Table C (continues on page 40)

Table of Rubric Score by Assessment Type							
Frequency	Rubric	Assessment Type					
	Scale Points for	Drawn	Written	Total			
Percent	Retelling Story (1 to 9)						
Row Percent							
Column Percent							
	7 out of 9	5	3	8			
		11.63	6.98	18.60			
		62.50	37.50				
		23.81	13.64				
	8 out of 9	7	4	11			
		16.28	9.30	25.58			
		63.64	36.36				
		33.33	18.18				
	9 out of 9	5	1	6			
		11.63	2.33	13.95			
		83.33	16.67				
		23.81	4.55				
	Total	21	22	43			
		48.84	51.16	100.00			

Table C (continued from page 39)









Table I)
---------	---

Analysis Variable : Rubric Score Scale points for Retelling Story (1 to 9)							
Assessment Type	Number of	Number of Mean Standard Minimum Maximu					
	Students		Deviation				
Drawn	21	7.4285714	1.4342743	4.0000000	9.0000000		
Written	22	5.5000000	2.1325147	1.0000000	9.0000000		

Table E

The TTEST Procedure Variable: Rubric Score (Scale points for Retelling Story (1 to 9))							
assess type	type N Mean Std Dev Std Err Minimum Maximum						
Drawn	21	7.4286	1.4343	0.3130	4.0000	9.0000	
Written	22	5.5000	2.1325	0.4547	1.0000	9.0000	
Diff (1-2)		1.9286	1.8256	0.5569			

assess type	Method	Mean	95% C	L Mean	Std Dev	95% CL	Std Dev
Drawn		7.4286	6.7757	8.0814	1.4343	1.0973	2.0712
Written		5.5000	4.5545	6.4455	2.1325	1.6407	3.0475
Diff (1-2)	Pooled	1.9286	0.8038	3.0534	1.8256	1.5021	2.3279
Diff (1-2)	Satterthwaite	1.9286	0.8101	3.0471			

Method	Variances	DF	t Value	Pr > t
Pooled	Equal	41	3.46	0.0013
Satterthwaite	Unequal	36.915	3.49	0.0013

Equality of Variances						
Method Num DF Den DF F Value Pr > 1						
Folded F	21	20	2.21	0.0814		

Table F	
---------	--

Measures of Academic Progress (MAP)				
MAP Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
118	1	2.56	1	2.56
125	1	2.56	2	5.13
126	2	5.13	4	10.26
128	1	2.56	5	12.82
129	1	2.56	6	15.38
133	4	10.26	10	25.64
134	3	7.69	13	33.33
135	1	2.56	14	35.90
136	1	2.56	15	38.46
137	1	2.56	16	41.03
138	2	5.13	18	46.15
140	1	2.56	19	48.72
141	2	5.13	21	53.85
142	1	2.56	22	56.41
143	1	2.56	23	58.97
144	1	2.56	24	61.54
145	1	2.56	25	64.10
146	3	7.69	28	71.79
148	1	2.56	29	74.36
149	1	2.56	30	76.92
151	1	2.56	31	79.49
152	2	5.13	33	84.62

Table F (continues on page 45)

Measures of Academic Progress (MAP)				
MAP Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
155	1	2.56	34	87.18
157	2	5.13	36	92.31
162	2	5.13	38	97.44
163	1	2.56	39	100.00
Frequency Missing = 9				

 Table F (continued from page 44)

Table G

Measures of Academic Progress (MAP) Above or Below Benchmark				
MAP Score	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Below Benchmark	22	56.41	22	56.41
Above Benchmark	17	43.59	39	100.00
	Frequenc	y Missing	= 9	



Figure 3: Student 205 Written Retelling Assessment

Figure 4: Student 205 Verbal Retelling Assessment





Figure 5: Student 105 Drawing Retelling Assessment

Figure 6: Student 105 Verbal Retelling Assessment





Figure 7: Student 103 Drawing Retelling Assessment

Figure 8: Student 103 Verbal Retelling Assessment

Ţ	ext: There Was An Old Lady Who Swallowed Some Leaves
000	iomprehension and Response- Tose the book and say, listen at the beginning and fellime what happenediin this story." Ighlight the student's responses below.
S	tory Overview:
E	eginning: Old Ladv/she swallows some leaves
N	Adde:
2	. Swallows a shirl and the set corrected
1	. Swallows a pumpking
	. Swallows a pole
	Swallows some pants
	, Swallows a rope of
	. Swallows some may
0	. Out pops a scarecrow
	the state of the s
	If necessary use one of the following prompts to gain turner information after initial refeiling. Taily the number of infrest the prompt was used beside
1	
	1. What happened at the beginning i
	3. What happened offer before
1	HE LOW DID THE RELY MINUN
	9 -
	Refeiling Rubric score: O/9



Figure 9: Student 119 Written Retelling Assessment

Figure 10: Student 119 Verbal Retelling Assessment





Figure 11: Student 207 Drawing Retelling Assessment

Figure 12: Student 207 Verbal Retelling Assessment





Figure 13: Student 219 Written Retelling Assessment

Figure 14: Student 219 Verbal Retelling Assessment





Figure 15: Student 101 Written Retelling Assessment

Figure 16: Student 101 Verbal Retelling Assessment





Figure 17: Student 215 Drawing Retelling Assessment

Figure 18: Student 215 Verbal Retelling Assessment



Chapter Five: Discussion

This study proposed that utilizing the visual arts, specifically drawing, in assessment would yield positive results in students' retelling a story compared to more traditional, written approaches. The data indicated that students who experienced the use of drawing for retelling assessment were more likely to recall and retell parts of the story than students who had used writing before their retelling assessment.

The results of this study supports the thesis, that emerging readers are better able to recall a story when they draw to express their understanding, as compared to a written assignment. The outcome of past research supports this result. In particular the literature promotes the practice of pairing an image with a word to be remembered to facilitate recall (Anning, 1999). This approach is considered a revisualization and association process (Cordoni, 1981).

All instructional practices require sensitivity to student learning levels and individual learning needs. Students who are already reading and writing will be successful in retelling stories using drawing or written notes. On the other hand, students who have yet to understand the concept of writing or the association between alphanumeric symbols, sound, and words will stumble if they have to write and then read and interpret the symbols. Thus, the need and argument for providing students the opportunity to express their understanding of a concept, such as retelling, in a variety of forms is essential. Utilizing drawing as a form of communicating understanding was shown to be useful for students who had not yet learned to write. Students who are emergent writers may share pictures and tell their stories (Ernst, 1997). Opportunities to draw may help students connect the act of drawing to the act of writing, eventually (Ernst, 1997).

The significant findings in this study indicated that utilizing the visual arts as a means of support in assessment is appropriate for students who are emergent readers and writers. Based on the results of this study, drawing can be a useful support in assessment for students with special needs.

Gabig's (2008) past study of retelling investigated whether autism affects the verbal working memory of students during verbal retelling assessment. Students with autism were able to retell only sections of the stories, demonstrating that their verbal working memory's capacity may be smaller than students without autism. In the current research, Student 207's results indicated that using drawing to assist in a verbal retelling of a story boosts the student's ability to recall and retell the parts of the story in sequence. (See Figure 11 and Figure 12). This example adds to the statistical significance of this study; yet, the sample population of the study only included one student with autism. Future studies should be done to research further how drawing might be an instructional option among a sample of students with autism.

The struggle of Student 219, the English Language Learner, offered another practical example from this study. Given the language barrier between the teacher and student, the student's results may not be accurate. Had the story been read to the student in the student's first language, the student may have been able to retell the story (Carger, 2004). Since the student is in an English language school environment, only English is available for the student. English Language Learning curricula are built on picture, word and language associations. In past studies of English Language Learners, illustrations develops fine and gross motor skills and skills necessary for both writing and reading (Genishi, Stires & Yung-Chan, 2001). When students are ready to use abstract symbols, the teacher assists in facilitating the link between the new information to prior knowledge. In due course, the students are able to become very flexible when moving between symbol systems. Student 219 was randomly assigned to writing for the retelling assessment. Had the student been administered a drawing supported retelling assessment, would it have made a difference? Images are the bridge between languages. Therefore, in future research; it would be noteworthy to see this study implemented with a number of English Language Learners.

Chapter Six: Conclusion

The academic literacy curriculum in kindergarten does not include drawing as a significant learning skill or activity, and the act of drawing in the classroom is often considered a low-level, non-instructional activity to keep students occupied (Berghoff, Cousin & Martens, 1998). Since the perspective of drawing in the classroom is portrayed in this manner, students, teachers, and administrators deem drawing as insignificant and drawing or the visual arts do not possess weight or real purpose (Berghoff et al., 1998). This inaccurate notion marginalizes children who lie in the visual or kinesthetic modes of learning in Gardner's (1995a; 1995b, 1996) Multiple Intelligences (Berghoff et al., 1998). Gardner (1995a; 1995b, 1996) along with others (Christodoulou, 2009; Hearne & Stone, 1995) have argued that intelligence is dynamic and multifaceted; it involves multiple ways of representing experience and solving problem s (Edwards, & Willis, 2000). Drawing improves literacy (Ernst, 1998).

Kindergarten teachers and other teachers of emergent readers and writers need strategies for including drawings in learning to communicate ideas on paper. Initially such artwork is a representation of playing and experiences. Like play, and other background experiences, drawing increases development in fine and gross motor skills and develops skills for both writing and reading (Genishi et al., 2001). For emergent readers, drawing can be a transition from concrete to abstract in written communication (Castro-Caldas & Reis, 2003). The foundation to learning literacy concepts is to start by focusing on the visual arts and leading to more focused literacy skills such as sounds, vocabulary and comprehension (Ehrenworth, 2003; Richards, 2003). Literacy is most commonly thought of as the written word, but can include other systems of representation (Edwards, & Willis, 2000).

There are three key areas of emergent literacy: oral language, phonological awareness, and print awareness (Allor & McCathren, 2003). The focus of this study is on all three areas of literacy. Children must learn how to recognize and discriminate visual shapes of letters before they are able to learn to read (Allor & McCathren, 2003). Phonological awareness is necessary for written communication, understanding the sounds and the letter/symbol association, while print awareness is a skill necessary for reading, decoding, and interpreting what is written. Print awareness includes understanding the difference between graphic displays of words and non-words, knowing that each word corresponds to speech, the function of empty spaces in establishing word boundaries, and that words are read from left to right and top to bottom (Allor & McCathren, 2003). Letter recognition is often included as a form of print awareness (Allor & McCathren, 2003).

This research was intended to help kindergarten teachers by providing another instructional practice and assessment tool that may become useful when working directly with students who are emergent writers. Specifically, drawing can be used to gauge student understanding of retelling and other literacy components. A multiple intelligence theory indicates that there are multiple means of assessment that go beyond the language and logic intelligences, which provides each individual the opportunity to show their understanding and learning (Gardner, 1995a).

The research was also intended to support and advocate for visual arts to be integrated into early literacy learning, in reading and writing areas. Words and numbers are not the only way that one can express understanding of content; the arts provide for another form of expression of understanding (Eisner, 1998).

Outside of contributing to the field of emergent literacy instruction and assessment as well as integrating visual art into emergent literacy instruction and assessment, this research sought to answer a question that was developed through the researcher's observations of students who are emergent readers and emergent writers; could these students benefit from support for assessment based in visual arts rather than written assessment?

The results from this study show a clear indication that the visual arts impacted the assessment results. The students who were provided an opportunity for drawing were more likely to obtain a higher score when retelling the story.

Chapter Seven: Recommendations

The results of this study indicate that visual arts are of significance in learning and assessments with students who are new to literacy instruction on reading and writing. This study was able to provide new research to other early childhood educators and art educators with the issue of assessment of student understanding when the majority of the student population is unable to read or write. However, this research produces other questions for future research on this topic. The research could be modified by including a larger sample size, including students from different areas, rural and urban, and different student demographics.

- It would have been beneficial to include students from other school districts to compare regional differences.
- By including more participants, enlarging the sample size would generate more sound and valid results.
- Given the differentiation available with visual arts suggests a need to include more students with special needs than who were included in this study.

Appendix

Appendix A: Jessamine County School Board Approval



July 25, 2014

To Whom It May Concern:

This letter is to verify that Rachel Lindle, teacher at Jessamine Early Learning Village and UK graduate student, has received approval from the Jessamine County Board of Education to conduct research regarding reading comprehension. Please reference the attached agenda item approved by the JCS Board of Education on 1-27-14. Please contact me if you have additional questions.

Sincerely,

Michelle L. Gadberry, Psy.S. Director of Special Education

Jessamine County Schools exists to motivate and challenge every child every day to be a caring, responsible citizen and a high-level thinker, performer, communicator, and learner for life!
Lassamina	County Board of Ed.	APPROVED
JESSAIIIIIE	County Doard of Edi	JAN 2 7 2014
and the second second	Agenda Item	BO#_125
A Ber		🔀 Consent Agenda
		Action Item
		Report
		Information
NO AL TO A TO AND		

Meeting Date: January 27, 2014

Staff Contact Person: Michelle Gadberry, Director of Special Programs

Subject: Request for approval of a research study conducted by Rachel Lindle, teacher at JELV and graduate student at the University of Kentucky.

Background:

The participants in this study are Kindergarten students from both JELV and another school in Fayette County. Approximately 48 students from JELV will be targeted for participation. The purpose is to determine if using the visual arts to assess a student's understanding of a story and verbal retelling would be a better assessment of comprehension for students of Kindergarten age. Teachers will implement a scripted lesson and then give students either a written or drawn assessment. Those assessments will then be used as references for the verbal assessment. The number of correct retelling sequences out of nine will be documented to compare the differences between the written or drawn assessment.

Consent will be sought from parents and guardians via a letter sent home in the student's daily take home folder. Ms. Lindle has also obtained the consent of the school principal Mrs. Kelly Sampson and the other teacher participating in the study at JELV have also given consent. Ms. Lindle will maintain all confidentiality requirements. Student assessments will be coded and originals will be returned to the teacher. This research has no anticipated risk or deception. This research has been submitted for approval by the Institutional Review Board at the University of Kentucky and no data will be collected prior to this approval.

Budget Implications:

None

Superintendent's Recommendation:

Appendix B: University of Kentucky Institutional Research Board Approval



Initial Review Use of minors in the research approved.

Approval Ends August 5, 2015

FROM:

SUBJECT:

TO: Rachel Lindle 2401 English Station Drive Lexington, KY 40514 PI phone #: (859) 338-8542 IRB Number 13-0850-P4S Office of Research Integrity IRB, IACUC, RDRC 315 Kinkead Hall Lexington, KY 40506-0057 859 257-9428 fax 859 257-8995 www.research.uky.edu/ori/

DATE: August 11, 2014 On August 6, 2014, the Non-medical Institutional Review Board approved your protocol entitled:

Non-medical Institutional Review Board (IRB)

Approval of Protocol Number 13-0850-P4S

Chairperson/Vice Chairperson

Learning to Retell Stories through Comparative Teaching: Writing and Drawing

Approval is effective from August 6, 2014 until August 5, 2015 and extends to any consent/assent form, cover letter, and/or phone script. If applicable, attached is the IRB approved consent/assent document(s) to be used when enrolling subjects. [Note, subjects can only be enrolled using consent/assent forms which have a valid "IRB Approval" stamp unless special waiver has been obtained from the IRB.] Prior to the end of this period, you will be sent a Continuation Review Report Form which must be completed and returned to the Office of Research Integrity so that the protocol can be reviewed and approved for the next period.

In implementing the research activities, you are responsible for complying with IRB decisions, conditions and requirements. The research procedures should be implemented as approved in the IRB protocol. It is the principal investigators responsibility to ensure any changes planned for the research are submitted for review and approval by the IRB prior to implementation. Protocol changes made without prior IRB approval to eliminate apparent hazards to the subject(s) should be reported in writing immediately to the IRB. Furthermore, discontinuing a study or completion of a study is considered a change in the protocol's status and therefore the IRB should be promptly notified in writing.

For information describing investigator responsibilities after obtaining IRB approval, download and read the document "PI Guidance to Responsibilities, Qualifications, Records and Documentation of Human Subjects Research" from the Office of Research Integrity's IRB Survival Handbook web page

[http://www.research.uky.edu/ori/IRB-Survival-Handbook.html#PIresponsibilities]. Additional information regarding IRB review, federal regulations, and institutional policies may be found through ORI's web site [http://www.research.uky.edu/ori]. If you have questions, need additional information, or would like a paper copy of the above mentioned document, contact the Office of Research Integrity at (859) 257-9428.

N. Ven Tuhogen, PhD

63

Appendix C:

University of Kentucky Institutional Research Board Approved Parental Consent Form



Dear Parent/Guardians,

My name is Rachel Lindle and I am a University of Kentucky Graduate Student and a kindergarten teacher at the Jessamine Early Learning Village in Nicholasville, Kentucky. I am a Master's Degree Student in the Art Education Department at the University of Kentucky. My Faculty Advisor is Dr. Allan Richards in the Department of Fine Arts.

I am writing a thesis on the effects of visual arts on student ability to retell stories for my final paper to obtain my Master's Degree. Since I teach in the kindergarten classroom, I wanted to research a skill that kindergarten students are performing.

In the kindergarten classroom, a Common Core State Standard students are expected to know by the end of the year, is to be able to retell stories that are read to them in sequence.

I would like to use your child's drawn or written retelling assessment along with a verbal retelling assessment to analyze the effects of drawing or writing on the student's ability to retell a story. This is a common assessment given to students regularly in the classroom; you are giving permission for me to access the results.

No personal information of the student will be used; the names will be erased from the assessments and replaced with a number. There will be no personal information included beyond what school and grade level the assessment came from in the research and paper. We will keep private all research records that identify you to the extent of the law. However, we may be required to show information which identifies you or your child to people who need to be sure that we have done the research correctly; these would be people from such organizations as the University of Kentucky.

The research is voluntary and not participating will in no way affect your child's status in the school or affect your child's grades. Your child may stop participation at any time. Your child will not benefit from the research. There are no known risks from participating in this research.

If you have any questions or concerns please contact me at (859) 887-5357 or <u>rachel.lindle@jessamine.kyschools.us</u> If you have questions about your rights as a volunteer in this research contact the staff in the Office of Research Integrity at the University of Kentucky at (859) 257-9428 or toll-free at 1 (866) 400-9428.

Please check below to notify your teacher if your child's assessment can be used in this study and return this portion to your child's teacher.

Yes, my child, (student name)_____''s work can be included in this study.

No, my child, (student name)_____ 's work cannot be included in this study.

Parent/Guardian Signature: ____

Parent/Guardian Printed Name: _

Retelling Scripted Lesson

Materials Provided (per teacher):

- Principal Investigator (PI) will provide:
 - A manila envelope with clasp and eyelet (This is to keep Parental Consent Forms that are returned to the classroom teacher. The Parental Consent Form Checklist will be adhered to the outside for ease of access to check off)
 - Pocket Chart Retelling Images
 - Craft Sticks
 - o Cup
 - o Copies of:
 - Parental Consent Form Checklist (1 copy for the teacher)
 - Parental Consent Form (24 copies to send home with students and keep for records)
 - Teacher Retelling Scripted Lesson (1 copy for each teacher)
 - "I Can" Retelling Statement (1 copy for teacher to use in lesson)
 - Written Assessment (12 copies, per teacher, for only half of the students in your classroom based on random selection based on craft stick grouping)
 - Drawing Assessment (12 copies, per teacher, for only half of the students in your classroom based on random selection based on craft stick grouping)
 - Verbal Assessment (24 copies, per teacher, 1 for each student in your classroom)

Materials Needed:

65

Appendix D:

- Computer hooked up to iBoard (All classrooms at JELV have a computer hooked up to the interactive board)
- Pocket Chart
- Pencils
- Crayons

Before Implementing Lesson:

- One week before implementing lesson, on Monday, send home the Parental Consent Form in the student's Daily Take Home Folder.
- 2. Check Daily Tuesday- Friday for signed Parental Consent Forms.
- 3. Utilize the **Parental Consent Form Checklist** to check by each student's name whether or not the student's work is allowed to be used for the research. Place any returned **Parental Consent Forms** in the provided manila **envelope** and clasp shut to prevent loss of important paperwork.
- 4. On Friday, prepare personal pocket chart, computer, iBoard, pencils, and crayons to allow for use the upcoming week on Monday. The Principal Investigator will pick up the manila envelope, with the Parental Consent Form Checklist and Parental Consent Forms, to verify student participation in the study and to maintain records for the research.

Lesson:

- 1. Begin with all students on the rug in assigned spots.
- 2. Review "I Can" Retelling Statement whole group,
 - A. Read and point to the words in the "I Can" Retelling Statement to students, "I can retell important details from a

text."(K.RI.2)

- Explain: "Retelling is telling a story again. We are going to practice retelling the details, the important parts of a story, or text"
- 3. After, introduce (Monday) or reread (Tuesday- Friday) the text.
 - A. "The story we will read is There Was an Old Lady Who Swallowed Some Leaves."
 - B. Use the link to have the story read aloud to students to allow for consistency and prevent any variables from changing.
 - https://www.youtube.com/watch?v=Po1J6InnoUk
- 4. Once complete, explain that today we will retell a story.
 - A. "Retelling is telling the story again, with all of the parts in order. When you retell a story, you want to start at the beginning, and then tell what happens next, what happens after that and what happens at the end of the story. You would not want to hear a story that started at the middle, and then the person told the end and then told about the beginning of the story. You would be confused about what happened in the story. So, today we will practice retelling stories in order."
- 5. Use the provided **Pocket Chart Retelling Images** to retell the story whole group using images from the story, calling on students to assist in placing them in order/sequence on the **Pocket Chart** (modeling how to retell a story to students.)
 - A. Start by asking students,
 - "What happened at the beginning of the story?"
 - B. Call on students until you get the correct answer.
 - C. Prompts allowed:
 - "What happened 2nd /3rd /4th /5th /6th /7th /8th ?"
 - "What happened next/after (insert last item identified)?"
 - "What happened at the end of the story?"

• "What was the last thing that happened in the story?

6. Repeat items 1-5 on Tuesday- Thursday.

7. FRIDAY ONLY

Prepare for this last day by using the I Can Statement, Craft Sticks, Cup, Written Assessment, Pencils, Drawing Assessment,

Crayons and Verbal Assessment

- (The Principal Investigator (PI) will make craft sticks for each classroom to be used to randomly select groups of 12 students from the 24 students in a single classroom.
 - The **Principal Investigator** will do this by placing a blue colored dot on one end of 12 sticks and then completing the same task of a red colored dot on 12 sticks.
- B. Repeat steps 1-5
- C. One at a time, randomly select students and divide them into two equal groups by using the provided Craft Sticks and

provided Cup as above in 7A.

- Place Craft Sticks with the colored dot in the bottom of the provided Cup, so the color cannot be deciphered by students.
- Have students select one Craft Stick from the Cup and return to their spot on the rug.
- One group, blue, will draw images to retell the parts of the story independently, while the other group, red, will write the parts of the story independently.
- Send students to the table with the designated assessment to work independently.
 - Use the provided Written Retelling Assessment, Drawing Retelling Assessment, and Verbal Retelling
 Assessment below for students in the designated groups.

- Prompts allowed during Written Retelling Assessment and Drawing Retelling Assessment to answer student questions:
 - o "What happened 2nd /3rd /4th /5th /6th /7th /8th ?"
 - o "What happened next/after (insert last item identified)?"
 - "What happened at the end of the story?"
 - "What was the last thing that happened in the story?
- D. After both groups complete their independent retelling of drawing or writing, the teacher will call students one at a time and using their independent drawing or writing piece as a reference, students will verbally retell the story, while the teacher records the responses on the provided **Verbal Retelling Assessment**

Utilize the Verbal Retelling Assessment and use the provided script on the Verbal Retelling Assessment.

- 8. The teachers will grade the responses using the rubric on the Verbal Retelling Assessment.
- 9. Return graded Verbal Retelling Assessment, Written Retelling Assessment and Drawing Retelling Assessment to the Principal

Investigator.

A. If the teacher needs a record of the Written Retelling Assessment, Drawing Retelling Assessment, and/or Verbal Retelling

Assessment to send home or for assessment purposes, a copy will be made, the Principal Investigator will keep the

original copies of all the assessments, forms and paperwork.



Appendix E:

Drawing and Written Retelling Assessment



Verbal Retelling Assessment (given to all students)

Name	
------	--

Text: There Was An Old Lady Who Swallowed Some Leaves

Comprehension and Response-

Close the book and say, "Start at the beginning and tell me what happened in this story." Highlight the student's responses below.

Story Overview:

Beginning:

1. Old Lady/she swallows some leaves

Middle:

72

- 2. Swallows a shirt
- 3. Swallows a pumpkin
- 4. Swallows a pole
- 5. Swallows some pants
- 6. Swallows a rope
- 7. Swallows some hay
- 8. The Old Lady/she sneezed

End:

9. Out pops a scarecrow

*If necessary use one of the following prompts to gain further information after initial retelling. Tally the number of times the prompt was used beside the statement/question

Date__

1. Tell me more.

2. What happened at the beginning?

3. What happened after/before _____ (an event mentioned by the student)

4. How did the story end?

Retelling Rubric score: ____/9

Appendix F:

Appendix G:

There Was an Old Lady Who Swallowed Some Leaves on the iBoard



The story can be accessed at https://www.youtube.com/watch?v=Po1J6InnoUk





Appendix H: "I can" Statement



Appendix I: Retelling Picture Cards and Pocket Chart











Appendix J: Craft Sticks and Cup









Appendix K: Students working on Drawn and Written Retelling Assessments









References

- Allor, J., & McCathren, R. B. (2003). Developing emergent literacy skills through storybook reading. *Intervention in School & Clinic*, 39(2), 72-79.
- Anning, A. (1999). Learning to draw and drawing to learn. *Journal of Art and Design Education*, 18(2), 163.
- Antonacci, P. A. (2000, January 1). Reading in the zone of proximal development: Mediating literacy development in beginner readers through guided reading. *Reading Horizons*, 41(1), 19-33.
- Beentjes, J. W. J., & Van Der Voot, T. H. A. (January 01, 1991). Children's written accounts of televised and printed stories. *Educational Technology, Research and Development*, 39(3), 15-26.
- Berghoff, B., Cousin, P. T., & Martens, P. (1998, March 1). Multiple sign systems and reading. *Reading Teacher*, *51*(*6*), *520*.
- Blackstock, J., & Miller, L. (1992, January 1). The impact of new information technology on young children's symbol-weaving efforts. *Computers and Education*, 18, 209-221.
- Blok, H., Oostdam, R., Otter, M. E., & Overmaat, M. (2002, January 1). Computerassisted instruction in support of beginning reading instruction: A review. *Review* of Educational Research, 72(1), 101-130.
- Britsch, S. J., & Meier, D. R. (1999, September 6). Building a literacy community: The role of literacy and social practice in early childhood programs. *Early Childhood Education Journal*, 26(4), 209-215.

- Carger, C. L. (2004, March 1). Art and literacy with bilingual children: Literature becomes significant for children though engagements in art and talk about books. *Language Arts*, 81(4), 283.
- Castro-caldas, A., & Reis, A. (2003). The knowledge of orthography is a revolution in the brain. *Reading and Writing*, *16*(1-2), 81-97.
- Chall, J. S. (1983, November 1). Literacy: Trends and explanations. *Educational Researcher*, 12(9), 3-8.

Chall, J. S. (1997, January 1). Are reading methods changing again?. *Annals of Dyslexia*, 47, 257-264.

- Christodoulou, J. A. (2009). Applying multiple intelligences. *School Administrator*, 66(2), 22-26.
- Coles, G. (2004). Danger in the classroom: 'Brain glitch' research and learning to read. *Phi Delta Kappan*, 85(5), 344-351.
- Cordoni, B. (1981, January 1). Teaching the LD child to read through visual imagery. *Intervention in School and Clinic*, *16*(3), 327-332.
- Daniels, H., & Beizer, L. (1998, January 1). An introduction to Vygotsky. *Anthropology*& *Education Quarterly*, 29(1), 140.

D'Arcangelo, M. (1999). Learning about learning to read. *Educational Leadership*, 57(2),26.

Edwards, C., & Willis, L. (2000). Integrating visual and verbal literacies in the early childhood classroom. *Early Childhood Education Journal*, 27(4), 259.

- Ehrenworth, M. (2003, September 01). Literacy and the aesthetic experience: Engaging children with the visual arts in the teaching of writing. *Language Arts*, 81(1), 43-51.
- Eisner, E. (1998, January 1). What do the arts teach?. *Improving Schools*, 1(3), 32-36.
- Ernst, K. (1997). Art goes to the classroom. Teaching Pre K-8, 27(4), 64.
- Ernst, K. (1998). Drawing improves literacy. Teaching Pre K-8, 28(7), 28.
- Felten, P. (2008). Visual literacy. Change, 40(6), 60-64.
- Frey, N., & Fisher, D. (2010). Reading and the brain: What early childhood educators need to know. *Early Childhood Education Journal*, *38*(2), 103-110.
- Gabig, C. (2008). Verbal working memory and story retelling in school-age children with autism. *Language, Speech & Hearing Services In Schools*, *39*(4), 498-511.
- Gagnon, L. M., & Dixon, R. A. (December 01, 2008). Remembering and retelling stories in individual and collaborative contexts. *Applied Cognitive Psychology*, 22(9), 1275-1297.
- Gallagher, G. (2005). Tell me a story: Developmentally appropriate retelling strategies. *Library Media Connection*, 23(7), 101.
- Gardner, H. (1995a, January 1). "Multiple intelligences" as a catalyst. *English Journal Illinois*, 84(8), 16-18.
- Gardner, H. (1995b). Reflections on multiple intelligences. *Phi Delta Kappan*, 77(3), 200.
- Gardner, H. (1996, November 1). Probing more deeply into the theory of multiple intelligences. *NASSP Bulletin*, *80*, 583, 1-7.

Genishi, C., Stires, S. E., & Yung-Chan, D. (2001, March 1). Writing in an integrated curriculum: Prekindergarten English language learners as symbol makers. *The Elementary School Journal*, 101(4), 399-416.

Healy, J. W. (2007). Art and writing. *Teaching Pre K-8*, 37(7), 28-29.

Hearne, D., & Stone, S. (1995, January 1). Multiple intelligences and underachievement: Lessons from individuals with learning disabilities. *Journal of Learning Disabilities*, 28(7), 439.

Hetzroni, O. E. (2004). AAC and literacy. *Disability & Rehabilitation*, 26(21/22), 1305-1312.

- Hibberd, F. J. (2006). The essential Vygotsky. *Journal Of The History Of The Behavioral Sciences*, 42(2), 178-179.
- Hilte, M. (2011). Activating the meaning of a word facilitates the integration of orthography: Evidence from spelling exercises in beginning spellers. *Journal of Research in Reading*, 34(3), 333-345.

Indrisano, R. S. (1995). Literacy development. Journal of Education, 177(1), 63.

- Jiménez, J., & Rumeau, M. (1989, January 1). Writing disorders and their relationship to reading-writing methods. *Journal of Learning Disabilities*, 22(3), 195-199.
- Lehtonen, A. (2005). Doublet challenge: Form comes before function in children's understanding of their orthography. *Developmental Science*, 8(3), 211-217.
- Lin, C.-H., (2003). *Literacy instruction through communicative and visual arts*. Bloomington, IN: ERIC Clearinghouse on Reading English and Communication.

- Love, A., Burns, M. S., & Buell, M. J. (2007, January 1). Writing: Empowering literacy. *Young Children*, 62(1), 12-19.
- Manning, M., & Manning, G. (1996). Art in reading and writing. *Teaching Pre K-8*, 26(6), 90.
- McCutchen, D., Abbott, R., Green, L., Beretvas, S., Cox, S., Potter, N., & ... Gray, A.
 (2002). Beginning literacy: Links among teacher knowledge, teacher practice, and student learning. *Journal of Learning Disabilities*, 35(1), 69-86.
- Miller, L. (1998, January 1). Multimedia and young children's symbol weaving. *Reading*& Writing Quarterly, 14(1), 109-114.
- Morrow, L. M. (1985, May 1). Reading and Retelling Stories: Strategies for Emergent Readers. *The Reading Teacher*, *38*(9), 870-875.
- Nodine, C. F., & Steuerle, N. L. (1973, January 1). Development of perceptual and cognitive strategies for differentiating graphemes. *Journal of Experimental Psychology*, 97(2), 158-166.
- Norrick, N. R. (January 01, 1998). Retelling Stories in Spontaneous Conversation. Discourse Processes, 25, 1, 75-97.
- Northwest Evaluation Association (NWEA). (2014, July). *MAP overview brochure*. Retrieved from: https://www.nwea.org/resources/map-overview-brochure/
- O'Neil, K. (2011). Reading pictures: Developing visual literacy for greater comprehension. *Reading Teacher*, 65(3), 214-223.
- Richards, A. G. (2003, November 1). Arts and academic achievement in reading: Functions and implications. *Art Education*, *56*(6), 19-23.

- Robertson, L., Dow, G., & Hainzinger, S. (2006). Story retelling patterns among children with and without hearing loss: effects of repeated practice and parent-child attunement. *Volta Review*, *106*(2), 147-170.
- Salkind, N. J. (2010). *Statistics for people who (think they) hate statistics*. Thousand Oaks, CA: Sage.
- Scrimsher, S., & Tudge, J. (2003, July 1). The teaching/learning relationship in the first years of school: Some revolutionary implications of Vygotsky's theory. *Early Education and Development*, 14(3), 293-312.
- Shmulsky, L. (2009, November 1). Art & literacy. Arts & Activities, 146(3), 40-42.
- Sidelnick, M. A., & Svoboda, M. L. (2000, October 1). The bridge between drawing and writing: Hannah's story. *Reading Teacher*, 54(2), 174-184.
- Smout, B. (1990). Reading, writing, and art. *Reading Teacher*, 43(6), 430-431.
- Soundy, C. S., Guha, S., & Qiu, Y. (2007, May 1). Picture power: Placing artistry and literacy on the same page. *Young Children*, 62(3), 82-88.
- Sousa, D. A. (2006, December 1). How the arts develop the young brain. *School Administrator*, *63*(11), 26-31.
- Stadler, M. A., & Ward, G. C. (2010). The effect of props on story retells in the classroom. *Reading Horizons*, 50(3), 169-192.

Spiro, J. (2003). Watching the brain learn to read. *Nature Neuroscience*, 6(7), 658.

- Thompson, G., McKay, M., Fletcher-Flinn, C., Connelly, V., Kaa, R., & Ewing, J. (2008, January 1). Do children who acquire word reading without explicit phonics employ compensatory learning? Issues of phonological recoding, lexical orthography, and fluency. *Reading and Writing*, 21(5), 505-537.
- Zambo, D. K. (2004). Emotion and cognition in students who struggle to read: New insights and ideas. *Reading Psychology*, *25*(3), 189-204.
- Zannini, L. L. (1998, January 1). Eisner, E. W. (1994). Cognition and curriculum reconsidered (2nd ed). *Gifted Child Quarterly*, *42*(1), 63-64.
- Zimmerman, B. S. (2012, May 1). Drawings and dialogue: Word solving in early literacy. *Reading Teacher*, *65*(8), 578-583.

Vita

<u>Name</u>

Rachel Louise Lindle

Degrees Awarded

Bachelor of Arts, Early Elementary Education, Magna cum Laude University of Kentucky, Lexington, KY, December 2008

Professional Positions Held

Artist, 2009-Present Photography

Kindergarten Classroom Teacher, August 2011-Present Jessamine Early Learning Village, 851 Wilmore Road Nicholasville KY 40356 Jessamine County Public Schools

First Grade Classroom Teacher, July 2010-July 2011 North Middletown Elementary School, 301 College Street North Middletown KY 40357 Bourbon County Public Schools

Kindergarten Instructional Paraeducator, January 2009-July 2010 North Middletown Elementary School, 301 College Street North Middletown KY 40357 Bourbon County Public Schools